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ORIGINAL LECTURES.

A COURSE OF SIX LECTURES
ON THE
RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE

The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture I.

Mr. President and Gentlemen,—Before I undertook the honourable task of delivering in this theatre the course of lectures which I am about to commence, I ascertained that it was neither indispensable, nor, indeed, very desirable, that the materia medica,(a) in a limited sense of the term, should form their chief subject; and that I might strictly fulfil the intention of the lectures by taking a wider scope, provided that the end and object of my discourses were, the prevention and the cure of disease,—provided, too, that my efforts were directed towards the attainment of that very important object, the right use of the materia medica.

Now, it is manifest that the right use of the materia medica implies a knowledge,—1st, of the materials themselves; of their physical and chemical properties; of their effects upon the healthy living body; of the doses, and of the modes in which they may best be administered. 2ndly. There is required for this end a knowledge of disease; of its causes, its nature, and its consequences; and, 3rdly, the most important knowledge is that which relates to the influence of the materia medica upon morbid processes, whether in preventing, modifying, or entirely arresting them. My design in the present lectures is, to consider the materia medica only in the last-mentioned relationship—with reference, that is, to the connexion between therapeutics and pathology.

There are, probably, few subjects respecting which there exist so many conflicting opinions as with regard to the effects of remedies upon disease, their modes of action, and the best methods of administering them. Without stopping to inquire how far some of the propounders of strange doctrines do actually and honestly believe in the wild and irrational notions which they profess to hold, it is notorious, that a great diversity of opinion upon many points relating to the cure of disease prevails among the most sincere, zealous, and able cultivators of medical science.

It can scarcely, I think, be doubted, that many of the conflicting opinions which exist with regard to the treatment of certain diseases, and the value of particular means of cure, have their origin in an insufficient regard to what has been called the natural history of disease,—by which I mean, the origin, the nature, and the consequences of morbid processes. Within the last few years, the importance and the intimacy of the relationship between therapeutics and pathology have been much more insisted upon than formerly; but it is very apparent, that the subject has not yet received all the attention to which it has a claim; and that to the neglect of it may be attributed many of the opposing theories and the diverse modes of practice which are found to prevail.

There are certain propositions with reference to this subject which are so self-evident as to receive immediate and universal assent. It is obvious, for instance, that no one is fully competent to cure a disease, unless he have the power to detect the particular malady which he professes to heal. It is not sufficient to know, that quinine is a cure for ague; but there must also be the ability to distinguish ague from other diseases with which it may be confounded. Without this power of diagnosis, the remedy would sometimes be withheld when it might have been given with success; while, in other cases, supposed to be ague, but not really such, the administration of quinine might be useless, or even mischievous. We sometimes receive from our patients, in reply to the question, "What ails you?" not a detail of symptoms, but a ready-formed diagnosis; and among those who have had chills or rigors, the belief is common, that they are suffering from ague. It scarcely need be said, that we cannot act upon such a diagnosis without further inquiry, and that, if we were to do so, we should often fail to cure our patients, while, at length, our frequent failures would naturally lead us to the conviction, that the value of quinine as a remedy for ague has been greatly over-estimated.

The importance of scientific pathology, and of an accurate diagnosis, would be far less than it is, if, for every disease which we can recognise, we had one or more specific remedies, such as quinine for ague. Unhappily, however, it is far otherwise; and, in a large proportion of cases, we are reduced to the necessity of treating disease upon what are called general principles. In other words, we study the phenomena of disease with a view to ascertain their nature and tendency; we learn what we can of the natural curative efforts which are continually manifesting themselves during the progress of various diseases; and we thence deduce rules for our guidance in the management of these diseases; one of the most important rules being, to avoid all mischievous interference, and to do nothing, if we have not a reasonable hope of doing good. It is, I think, extremely improbable, that specific remedies will ever be found for many of the diseases with which we are acquainted. The contrary doctrine, we know, is maintained by some claimants for public favour, who proclaim the virtues of one unfailing remedy for impure blood, the source, as they assert, of all diseases, while others boast with equal confidence of specifics as numerous as the multitudinous forms of disease. A short time since I was told by a friend, who has acquired a well-deserved reputation by investigating a particular class of diseases, that a certain practitioner is in the habit of sending to him patients, in order that he may form a diagnosis and name the disease; this being done, the patients return to the aforesaid practitioner, who supplies them with the cure for the disease which he could not himself detect, and which he still knows only by name! It would be a waste of time to insist upon the absurdity of such pretensions as these.

It is not difficult to perceive, that there is an almost daily increasing difference between true and false medical science of the present day; and, inasmuch as their methods of procedure are essentially opposite, the breach between them will soon become so wide, as to be apparent to all who are not wilfully blind. One great and important distinction between true and false philosophy is this,—that the one, while it pays due regard to the wisdom and experience of past ages, and obtains from them all the assistance which they are capable of yielding, does not hesitate to examine, by the aid of such light as modern researches afford, all the dogmas which have been handed down to it; and, finding some to be inconsistent with facts and with analogies, it abandons them as untenable, and as unsafe guides in practice. It scarcely need be said, that this is the truly scientific method of inquiry, and that a very prevalent false method is, in many respects, the direct opposite of this,—a method which has a tendency to dogmatise with reckless boldness, and which, starting from certain ill-grounded and false data, arrives at conclusions which are not more opposed to the doctrines of former ages than they are to the experience and common-sense of the present. The disciples of Hahnemann are conspicuous examples of this pseudo-scientific method. The difference between the two methods, as I have before intimated, is daily becoming more apparent. We are gradually banishing both from our theories and from our practice, much of that mystery—in an evil sense of the word—for which practitioners of the healing art were formerly quite proverbial; and we are becoming more accustomed to appeal to the common-sense of each other, and of our patients, in confirmation of our doctrines and our practice.

There is, probably, no better test of the truth or soundness of any doctrine, when applied to practice, than the fact of its being consistent with the dictates of well-informed common sense; and, perhaps, I could give no better illustration of the beneficial influence which has been exerted by this kind of appeal, than is to be afforded by the modified views now prevalent with regard to the nature and the treatment of inflammation. It certainly does appear contrary to common sense to suppose, that a disease, whatever may be its name or its nature, which has been induced by exhausting and depressing influences,—by excessive labour, by loss of rest, by abstinence, by hæmorrhage, or by some other drain upon the bodily strength,—that a disease so originating can

(a) The course of lectures which I was appointed to deliver is nominally on Materia Medica. I had the express permission of the President of the College to give the term a wide interpretation.

be removed by a recourse to measures which have the same exhausting and depressing tendency,—by the free abstraction of blood, by a rigidly low diet, and by active purgatives. Science has listened to the voice of common sense in this matter, and, in spite of the dogma *similia similibus curantur*—a method of practice which was originally suggested by imperfect and erroneous views respecting the nature of inflammation—has been greatly modified, and with the happiest results. It is now becoming more and more apparent, that the *quantity* of blood in the vessels of an inflamed part is not the primary and most important fact in the phenomena of inflammation. That the so-called increased afflux, or determination, of blood, is in reality produced by impeded flow of blood through the capillary vessels, resulting from an altered relation between the blood and the tissues with which it is brought into contact. This altered relation between the blood and particular tissues, may depend upon an excess of nutrient materials in the circulating fluid, or it may depend upon a directly opposite condition, or upon other changes in the *quality* of the blood. So that, however great may be the resemblance between the local phenomena of inflammation in different cases, the treatment must be conducted with a constant reference to the causes which have given rise to the disease.

The importance of ascertaining the remote originating cause of a disease is great in proportion to the degree of doubt which there may be as to the precise nature of the local changes upon which the symptoms in any given case are supposed to depend.

Perhaps I cannot better illustrate this remark, than by a reference to those cases in which cerebral symptoms, and especially heaviness of the head and drowsiness, occurring in feeble and exhausted infants, might be erroneously supposed to indicate an inflammatory condition of the brain —cases of hydrocepholoid disease, as they have been called by Marshall Hall, who was, I believe, the first to publish an account of the affection in question. Dr. Gooch's valuable essay (a) on this subject is so well known, that I scarcely need refer to it, except for the purpose of recommending it to the notice of any one who, perchance, may not have met with it. The mode of determining the true nature and the appropriate treatment of these cases, is to observe, not only the heaviness of the head and the drowsiness, but also the accompanying symptoms, and the previous history of the child. We are to take care, as Dr. Gooch advises, "that a drowsy child, who is languid, feeble, cool, or even cold, with a quick weak pulse, should not be treated by bleeding, starving, and purging, like a drowsy child, who is strong, plethoric, has a flushed face, and a heated skin." When, in addition to the symptoms of exhaustion before mentioned, we learn, as we often shall on inquiry, that the child has been recently weaned, or that, from some cause or other its food has disagreed, that the bowels have been disordered and relaxed, or that the patient's strength has been reduced by active medicine or by leeching, little doubt will remain as to the nature of the case, and as little as to the necessity for nutritious food, for stimulants, and for tonics. I shall have frequent occasion to insist upon the importance of directing attention to the remote causes of disease, as a means of determining both its true pathology and its appropriate treatment.

I purpose now to illustrate the connexion between pathological science and rational therapeutics, by a consideration of hypertrophy of the heart.

It was formerly much more than at present the custom to speak, and even to write of hypertrophy of the heart, as if it were a disease *per se*, against which remedial measures were to be directed, without consideration of the cause of this structural change, or the possible consequences of injudicious attempts to remove it. We are not surprised to hear such language from non-professional persons, who frequently speak of themselves, or of their friends, as having "enlargement of the heart," and who appear to consider that this is a sufficient account of the disease, and one which will enable a physician to give an opinion as to its probable consequences. We cannot, however, but experience a feeling of astonishment, when we find, as we sometimes do, that even those who appear to consider themselves competent to improve the treatment of these diseases, disregard the very elements of the question. Not long since, there appeared, in a Medical journal, a paper, in which it was proposed to cure hypertrophy of the heart by the inhalation of medicated vapours. It was maintained, that this method of treatment afforded great hopes of success, inasmuch as the remedy would speedily be brought into direct contact with the part most frequently affected—viz., the left ventricle. Now, the obvious defect in this paper, is the absence of any allusion to the various causes, and the pathological significance of hypertrophy of the left ventricle. There is no indication, that the author of the paper at all appreciates the great difficulty in the way of curing hypertrophy of the heart, without a previous removal of the cause which gave rise to it, or the fatal mischief which might ensue, if, by any means, such a result were attainable.

A consideration of the various causes which give rise to hypertrophy of the heart will suffice to show the unreasonableness of expecting to remedy, by any one method, a condition so diverse in its origin. I may state, *in limine*, that there is, probably, no exception—there is, certainly, no *proved* exception—to the rule, that hypertrophy of the walls of the heart results from continued or frequently repeated increased contractions of its muscular fibres. It consists in an increased growth of muscular tissue, and this results from the frequent and violent contractions of the heart, which are occasioned by a necessity for some additional effort to carry on the circulation. This growth of muscular tissue, in obedience to the demand for increased exertion, is one of the beautiful instances of those compensating and reparative processes with which the physiologist and the pathologist are familiar. An illustration of the same beneficent law is seen in the firm and massy muscles of the blacksmith's arm, as compared with the flabby and undeveloped limbs of the tailor, an instance, as we see, of supply being regulated by demand. Thus far, it appears, that hypertrophy of the muscular walls of the heart is a simple and easily intelligible phenomenon; but when we proceed to inquire into the various circumstances which may give rise to this demand for increased efforts on the part of the heart, and the consequent hypertrophy of its muscular tissues, we find that these causes are numerous and very diverse; and it becomes apparent that our success in the treatment of this condition must greatly depend upon our ability to detect and to remove its originating cause.

Among the most frequent causes of hypertrophy of the left ventricle are, first, a diseased condition of the aortic valves, or of the aorta itself; and, secondly, such a diseased or imperfect state of the mitral valve as will permit the blood to regurgitate into the auricle. The result of each of these conditions is, that the left ventricle has to perform more than its natural amount of work, and, in consequence, its muscular walls acquire an increase of thickness. Narrowing of the aortic orifice, or a diseased condition of the arterial walls, exerts an obstructive influence upon the current of blood directly, while a diseased condition of the aortic or mitral valves, which permits of regurgitation, may cause an indirect, but equal impediment to the circulation, for the system demands a certain supply of blood in a given time; and as the blood which regurgitates either from the aorta into the ventricle, or from the ventricle into the auricle, in no way contributes to that supply, the amount of regurgitation, if it could be estimated, would be an index of the degree of extra ventricular contraction, either as regards force or frequency, or both, which is rendered necessary by this backward current. In each of the cases which I have mentioned, the hypertrophy of muscular tissue is a natural result of the increased demand for the muscular power which is required for overcoming an impediment to the onward passage of the blood.

In the cases to which I have now alluded, there is a very obvious mechanical cause, in the condition of the valves or of the arterial walls, for the impeded circulation, and the consequent hypertrophy of the left ventricle. But there is a numerous and important class of cases in which there exists a very marked degree of hypertrophy of the ventricles without disease of the valves or of the aorta; in short, without any obvious cause of impediment to the circulation. This form of hypertrophy occurs, for the most part, in connexion with chronic disease of the kidney; and it will, perhaps, be remembered, that in the "Gulstonian Lectures," (a) which I had the honour to deliver last year,

(a) "On Some Symptoms in Children, Erroneously Attributed to Congestion of the Brain."

(a) See *Medical Times and Gazette*, 1852.

I entered at some length upon the consideration of this subject, and then suggested what appears to be the most reasonable explanation of hypertrophy of the left ventricle, when it occurs in connexion with chronic renal disease, and unassociated with disease of the valves or large arteries. The subject is one of much interest and importance, as well to those who are studying the connexion between morbid phenomena, as to those who are engaged in the treatment of disease. At present, I can only refer to such of the leading facts and arguments as will suffice to show in what way the question bears upon our present inquiry,—the relation, that is, of therapeutics to pathology.

The connexion between hypertrophy of the left ventricle and chronic disease of the kidney was first pointed out by Dr. Bright, whose observations upon this point are in strict accordance with those which have been since made by others. Dr. Bright found, that, in 52 out of 100 cases of renal disease, which were examined after death, there was hypertrophy of the heart. In 34 of these 52 cases of hypertrophy no valvular disease whatsoever could be detected, but, in 11 of these 34, there existed more or less disease in the coats of the aorta; and this disease may perhaps have impeded the circulation, and so have occasioned the hypertrophy; still, however, there remain 23 cases without disease either of the valves or of the arterial coats, without, as Dr. Bright remarks, "any probable organic cause for the marked hypertrophy generally affecting the left ventricle." Now, the most probable explanation of these cases is this, that the blood contains urea, and other excrementitious materials, which have accumulated there in consequence of degeneration of the secreting tissues of the kidney; that the blood thus contaminated is impeded in its passage through the systemic capillaries, and that the hypertrophy of the left ventricle results from the increased efforts which are necessary in order to overcome this impediment. The chief facts which lend support to this explanation of the phenomena in question are briefly these:— It has been demonstrated, that at least one species of excrementitious material has precisely that effect upon the circulation which I have supposed to result from the accumulation in the blood of urinary excreta. Dr. Reid has shown that the exclusion of air from the lungs of a dog, and the consequent transmission of black blood into the arteries, has the immediate effect of causing great distension of the arteries, and an increased pressure upon their walls, while there is a corresponding diminished pressure upon the walls of the veins. It is evident, therefore, that this black, unaërated blood is impeded in its passage through either the minute arteries or the capillaries. The final result of the continued exclusion of atmospheric air from the lungs is a complete arrest of the blood in the pulmonary capillaries, as proved by the great engorgement as well of the lungs as of the right side of the heart and of the veins, and the comparative emptiness of the left cavities and the arteries.

It appears, therefore, that an excess of carbonic acid in the blood occasions an impeded circulation through the entire capillary system, and that the impediment increases until the blood is finally arrested in the capillaries of that organ whose office it is to eliminate the poisonous material. The very gradual process of asphyxia, which often results from emphysema of the lung and chronic bronchitis, exerts upon the right ventricle of the heart the kind of influence which a consideration of Dr. Reid's experiments would have led us to anticipate: the walls of that cavity usually acquire such an increase of thickness and of strength as is rendered necessary by the impeded condition of the pulmonary circulation. We have here, then, another cause and another form of hypertrophy of the heart.

Returning now to the hypertrophy of the left ventricle, which occurs in connexion with chronic renal disease; the reasons for believing that it results from an impeded flow of blood through the systemic capillaries, are briefly these:— 1st. The absence of any other obvious cause of the phenomenon; and, 2ndly, the analogy with the consequences of asphyxia,—an analogy which is strengthened by the observation, that the condition of the renal blood-vessels is such as to indicate that these forms of diseased kidney which give rise to an accumulation of urinary excreta in the blood, are associated with an impeded circulation through the renal capillaries, which is strictly analogous to the state of the pulmonary circulation in cases of asphyxia. The minute branches of the renal arteries and the Malpighian capillaries in the cases of chronic disease of the kidney to which I now refer, usually have their walls hypertrophied and thickened in a way which can be explained only on the supposition, that there has been a long-continued impediment of the circulation through the intertubular capillaries.(a)

I pass over the subject of adherent pericardium, because its influence upon the movements of the heart, and in the production of hypertrophy, is uncertain.

Before I speak of the indications for the treatment of hypertrophy, I beg to direct attention briefly to those cases of mere functional disturbance of the heart, which have some resemblance to hypertrophy, but which are not really such,—cases of "mock hypertrophy," as they have been well designated. Now, as to the marks of distinction between this condition and true hypertrophy, Dr. Latham(b) well observes, that "impulse of the heart taken alone, however great and however extensive it may be, is not a sure physical sign of hypertrophy. Hypertrophy, indeed, cannot exist without excess of impulse; but, excess of impulse can exist without hypertrophy. When the impulse of the heart is excessive, and, at the same time, its sounds are obtuse, muffled, and indistinct, and the præcordial region presents a larger space than natural, which is dull to percussion, then the signs of hypertrophy are complete. But, when the impulse of the heart is in excess, and, at the same time, its sounds are as loud and as clear as ever, or louder and clearer still, and the whole præcordial region is quite resonant to percussion, save the small space which is naturally dull, then the signs of hypertrophy are incomplete." Dr. Latham adds, "Yet, if this be enough to constitute hypertrophy, I have seen and treated it successfully in a hundred instances. But, in the meantime, I have not thought that I had to do with any such affection, or ever claimed the least credit for curing it." Dr. Latham divides these numerous cases of mock hypertrophy into three classes, with reference to the general physical condition of the persons affected.

1st. Young persons in the prime of life are frequently the subjects of this affection. They are often plethoric, and often sedentary, and can assign the origin of their complaint to no particular exciting cause. In them, the excessive action of the heart appears to result from a rich and redundant blood; and the cure of their simulated hypertrophy is effected by depletion, abstinence, and more active habits.

Again; young persons are the subject of it, but they are often pale, and thin, and dyspeptic, and very sensitive, and inactive from mere debility and nervousness. In such cases, great and permanent benefit is often derived from the exhibition of tonics, and especially from the preparations of steel, from a nutritious diet, and from such an amount of daily exercise in the open air as can be endured without an exhausting degree of fatigue.

Again, Dr. Latham adds, "young persons are the subject of it, but they are often neither florid nor pale, neither too full nor too empty of blood. They have no complaint that they can tell you of, and none that you can make out, except an inordinate impulse of the heart; an impulse great enough for any amount of hypertrophy, and constantly present, and admitting of severe aggravation, and even attended with pain; while the sounds of the heart are still loud and clear, and the præcordial region is still duly resonant." I have seen many cases referable to this last division, in which the chief, if not the sole cause for the tumultuous action of the heart, was mental shock or anxiety. The difficulty of dealing with them is usually increased by the hurtful influence which the patient's attention—continually and in spite of himself, directed to the heart,—exerts upon the movements of the organ. A constant dread of sudden death, too, is one of the most frequent and distressing attendants upon this condition, and one which it requires all the skill and judgment of the physician to combat. An unfavourable opinion, or an unguarded expression, in the presence of the patient, may be a source of dread and misery to him for a very long period. One of my dispensary patients, a law-stationer's clerk, about 30 years of age, has suffered from this nervous form of palpitation from childhood; but he declares that he has never recovered from the shock which he

(a) This subject is treated more at length in a Paper by the author, in Vol. XXXIII. of the "Medico-Chirurgical Transactions;" also in his treatise "On the Diseases of the Kidney."

(b) "On the Diseases of the Heart."

experienced when a boy, on hearing his medical attendant say, that his case was similar to that of a patient to whom he had just been called, and who had dropped dead. From that time my unhappy patient has been haunted by the dread of sudden death. That his fears are groundless, and that his medical attendant was not only cruelly incautious in the expression of his opinion, but also in error as to the real nature of the malady, is proved by the fact, that the patient was alive nearly twenty years after the period referred to, and that he then had no symptoms of organic disease of the heart.

Reverting again to the cases of actual hypertrophy, it may be observed, that the valvular disease which, in a large proportion of cases, is the primary cause of the hypertrophy, usually has its origin either in the rheumatic diathesis, or in that state of the blood and of the constitution generally which results from disease of the kidneys. With respect to renal disease, therefore, it is to be remarked, that the morbid condition of the blood induced by it has a double tendency to cause hypertrophy of the heart,—first, by exciting disease of the valves, and, secondly, by the impeded capillary circulation which it occasions, independently of valvular disease.

It is sufficiently obvious, that any one who undertakes the treatment of hypertrophy of the heart will require a knowledge of something more than the mere name and morbid anatomy of the disease; and that, without some insight into its pathology, he can scarcely avoid mischievous errors in practice. The probability of a cure in any case of hypertrophy is very slight. With reference to this question, Dr. Latham remarks, "The cure of hypertrophy of the heart does not look like a thing which is in its nature impossible; but I must confess, that, in the whole course of my experience I never yet met with a single instance in which I was perfectly satisfied that it was cured." The question may be simplified by a consideration of the various causes which give rise to this condition, and by inquiring, whether it be possible to remove these; for, since hypertrophy of the heart is a secondary change, and one, too, which evidently has a beneficial tendency, it is obvious, that, as I have before observed, any attempt to lessen the hypertrophy while its cause remains will certainly prove unsuccessful, and probably injurious.

First, then, with regard to disease of the valves, whether resulting from rheumatism or renal disease, or whether originating, as it sometimes, though rarely, does, from some obscure and unrecognised cause, there is, I believe, no question as to the fact, that valvular disease of the heart, when its extent and character are such as to have produced hypertrophy of the ventricle, is irremediable by any means which we have at our command. In such cases, therefore, the discriminating practitioner will not flatter either himself or his patient with the hope of a cure for the diseased valves, nor will he expect or even attempt to remove the hypertrophy which has resulted from the valvular disease.

The chief object of treatment in these cases is to prevent, so far as that is possible, an aggravation of the valvular disease, by guarding against the recurrence or the increase of its original exciting cause. It is beyond my present purpose to speak of the treatment of rheumatic diseases; and it is the less desirable that I should refer to this subject, since it has been so ably discussed in the Lumleian Lectures, which we have recently had the privilege to hear. The treatment of renal disease, which, next to rheumatism, is the most frequent cause of valvular disease of the heart, will form the chief subject of my next lecture.

The observation which I have made with regard to the incurability of the hypertrophy, which results from disease or imperfection of the valves, applies with equal force to those cases of hypertrophy which result from narrowing, or dilatation, or extensive disease of the coats of the aorta and other large arteries, as well as to those which are dependent on malformations of the chest. In all these instances, the cause being a permanent one, it is neither probable nor desirable, that the hypertrophy which results from it should be less so. If there be any cases of hypertrophy which are curable, they are those which, being unconnected with disease of the valves or of the blood-vessels, are with reason supposed to result from that impeded capillary circulation which is dependent on an impure condition of the blood. The hypertrophy of the left ventricle which is connected with chronic renal disease, and that of the right ventricle which is frequently associated with chronic pulmonary disease, and more particularly with emphysema and chronic bronchitis, are instances of this. I have never met with a case of renal disease in which a cure was effected after the original malady had been so extensive, and of so long duration, as to give rise to hypertrophy of the left ventricle; nor do I know of any case of chronic bronchitis in which such an event has been observed with regard to the right ventricle; but there is good reason to believe that such a result is not only possible, but also within the bounds of probability. The attainment of this object must obviously be sought for by the use of measures directed to the removal of the primary disease, whether affecting the kidney or the lung; and it is likely—nay, certain—that the hypertrophy of the heart will disappear when its originating cause has ceased to operate. It may, perhaps, be thought, that, considering the intractable nature of those chronic diseases of the lung and kidney to which I have referred, to promise a cure of hypertrophy upon such conditions as those to which I have referred, is only—

> "To keep the word of promise to our ear,
> And break it to our hope."

And it must be confessed, that the prospect is not a cheering one. With respect to the special means for the removal or mitigation of the diseases in question, I will not here anticipate what I shall have to say in my next lecture as to the treatment of renal diseases; and, with regard to that distressing complication of emphysema with chronic bronchitis, there is, perhaps, only one step which affords a hope of great and permanent relief,—I mean, removal to a temperate and equable climate. There are few maladies which, in spite of the most careful and skilful attention, have a greater tendency than these to grow worse with every return of inclement weather; few, therefore, which so urgently require migration to a warmer and less changeable climate than any which can be had within the British islands.

It remains now for me to say a few words respecting the treatment of the hypertrophy which results from disease of the valves or of the arteries. I have repeatedly said, that this change in the muscular structure of the heart is reparative and beneficial in its tendency; but, like many analogous processes, it is attended with some injurious consequences. The chief of these appears to be the loss of that exact balance and adjustment of the power of the heart and of the bloodvessels which exists in the perfectly healthy body. It may readily be supposed, that, although the force of the hypertrophied ventricle is only just sufficient to overcome the resistance opposed to the passage of a due supply of blood when the body is at rest, the effect of any excitement, whether from bodily exertion or from mental emotion, may be, to call forth such violent contractions of the heart as will endanger the integrity of the vascular system; hence arise violent pain and throbbing in the chest and head, and sometimes hæmorrhage and apoplexy. To guard against such consequences, and especially in florid and plethoric subjects, it may be necessary to have recourse to some measures of depletion, to diminish the amount of food, to regulate the bowels, to abstract a small quantity of blood from the region of the heart by leeches or by cupping, and sometimes, perhaps, to take a few ounces of blood from the arm. But depletion must in these cases be practised with extreme caution; for there can be little doubt that the cases of valvular disease in which the power of the heart is more than equal to the impediments which it has to overcome, are few in comparison with those in which the chief distress arises from the force of the heart being inadequate to its work; and as the first class of cases may suffer from depletion being carried too far, so the last are invariably rendered worse by any degree of depletion. When we consider how much the movements of a sound heart may be disturbed and hurried by loss of blood, we shall be at no loss to understand the still greater mischief which may result from anæmia, when the heart is in a state of hypertrophy. "Beware, then," these are the words of Dr. Latham, "in the management of hypertrophy of the heart,—beware, above all things, of bleeding your patients into paleness and poverty of blood."

When the impulse of the heart is excessive and painful, and when we are deterred by the consequences of anæmia from resorting to any measures of active depletion, the distressing symptoms may sometimes be relieved by a cautious use of sedatives and narcotics,—by digitalis, by henbane, by belladonna, or by aconite, and sometimes by opium, or by morphia. The effect of these medicines must be carefully watched, and they must be quickly suspended if they

be found to disagree. In doubtful cases, they have this advantage over depletory measures, that, in general, any injurious effects which they occasion are less durable, and more easily counteracted.

The cases are not few, in which, when the valves are diseased, our object should be, rather to increase than to diminish the hypertrophy. When the skin is pallid, the circulation languid, and the heart's impulse feeble, great benefit is often derived from the exhibition of tonics, and from a nutritious but unstimulating diet. In such circumstances, the preparations of steel are often most efficacious in improving the quality of the bood, and thereby restoring vigour and steadiness to the heart's action.

That a patient, who is suffering from any form of valvular disease, should be cautioned to avoid everything which may tend to excite or to disturb the circulation, is so obvious as scarcely to require even this passing allusion.

If, now, we consider for a moment what aid, in the therapeutical management of hypertrophy of the heart, may be derived from pathological considerations, it will appear, that, although these are not entirely unsuggestive of positive means of cure, yet their chief value consists in the warning which they give against that blind and over-active practice which disregards the origin and the tendency of that which it attempts to remove. No one will be disposed to undervalue even this amount of assistance from pathology, who considers the mischievous consequences of rash and mistaken heroism in the treatment of disease.

CLINICAL LECTURE

ON

WOUNDS OF BLOODVESSELS OF THE LOWER EXTREMITY.

DELIVERED AT

St. Bartholomew's Hospital.

By WILLIAM LAWRENCE, F.R.S.

(Continued from page 592.)

Case.—DEEP STAB IN THE LEFT GROIN.—PROFUSE AND NEARLY FATAL HÆMORRHAGE.—LIGATURE OF THE EXTERNAL ILIAC ARTERY ON THE SECOND DAY.—DEATH ON THE SIXTH.—WOUND OF THE CIRCUMFLEXA ILII.

James Walsh, aged 55, shoemaker, a stout Irishman, of intemperate habits, who had generally enjoyed good health, but had suffered from cough for the last few weeks, was brought into the hospital, from his residence at Holloway, on May 18, about three o'clock in the morning. His countenance was of deathy paleness, the skin cold, the pulse extremely feeble, and occasionally imperceptible. He was nearly unconscious, and seemed, in short, on the point of expiring from loss of blood. His clothes, from the neck downwards, together with a bed on which he had lain, were saturated with blood, and there was a large quantity of recent coagula about the left side of the abdomen and pelvis. On clearing these away, an incised wound was discovered, between one and two inches in length, parallel to Poupart's ligament, and a little above it, not far from the anterior superior spine of the ilium. A director, carefully introduced, passed obliquely backwards and inwards, to a depth of between four and five inches, apparently towards the iliac vessels and pelvis. The persons who brought him were unable or unwilling to give any account of the matter, and the patient was not in a state to afford any information. When somewhat recovered, he refused to answer questions, but stated subsequently, that, about two hours previously to his admission, while standing at the door of his residence, he was stabbed from before, the blow being directed from above, downwards; that a gush of blood immediately followed, but that he managed to walk up-stairs unassisted; that the bleeding continued for an hour and a half, no effort being made by the bystanders to check it. He was then seen by a medical man, who advised his immediate removal to the hospital. He said, that he had been drinking during the evening, but that he was not intoxicated. The trousers which he had worn, and a very thick pocket, had been cut through by the blow. A careful examination led to the conclusion, that the peritoneum had not been wounded. The arteries of the limb pulsated very feebly, like that at the wrist. There was slight oozing of discoloured serum from the wound, but no bleeding. He was placed in a warm bed, and had brandy-and-water from time to time, the wound being covered by wetted lint. He slept much in the course of the day; in the evening the pulse had improved, but was still feeble; the countenance and the skin had regained their colour and warmth.

19th.—The patient had slept well; no return of bleeding; slight serous exudation from the wound, without pain or tenderness. No pulsation in the left femoral artery, till near the middle of the limb, where it could be just felt. The posterior tibial artery pulsated feebly, but not the anterior tibial, though an artery, which probably supplied its place, could be felt towards the outer side of the foot. The right femoral artery could be plainly felt in its whole course in the front of the limb. The pulse had improved.

It now became necessary to consider whether any or what proceedings should be adopted, in order to discover the source of the dangerous bleeding which had immediately followed the wound and nearly killed the patient, and to prevent recurrence of the danger. It was natural to expect that the hæmorrhage, which had ceased from extreme weakness, would be renewed when the circulation recovered its strength. The loss of a few ounces, in the enfeebled condition of the patient, might be fatal; while the difficulty of exploring so deep a wound, when filling with blood, would be almost insuperable, especially at night. I therefore thought it right to attempt, by enlarging the wound, to discover what vessel had been injured; and this course was approved by my colleagues. The absence of pulsation in the femoral artery, at the upper part of the limb, strengthened the suspicion derived from the course and depth of the wound, that the iliac vessels were the seat of injury.

The patient was brought under the influence of chloroform, and kept in that state during the operation, which was tedious, from the depth of fat under the skin, and the thickness of the muscular parietes. The external wound was freely enlarged in both directions, and the subjacent parts divided and turned aside, so as to expose the external iliac artery, which was tied just above the origin of the epigastric and circumflexor ilii. The blood lost in the operation did not exceed a tablespoonful. The sides of the wound were brought together by sutures and plaster, and the leg was covered with cotton-wool. As he was restless towards evening, half a drachm of laudanum was administered at bedtime.

20th.—He has slept well, though numbness and aching were experienced along the front and back of the thigh, down to the instep and foot, and they still continue. The temperature of both limbs is the same (97 Fahr.) No tenderness round the wound, though it feels sore; bloody serum, mixed with oil-globules, flows from it. Pulse 136, small and compressible; skin warm and moist; thirst.

Six ounces of wine and a pint of porter daily.

21st.—He was noisy yesterday, towards evening; but slept tolerably well, without opium. Pulse 116, full, but compressible; thirst less; appetite good.

22nd.—The bowels, which had not been relieved since his admission, acted freely and copiously after an aperient draught yesterday evening. At night he took half a drachm of laudanum, and slept well. Weaker this morning, though less listless. Pulse 128; skin cool and moist. No pain in the wound, the surface of which is less moist; it is dark-coloured, with an offensive discharge. Numbness felt in the left limb; no difference in temperature between the two; both are a few degrees lower than yesterday. He became much excited towards the middle of the day, and could with difficulty be kept quiet. He was thirsty, and constantly calling for drink. Forty minims of laudanum were taken in the afternoon, and thirty more in the evening.

23rd.—Slept well after the opiates. Pulse 124, and very small; the skin cool and moist, after profuse perspiration; mouth and tongue dry. Temperature of the right foot, 93; that of the left, 87. Twelve ounces of wine and porter. In the afternoon the pulse became very rapid and small; the hands, placed out of bed, were cold; general cold and clammy perspiration; the abdomen tympanitic. Strong stimuli were administered, but he gradually sank, and died in the evening.

Examination 17 Hours after Death.—The surface completely bloodless and pale. A little discolouration of the

left leg and foot in the course of the superficial veins. The wound dark-coloured and covered with a thickish, offensive secretion. Not the slightest inflammation around it, nor any attempt at repair. The serous membrane of the abdomen, and all the viscera, perfectly bloodless; there was hardly a vessel to be seen. The peritoneum in the left iliac region, immediately over the extensive wound of the injury and operation was as pale as the rest of the membrane; but the sub-serous cellular tissue was ecchymosed to a considerable extent. In this situation there were a few short, very thin, and transparent adhesions of the sigmoid flexure of the colon to the neighbouring peritoneum, evidently of old date. The heart small and empty, with very little appearance of blood in the coronary vessels. The brain and its membranes almost bloodless. Some serum in the sac of the arachnoid, and partial opacity of that membrane over the cerebral hemispheres.

The cellular tissue around the iliac vessels was infiltrated with blood. The psoas and iliacus muscles were ecchymosed and softened.

No lesion of any large vessel could be discovered in the course of the wound. The circumflexa ilii had been divided about an inch beyond its origin, and its orifice was closed.

The external iliac artery was completely filled with a recent coagulum, from the situation of the ligature to the bifurcation of the common iliac trunk. A similar but shorter coagulum filled the vessel equally below, although the ligature had been applied immediately above the orifice of the epigastric, the orifice of the circumflexa ilii being about half an inch lower. It thus appears, that, although the immediate vicinity of a collateral branch to the ligature of an artery on the side next to the heart, will prevent the formation of an internal coagulum, it does not produce the same effect in the case of the opposite side. The internal and middle coats of the vessel had been divided by the ligature. They were involved in the internal coagula, and had not yet united. The external coat was entire, and, together with the ligature, would undoubtedly have held the ends of the vessel together for a sufficient time to allow of their complete closure, more particularly as they were so effectually protected by the internal coagula.

The internal coat of the femoral artery was considerably diseased,—so much thickened as to diminish considerably the calibre of the vessel. The absence of pulsation in the upper part of the thigh,—an important point in considering the probable nature of the injury, is explained by this circumstance; at least no other cause was discovered. There were patches of opaque yellow deposit in the inner coat of the external iliac artery.

That the bleeding which followed the wound in this case, although it had ceased spontaneously, and was not renewed, was the cause of death, cannot be doubted. It is equally clear, that the source of the hæmorrhage was a division of the circumflexa ilii about an inch from its origin. Fatal hæmorrhage would not have been expected from a vessel of this size; but the danger arises from the magnitude of the trunk, and the vicinity of the wound to the origin of the branch. In the case related by Mr. Liston, of a gentleman who had received a bullet-wound in the upper part of the thigh, the flow of blood "was described to have been most impetuous and profuse, being thrown in jets to a considerable distance,—it was said, two or three feet. The patient was found by Mr. Jenkins, of Gosport, who was first called to his assistance in an almost lifeless state, and he was, with great difficulty, recovered from the syncope and depression."(a) After death, which happened from other causes, the source of this bleeding was found to be one of the superficial branches of the femoral artery, about half an inch below Poupart's ligament, divided about an inch from the trunk.

Moreover, fatal consequences have been known to result from dividing small branches of arteries not of the first order. Thus a patient died in this hospital thirty hours after an operation for strangulated hernia, of hæmorrhage from the pubic branch of the epigastric artery. Fatal bleeding from the same, or an equally small branch of the epigastric, followed the operation in another instance. Similar occurrences have been seen in France, according to a quotation by Dr. R. Quain, from the last edition of the *Médécin Operatoire* of Sabatier.(b)

The exact history of the occurrence, which had not been obtained from the patient prior to the operation, agrees very well with the fact disclosed by dissection, that the bleeding must have proceeded from the circumflexa ilii. If the external or internal iliac artery had been divided or wounded, we cannot suppose that the patient could have walked up stairs, remained bleeding for an hour and a half, and then recovered. We thus see that, in estimating the precise nature of such an injury, it is of the first importance to have a perfectly accurate account of all that has happened subsequently to its infliction, and particularly of the mode, duration, and quantity of the bleeding. The absence of pulsation in the upper part of the thigh constituted an additional difficulty of diagnosis in the present instance, suggesting, as it naturally would, the great probability, that the external iliac artery was directly involved in the mischief.

Case.—WOUND OF THE FEMORAL ARTERY ON ITS POSTERIOR ASPECT.—DIVISION OF THE VESSEL, AND APPLICATION OF THREE LIGATURES.—RECOVERY.

A little girl, six years of age, was admitted into the hospital, under my care, in the summer of 1848, with a wound in the thigh, from which much blood had been lost. A pair of tailor's scissors, with which she had been playing, had, by some accident, inflicted, on the upper part of the left thigh, a wound, from which it was represented that blood had flowed in a bright-red stream with a powerful jet. The bleeding had ceased at the time of admission, when she was cold, and almost pulseless. There was a small punctured wound, not exceeding the sixth of an inch in its external dimensions, situated a little below Poupart's ligament, and between one and two inches externally to the femoral vessels. No blood was escaping at the time of admission, nor did the hæmorrhage recur. The leg and foot were cold, and pulsation could not be felt, either in the femoral artery, or in those of the foot. She was placed in a warm bed, where the circulation soon recovered, and a damp cloth was kept on the bend of the thigh. In three or four days, a slight fulness was observed about the femoral vessels, and it was found to pulsate tolerably strongly; no pulsation could be felt in the arteries of the limb. The wound was now closed. As it was now obvious that the femoral artery had been wounded, I determined, with the concurrence of my colleagues, to expose and secure the vessel, which proved to be a more tedious and difficult affair than I had anticipated. Although the surrounding tissues were somewhat condensed, it was easy to bring the artery into view from Poupart's ligament downwards; it pulsated naturally, and appeared uninjured. On the outer side of the vessel, however, I noticed an appearance which seemed to me a little nick in the tube; it was seen through the cellular tissue, which still connected the vessel laterally, and appeared to be the termination of a wound in its posterior part. I proceeded to detach the vessel cautiously, for the purpose of tying it, when arterial blood flowed freely from behind. In order to obtain sufficient room, it was necessary to cut through Poupart's ligament; and I placed a ligature on the vessel high up. The blood still came out when this had been tied, and apparently with equal freedom. It was, of course, necessary to place a ligature below the situation of the wound; the bleeding continued. I next cut through the artery between the two ligatures, and, finding that the blood issued from the upper end, I secured it by a third ligature immediately on the orifice, and, of course, at a small distance only below the first. This effectually stopped the bleeding. The patient was put to bed, and, choosing a position of the limb in which the sides of the wound were accurately in contact, she remained in the same posture, with the part covered by a damp cloth, neither suture nor plaster being required.

The cellular texture around the femoral vessels was somewhat condensed; so that to expose, separate, and pass ligatures around them, was not so easy as in the normal

(a) Medico-Chirurgical Transactions, Vol. XXIX., p. 107.

(b) "Chez quelques sujets, l'artère épigastrique naît de la partie antérieure de l'iliaque, il n'est pas rare alors qu'elle fournisse plusieurs petites branches irregulières qui se perdent vers la symphyse du pubis, en passant derrière le ligament de Gimbernat; on a vu le débridement porté sur ce ligament donner lieu à une hémorrhagie mortelle due á la section de ces arterioles."—*Anatomy of the Arteries of the Human Body*, p. 460.

state of the parts. The arterial wound, entirely out of sight, was uncertain in its exact position and extent. It might have, and possibly did involve the deep-seated, as well as the superficial femoral artery. It was necessary to carry the dissection above Poupart's ligament, and to have pressure on the arterial trunk higher up during the progress of the proceeding. When these circumstances are considered, together with the age of the patient, it will be obvious, that the operation must have been tedious; it occupied more than an hour, and could not have been completed, with the necessary caution, in less time. A moderate influence of chloroform was maintained throughout. Without its salutary aid, I believe, either that the object could not have been accomplished, or that, by occupying a much longer time, with continuedand severe suffering, and greater loss of blood, the patient's life would have been seriously endangered. It is important to know, that the value of this anæsthetic agent is not only manifested in preventing pain, and otherwise facilitating the execution of a difficult operation, but in a beneficial influence on the subsequent progress of the cure. The child took a little fluid refreshment, and then slept tranquilly for some hours. She awoke for a short time, and then slept well during the night. In the middle of the day, I found her cheerful, with a healthy countenance, and no appearance of illness or suffering. She went on in the same favourable state to complete recovery. It was necessary to maintain the temperature of the limb by warm covering, and to continue this precaution after she had left her bed, as it was still more susceptible of cold. As she did not return to the hospital, it is probable that no further inconvenience was experienced from this circumstance.

What happened in this case may be explained by supposing, that the profunda femoris arose in the interval between the two first ligatures, and that the bleeding, which required the third ligature, proceeded from this vessel. It may be asked, why the precise situation and extent of the original wound and the origin of the profunda were not ascertained at the time. Such a question will not be put by a surgeon who has had to deal with an affair of this kind, who will, therefore, be satisfied with arresting the hæmorrhage effectually, without incurring the additional risk of dissecting in such a quarter in order to ascertain points which, although interesting in themselves, have no direct bearing on the safety of the patient.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. I.

EXTRACTS FROM A REPORT ON A RECENT EPIDEMIC OF REMITTENT FEVER, AT PROME, BURMAH.

By M. W. MURPHY, Esq., Assistant-Surgeon, 80th Regiment.

[We have italicised certain sentences in this Report which bear upon the question of identity of tropical remittent fevers with the true yellow fever. It will be seen that in this fever at Burmah there are points in which both resemblance and difference are very marked. Dr. Murphy has been required to furnish further information touching the black fluid vomited and found in stomach, and to report if it is similar to what is met with in cases of yellow fever.]

Number of Cases.—Between the 1st of October and 31st of December, 1852, 504 cases were treated; of these 407 were discharged, 11 died, 1 was invalided, and 85 remained under treatment, on the 1st of January, 1853. Of the total number, 174 were re-admissions, leaving 330 fresh cases during the quarter; which, with an average strength of 683, gives a proportion of 48·07 per cent.

Mortality per Cent.—The proportion to the total number treated was 2·18. Excluding one man who died of cholera, and one who died of chronic dysentery during convalescence, the mortality is reduced to 1·79. Many convalescent cases were attacked with cholera and dysentery, and died from their effects.

Re-admissions.—The number of re-admissions shows the liability to recurrence after one attack to be remarkable. Of the 174 re-admissions, 109 were admitted a second time (or 1 re-admission), 50 a third time, 12 a fourth time, and 3 a fifth time. They were most frequent in one company, which had been on detached service without a medical officer.

The Type of Fever was in most cases remittent, but in many cases the remissions were so imperfect, that it was difficult to discriminate between it and continued fever. In a few instances, in the earlier periods of attack, it was intermittent. As the disease was subdued, the remissions declined into intermissions. It very rarely, if ever, commenced in an intermittent form and progressed into the remittent. It constantly occurred that during the first remission the patient felt so much relieved from the more urgent symptoms, that he declared himself quite well; but, on being asked if he felt thirst, he invariably answered Yes, and, on being placed in the erect posture, he felt sick and giddy, the pulse always being accelerated, and the respiration hurried.

Symptoms.—After a feeling of oppression and weariness, with disinclination to exertion, and lassitude, which, in many instances, was experienced for two or three days, a rigor, with a great sense of coldness and constriction of the skin, has occurred, accompanied by pain of the head, chiefly of the forehead, with pains of the loins and legs. This was quickly followed by great heat of skin, urgent thirst, nausea, and faintness. During this period vomiting was often present, perhaps owing to the quantity of water swallowed to allay thirst. In most cases sweating followed with much relief to the headache, and pains in the back and legs. The paroxysm thus constituted occupied generally from four to eight or twelve hours. During the prevalence of the cholera in December the attacks of fever were ushered in with purging and vomiting, great depression of the circulation, and tendency to collapse. In some cases the heat of the skin was so great that it communicated a tingling sensation to the hand of the observer. In others it was but little higher than ordinary. In most cases the tongue was covered with a white creamy secretion, but in many, after the first day, the centre and tip became brown and dry, and, in the more severe and protracted cases, the entire tongue was covered with a dry black crust, and there were sordes on the teeth. The face was generally pale, the lips particularly being devoid of colour. In a few cases where the heat of skin was most intense, the face, during the hot stage, became greatly flushed, and the eyes suffused and glistening. In very many, during the continuance of the fever, the skin assumed a pale yellow colour. This was particularly remarkable in the men of the detached company, but the appearance became general in nearly all who had suffered from severe attacks. The pulse was frequent, —in many cases 140 to 150 during the accession of fever. It was usually compressed easily. The respiration was commonly hurried. The urine scanty, and of a deep red colour, containing much lateritious deposit. The feculent discharges were either deficient of, or highly charged with, bile.

These were the prevailing symptoms; but there were not a few cases in which several of those enumerated were combined, and the following were also observed:—An absence of the sweating stage, in place of which a slight relief only to the more urgent symptoms was experienced; persistence of extreme thirst, and heat of skin, *colour of the skin assuming a deep jaundiced hue; black, dry tongue, with sordes on the teeth;* VOMITING OF VERY DARK, ALMOST BLACK, GREEN MATTER in large quantities; extreme debility; delirium, and rapid death.

In one instance, a patient, who, on admission, presented the graver symptoms before mentioned,—the intense hot skin, urgent thirst, and vomiting of *dark green matter*, with great prostration,—was, on the second day of his attack, seized with a convulsive fit, and became semi-comatose, the skin, at the same time, assuming a deep yellow colour, and *lividity of the depending parts of the body occurring twelve hours before death.*

One case was complicated by a severe affection of the lungs. In three cases, an eruption of urticaria was noticed on the body and extremities. In six cases, entozoa, ascaris lumbricoides, were vomited, from three to four inches in length. In a very great number, tremors of the hands and tongue, as in delirium tremens, and accompanied by wakefulness, were noticed.

The progress to recovery was nearly always very slow, and the *liability to relapse very great.*

Black Vomit.—In only one case was the vomited matter *black;* and in this case the fluid reflected a slight greenish

hue on being poured out from the vessel in which it had been received. In two other cases, on *post-mortem* examination, *thick, black fluid* was found in the stomach.

Contagion.—Nothing was observed to give any ground for believing that the disease was communicated by contagion, or that it possessed any infectious character.

Causes.—*Predisposing.*—The greater part of the regiment was in an unhealthy state from long service in India and New South Wales, and during the past four years in the hot and damp climate of Lower Bengal and in Dinapore, where local morbid agencies are notoriously abundant. Intemperance had also prevailed among the men, and they had been subjected to great privations and hardships, particularly during a voyage of twenty-four days to Prome, on crowded, hot decks of steamers without bedding, and with very inefficient protection from the sun; living on salt rations without vegetables, only occasionally varied by tough fresh beef. This was followed by night-guards, and want of proper rest, owing to continual alarms from the enemy, and fatigue duties.

Endemic Causes.—On the arrival of the British force at Prome, it was found that the town had been deserted for three or four months previously. Long grass and jungle had grown in the streets and between the houses. The grass roofings of the houses were decayed, and scattered about by the inhabitants, who had pulled down the houses. The priests' houses alone had been spared. These were of wood, with wooden roofs, and were used as barracks. The 80th Regiment was quartered in houses on the N.E. side of the Gilded Pagoda, on low ground lying between the elevation on which the Pagoda stands and a rampart and ditch, partly dry, that had been a portion of the former defences of Prome. The part of the plain near the Pagoda hill was thickly covered with trees and jungle, and in the midst of this the greater number of the houses occupied by the regiment on its first arrival was situated. The other part of the plain was covered with long, coarse grass, and had not long before been entirely under water, several small boats having been found on and close to it. During the first fortnight the regiment was employed morning and evening on fatigue, cutting down the trees and jungle, piling them in heaps and burning them. Thus ground was laid open to evaporation, which for many years had been receiving deposits of decaying vegetable matter, and a great number of sentinels had to be posted round this at night. The houses afforded little protection from the night exhalations, the sides being open in every direction. The beds were on open flooring, exposing the men to cold draughts and chills. The variation of temperature during the twenty-four hours often amounted to 28°. The dews, at night, were very heavy, and the atmosphere charged with moisture. Fogs were constant over the low lands at night.

The causes assigned by the patient were either exposure to the sun, chills on duty at night, or fatigue in carrying weights from one place to another.

Drunkenness was almost invariably followed by an attack of fever or dysentery.

Necroscopical Appearances.—Eight bodies were examined. The liver was enlarged in all, being very great in four, at least three times the natural size. Its colour was *dark green throughout;* in four, being exactly similar to that observed by me at Sierra Leone in 1843. This green colour permeated the entire structure of the liver, the tissues adjoining it being also tinged. The gall-bladder was usually half full of dark-green, viscid bile. The structure of the liver was remarkably dry; the increase of size depending more on hypertrophy than hyperæmia. The *spleen*, in all the cases, was *enlarged;* in two instances to three times, and in one to four times the natural size. The structure was softer than natural, and it sometimes broke up on being lifted from its position. In three cases, the *black fluid* before mentioned was found in the stomach. In the case where it had been vomited considerably more than a pint was contained in it. In the two others it was found in small quantities, adhering to the mucous membrane, and resembling viscid black mucus. The membrane, on being washed, appeared of a dusky purple colour, and the submucous vessels were enlarged and congested. Pneumonic solidification of the lower lobes of both lungs was found in one case. This was in a recruit recently arrived from England.

Treatment.—There was great difficulty in procuring supplies and proper food for the patients. Thus, the medical officers could not so much treat the cases as they would wish, but were obliged to select what would be most likely to be an efficient substitute for something not to be had. An emetic was first administered, and was often followed by the best results, diaphoresis being induced, and the heat of surface and nausea relieved. A foot-bath was then given, and, if heat and headache continued, cold water or spirit lotion was applied to the head, with or without shortening the hair. Calomel and colocynth were given, if a purgative was required, followed by compound jalap powder. On the bowels being open, quinine was given. I generally waited for the remission, before commencing it; but, in the severer cases, I have not hesitated to give it in any period of the fever when constipation was present, combined with sulphate of magnesia, or, when diarrhœa existed, with opium. In October, I gave 8 grains, followed every third hour by 6 grains; but, during the latter part of the quarter, the supply was defective, and 3 to 5 grains formed the maximum dose. This was given three or four days, until the fever appeared subdued, when the decoct. cinchonæ or inf. charytæ was substituted. After three or four doses of these, if no fever returned, the patient was discharged convalescent; and after some days in barrack-rooms went to duty. A mustard-poultice, blister to the abdomen, or effervescing draughts were sometimes required to allay abdominal and gastric symptoms. The form of giving quinine with opium was 3 grains of quinine, 1 of opium, and 1 of camphor, in a pill, with a draught of chalk mixture and aromatic confection. Even with head symptoms I have never seen reason to regret the use of opium in fever, when attention has been paid to the state of the bowels.

In the more severe cases, shaving the head, cold affusion, counter-irritation to the spine and epigastrium, small doses of hydrocyanic and creosote, were used. Of the efficacy of the latter in relieving vomiting, I cannot say that my experience afforded any remarkable proof. In three of the fatal cases of vomiting of dark green matter, a little weak brandy and water was the only thing retained. In these cases I gave quinine by enema. The vomiting was most relieved by the endermic use of opium, sprinkling morphia, or applying a solution of opium, four grains to the ounce, over a blistered surface. A blister over the spine in the dorsal region also had a good effect.

Arsenic was used extensively as a substitute for quinine, and its value proved nearly, if not quite, equal. It acted best in cases where the remissions were most marked, and when they afforded the most sensible relief, the type approaching nearer to the intermittent. The liq. potassæ arsenitis was given in doses of five minims every third hour, and increased gradually to eight minims.

Iron was given during convalescence with good effect. Mercury has been only used as a purgative. Wine and beer have been necessary, and prescribed freely.

In three cases I cut short a paroxysm of intermittent at its commencement, by the application of a ligature round both thighs. In one severe case of tertian, which had lasted for a considerable time, the fever did not return after the application of the ligature; but the patient was taking arsenic at the time.

CONTRIBUTIONS TO ORTHOPÆDIC SURGERY.

By BERNARD E. BRODHURST, Esq.,
Assistant-Surgeon to the Royal Orthopædic Hospital, &c.

[Continued from last Volume, page 597.]

Structural shortening of muscle is a rare pathological occurrence: it is a result of myositis. Inflammation of muscle, however, frequently advances beyond that state which terminates in shortening, and this generally when the muscular fibre itself is affected; induration, suppuration, and gangrene are not unusual terminations of this inflammation. Structural shortening is produced by inflammation of the cellular sheath, through which power of action is lost to the muscle. Should the inflammation extend beyond this, there is found infiltration of the interstitial cellular tissue; the colour of the muscular fibre itself is altered, in the first instance somewhat deepened, but soon it becomes paler than usual, and a rapid transition is effected to granular degeneration of the muscular fibre. The most frequent exciting causes of inflammation of muscle, are cold and damp, wounds of the muscle itself, and rupture of its fibres.

But there is a temporary shortening, (if it may be so said, temporary,) occasioned by paralysis of the opponent muscles. It is a compensating influence of loss and gain, similar to that exhibited in Bell's experiment, and constantly witnessed as a result of morbid action. When the extensor muscles, for instance, are paralysed, the flexors contract upon themselves, and draw the limb into a state of permanent flexion; they assume a tonically contracted position, through loss of tonicity in their antagonists, on the same principle by which a state of passive tension is preserved in health and repose. It is well known, after the experiments of Prevost and Dumas, that a muscle is capable of contracting 0·23, or nearly one-fourth of its length. The power, then, of the opponent muscles being removed, the healthy muscle merely exerts its ordinary contractile power, and retracts in proportion to its opponent's loss. Thus is occasioned a temporary shortening, through loss of opponent power. The contracted muscles appear to be those in fault, when, indeed, they are only secondarily affected, and exerting a healthy influence. Retraction, when it thus takes place, is slow and very gradual, and is able to resist a sudden attempt at elongation, in proportion as the muscle itself is powerful. But, since the law of elongation is similar to that of contraction, the muscle will at length yield to constant pressure, until it resumes its normal length. The two following cases will serve as types of this class of deranged function.

Case 2.—A. B., aged 36. October, 1850, fell, and struck the upper part of the sacrum and the lower lumbar vertebræ against the stairs. The accident occasioned pain; but this soon passed away, and it was not more thought of, until one month had elapsed. Then, power was suddenly, but momentarily lost; for a few minutes she was wholly unable to move, and would have fallen to the ground, had she not been supported by a friend. Power was regained, however, almost as quickly as it was lost, and she was enabled to continue her walk. For three months from this time, she suffered lancinating pains in the back and legs, and a decided loss of power was soon experienced in the extensors of the right lower extremity. This gradually increased, and the right arm became affected. During the following four months, disease proceeded rapidly; loss of power became so complete, that she was unable to rise from her seat, nor could she stand, or make a step forward, without aid. At this time, and subsequently, sensation was unaffected, the memory was unimpaired, and the mental functions were unaltered. The flexor muscles of the leg, as well as the gastrocnemius and soleus, were contracted, and the flexors of the fingers. To this there was superadded clonic contractions of the legs, at night more especially, which action, having commenced, usually lasted some hours. This painful and wearisome motion could be in some measure restrained, but it was impossible to prevent twitching of the muscles. I had the advantage of Dr. Little's advice in this case. The prognosis was unfavourable. Paralysis soon extended to the muscles of respiration and deglutition.

The autopsy disclosed effusion of bloody serum within the spinal canal, inflammation and thickening of the spinal meninges, the vertebral venous sinuses distended with blood, the spinal cord swollen and soft, and changed in structure, from the medulla oblongata downwards.

Case 3.—A. D., aged 18 months. March 24, 1845, a patient of the late Mr. Scott, at the London Hospital, was struck on the head by a swing, at Stepney fair. Without lacerating the scalp, this accident gave rise to considerable effusion of blood beneath it, over the left parietal and temporal bones. The tumour pulsated synchronously with the pulse, until the evening, when pulsation ceased. A few days later, however, it recurred; but the sensation communicated was then much more feeble than heretofore.

Soon after the accident, the child appeared drowsy, and remained so; the pupils acted, however, and respiration was normal. During the night, the child slept well and quietly, and no bad symptoms appeared until March 29, when the mouth was occasionally twitched to the right side, and the right hand was clenched, and the thumb was flexed into the palm. The flexor muscles of the forearm, and those of the leg, and the extensors of the foot, were soon after in clonic spasm.

30th.—The child was removed from the hospital.

Eight years later, I again saw this child, at the Orthopædic Hospital. She had then grown into a fine, healthy-looking, fair-haired girl. On the head there was an indentation three inches in length, into which the finger might be laid, at the junction of the parietal with the temporal bone. The extensor muscles of the right side of the body were more or less paralysed. The arm was raised with difficulty, and scarcely on to a plane with the shoulder; the hand was pronated, and the fingers were flexed; the spinal column was curved to the left side; the flexor muscles of the leg were contracted, as well as those which terminate in the tendo Achillis; the toe was on the ground.

Both in the case of the lady first mentioned and in that of the child, the effects described were such as are common (although these are extreme cases) to a large class of affections to which I shall have to call attention. Weber, in his essay on Muscular Motion, concludes, from certain experiments to which he alludes, that tonic convulsions, as tetanus, are the result of disturbance of the functions of the spinal cord; while clonic convulsions are due to derangement of certain portions of the brain. Such a distinction, if it were indeed founded on fact, would be in the highest degree important. As a rule, unquestionably, clonic spasm, as distinguished from choreic, is rather cerebral than dependent immediately on spinal irritation; but it is not always possible to analyse and apportion effects to various tracts of the cerebro-spinal system. That there are certain diagnostic signs of affections of the cerebrum, and of affections of the medulla, is admitted; but it has yet to be shown that clonic spasm is exclusively of the cerebrum, and tonic of the medulla. The positions, thus assumed by Weber, are contradicted, both by experiments and pathology; but it will be necessary to return to this subject.

There is, also, another form of muscular retraction arising from peripheral irritation, of which I shall treat in the third division of my subject.

Position is thought by some to be the one great cause of congenital deformity. That pressure of the uterus shall occasionally affect the fœtus, and cause deformity, is probable; indeed, there is no doubt that the posterior spinal curvature of infants is owing in great measure to position in utero. But pressure of the uterine walls is wholly insufficient to give rise to spastic contractions; neither is it possible that pressure of the uterus shall occasion varus in the embryo at the third month of utero-gestation,—yet varus has been met with at this time. Even when deformity has been removed by surgical operation, there is a tendency to its recurrence; and further, the same class of affections is found to exist where pressure is impossible. If the prisons of Venice and Ratisbon, and the yet more detestable dungeons of La Salpétrière, Bicêtre, and York were insufficient to occasion permanent muscular contraction, independent of inflammation, then may the uterus well be held exempt. A deficiency of liquor Amnii might affect development or life; it would be inopportune, in reference to this question, to enter into such an inquiry, however, since development is as in the healthiest. It has been a grave error, to rank together arrests of development and disturbances of function. The two conditions frequently co-exist, and they have this in common, that they tend to destroy the symmetry of the "human form divine:" but it cannot be expressed too distinctly, that muscular retractions are allied in nothing to monstrosity. Monstrosities are anomalies of organization. Affections of motility are anomalies of function; therefore, the one is to the other what function is to organisation. Every one acquainted with museums of pathological anatomy has had experience of the co-existence of monstrosity and muscular retractions. Each has seen for himself hemicephalous and anencephalous monsters, with retraction of, perhaps, all the flexor muscles of the body; or, again, contraction of the hands and feet, together with hydrorachis and hydrocephalus. And, probably, each has seen contraction of the flexor muscles in instances in which this result of irritation was the sole evidence of the existence of irritation. Now, if the most fearful form of monstrosity be adduced, or the simplest form of talipes, irritation of the medulla and spinal nerves must be the cause of spastic action. Thus, there is analogy between these separate conditions, as between function and organisation. The following is an instance of carpo-pedal contraction, and is, perhaps, stronger evidence against the influence of position in utero, than any mere words that could be offered:—

Case 4.—S. C., aged ten weeks, a puny, weakly, eight months' child, was affected at birth with double talipes varus, and cheirismus. Both feet were similarly distorted, both in an extreme state of varus, and both hands were

affected, the fingers of the left hand being clenched, and those of the right constantly everted, and never clenched. The greater influence of the flexor and adductor muscles was in this instance well shown; in the right hand, the M. interossei and lumbricales, together with the carpal flexors were affected; while, in the left hand, the common flexors of the fingers were more particularly implicated. These simple ginglimoid joints show well how unequal position is to occasion this form of contraction. Here there is no voluntary power to overcome spasmodic action; but the gentlest manual interference will restore the normal position of the limb. It were impossible to see the accompanying faithful delineations, (*Figs.* 3, 4, 5,) and believe position in utero to be sufficient to occasion such distortions. Spasm, whether it be as in *Case* 1, clonic, and of gastrocnemius and soleus only, or combined with morbid action of the adductors of the foot, is identical in kind; and whether it be temporary or durable, — tonic or clonic, it is evident that the same action must be in force to produce a result which differs alone in degree and duration. It would not be thought reasonable to assert, that congenital strabismus differed essentially from that which is post-natal, —that one and the other did not depend on irritation, probably, of a centripetal nerve and increased action of the centrifugal; neither is it philosophical to assume, that a different action is at work to produce a similar result, because the cause is hidden, when that which is obvious is sufficient, whether congenital or post-natal.

Of Congenital Affections of Motility.—Spasm is the one prominent form of congenital morbid muscular action. After birth, there are various forms of disease which give rise to similar appearances of deformity, as spasm, inflammation, paralysis, and hypertrophy, the first and last hypercineses, the second and third acineses. Not so, however, in the fœtus. Here, there exists one form only, or, if irritation ever advance to occasion paralysis, it is an occurrence so rare in the fœtus, that it can only be considered an exception to the rule. It may be said, that these congenital affections are not complicated with paralysis, hypertrophy, or inflammation of muscle, but are due to irritation alone of the cerebro-spinal axis.

Causes.—Irritation, however induced, is essentially the cause of spasmodic action; and whether it be manifested in varus or cheirismus, torticollis or strabismus, irritation of the nervous centres, direct or indirect, is probably the cause of abnormal action. I have also been able to trace an hereditary influence, which rarely predisposes to this morbid action. The following is an instance in point:—

Case 5.—J. H., aged 9 weeks, January, 1853. Highgate. A small, healthy-looking child, with talipes varus of both feet. He was the youngest of seven children, of whom four were boys. The boys were each of them born with single or double varus, but the girls were entirely exempt. The father of these children was afflicted with congenital varus, as also his brother, and their father. Several other male members of the same family, more distantly connected, were also born with varus; but there has been no instance in this family of a female thus affected. Thus it appears, that an hereditary predisposition exists to dispose to morbid muscular contractions, equally as to epilepsy or to hysteria; or to such affections as rachitis, tuberculosis, etc.; or, again, to malformations, as in the instance mentioned by Kellie of imperfection of the hand. For ten generations, the hand was malformed, the fingers being deficient one or more phalanges, the thumb alone being perfectly formed. The female members of this family were solely affected; the males were exempt. And again, as in the interesting instance related by Dr. Meryon,(a) of fatty degeneration of muscular fibre, in a noble English family of four boys and six girls; the boys alone were affected.

Disease in the fœtus is judged of, for the most part, by its products alone. Seldom have we the opportunity of viewing the course of an eruption, for instance, which has commenced in utero; yet it is not rare to find its result, as in the variolous cicatrix. Nor can the condition of the blood be doubted when this is manifest, or when the syphilitic blotch is developed, more than if these maladies had run their course under observation. No one will deny, that these are identical with those of adult life. And irritation, although its effects are produced more silently than in after life, (and this would seem to be common to affections of the fœtus,) is not essentially different. As we find the irritation of dentition and that of emotion acting as causes of spasm during infantile life, equally do we find in the fœtus impaired nutrition to produce similar results. Orthopædic surgery does not require a special physiology or pathological anatomy,—a knowledge of natural development and healthy structure will lead to a knowledge of morbid changes.

The learned author of the "Dictionary of Practical Medicine," article Convulsion, writes: "We know that the movements of the fœtus in utero are automatic—are the consequence of irritation affecting the organic nerves, extending to the spinal nerves, and, through them, inducing motion of the limbs." We also know, that all automatic movements, of whatever source, whether voluntary, emotional, instinctive, or reflex, are due to the cerebro-spinal nervous system. The effect of irritating organic nerves is to excite reflected motion in the parts themselves supplied by these nerves, and also to excite motion of the voluntary muscles, the roots of whose nerves are in connexion with these organic nerves. There is, further, a specific motor power enjoyed by the sympathetic, as I have myself shown(b); but this is widely different to that produced through the other automatic centres; in the latter, we have the result in animal motion; but, in the former, motions allied to tension and relaxation—motions essential to nutrition.

The position of the *fœtus in utero* is such, that it may be packed into the smallest space compatible with the requirements of nature. The head is bent upon the breast, with the chin upon the sternum; the neck and back are curved forward, the thighs are flexed upon the trunk, and the legs upon the thighs; the arms are folded across the chest, and the fingers into the palm. In other words, the position is such, that the power of the flexor muscles is exerted over that of the extensors. Hence it is, that, in all congenital affections, (and the exceptions prove the rule), the flexors and adductors are the contracted muscles,—and this not a consequence alone of position in utero; it obtains equally in post-natal affections, that the power of the flexor muscles is predominant. As Mason Good says:—"A very slight survey of the animal frame will show us, that the flexor muscles have, in every part, some preponderancy over the extensors;

(a) Medico-Chirurgical Transactions, Vol. XXXV.
(b) Paper read before the Royal Society "On the Motions of the Iris." 1850-51.

and that this preponderancy is continually counteracted by the stimulus of the instinct or of the will. We see it from the first stage of life to the last, and most distinctly in those states in which there is most feebleness, and, consequently, in which the controlling powers are least capable of exercising and maintaining a balance." Again: "A sudden and incidental application of any irritant power whatever to any of the muscular fibres, will throw them into an irregular action, not only in a morbid state, when they are most prone to such irregularities, but even in a state of health. Now, whenever an anomalous and forcible movement of this kind has once been excited in any chain of muscular fibres whatever, there is a strong tendency in them to repeat the same movement, even from the first; and when, from accident or a continuance of the exciting cause, it has actually been repeated, it forms a habit of recurrence that is broken off with great difficulty."(a)

14, Lower Brook-street.

[To be continued.]

CASE OF EXCISION OF THE KNEE-JOINT,

IN WHICH THE WHOLE APPARATUS PATELLARIS WAS PRESERVED.

By GEORGE M. JONES, Esq.,
Surgeon to Jersey Hospital.

It is not my intention to enter at all fully into the history of this case before the operation, nor to give a detailed account of the symptoms which supervened, or the treatment which followed it. This, together with more lengthened remarks on resection of the knee-joint generally, may probably appear at some future period, and in a more extended form than the limits of a weekly journal permit, and, with other unpublished cases, may perhaps be, in some degree, the means of deciding whether or not this operation be justifiable.

Seven cases of excision of the knee-joint have, to my knowledge, occurred within the last twelvemonths; and when men of the first eminence in their Profession, Mr. Fergusson, of King's College, and Dr. Mackenzie, of the Royal Edinburgh Infirmary, have each of them performed it twice during this period, I cannot but think that others will follow their example; and this belief influences me to publish, without delay, my last case, the operation having been performed in a different manner to that followed on former occasions, and, as far as I have been able to learn, differing also from that recommended or practised by others. —William Livermore, aged 12,(b) was admitted into the hospital on the 12th of October last, for an affection of the right knee, of upwards of a year's standing. His general health was not very much impaired, and the condition of the limb was—general inflammation of the knee-joint, and the textures surrounding it. To be brief, a careful investigation led to the supposition, that ulceration of the cartilages had already much advanced. There was general distension of the joint, as if by contained fluid. A fair trial of the following means was carried out:—The patient was kept in bed; the joint frequently covered with leeches; then cupping, blistering, mercurial and iodine frictions, tartar emetic ointment, each combined with appropriate constitutional remedies;—all failed. The operation was performed on the 17th of April last. A longitudinal incision was made on each side of the knee-joint, midway between the vasti and flexors of the leg, full five inches in extent; rather more than half the length was over the femur, and rather less than half over the tibia. These two cuts were down to the bones; they were connected by a transverse one just over the prominence of the tubercle of the tibia, care being taken to avoid cutting the ligamentum patellæ by this incision; the flap thus defined was reflected upwards, the patella, its ligament, and the joint, thereby exposed. The synovial capsule was cut through as far as it could be seen; the patella and its ligament were now drawn over the internal condyle, while the joint was kept extended. It was next forcibly flexed, the crucial ligaments, almost breaking in the act, only required a slight touch of the knife to divide them completely; the articular surfaces of both bones were thus completely brought to view, and nearly two inches of the femur and half an inch of the tibia were sawn off, the soft parts being drawn aside by assistants. The external condyle of the femur was found hollowed out by a large abscess, and it was necessary to saw off a portion of the carious bone, and to gouge the remainder, until healthy cancellous tissue was reached. The entire synovial membrane was in a state of pulpy degeneration, and was carefully dissected off.(b) The hæmorrhage had been rather great, but had now almost ceased, and no vessel required deligation. The blood was sponged out of the wound, the patella (after the diseased portion had been gouged out) and its ligament replaced, as nearly as possible, in their natural state, the bones brought in apposition, the flap brought down and held by sutures, the limb bandaged on a slight under-splint and laid in a box, the wound covered with moist lint, and the boy put to bed yet asleep. The operation occupied full twenty minutes, and was performed while the patient was under the influence of chloroform.

Opiates had, for some time, to be freely administered every night; and the boy's appetite, always excessively small, having entirely failed, the stimulating plan of treatment was followed out more rigorously than I had pursued it in other cases. The seventh day after the operation, a slough of some extent was perceived on the lower part and sides of the flap. This went on increasing for some days; the ligamentum patellæ was, however, never bared. Mild, stimulating applications arrested its progress; healthy granulations sprang up; and soon the suppuration, which at one time was very considerable, lessened in quantity. At present it amounts to a mere nothing, the wounds being now all but healed.

Not seven weeks have yet elapsed since this operation was performed, and it is most satisfactory to witness its favourable and rapid progress. The little patient never experiences the slightest pain in any part of the limb; he turns it from side to side easily and quickly, and, without either assistance or appliance of any kind, can, while lying on his back, raise the leg from the hip upwards. The knee bows slightly inwards; but my previous experience in these cases leads me to believe, that a very slight mechanical contrivance will entirely remedy this. The patella is adhesive to the femur and tibia, and its ligament preserves its integrity.

The integuments covering the joint had been so much deteriorated by the disease itself, and perhaps also by the remedies used, as, together with the length of the flap, to account naturally for the slough. Probably two smaller flaps, reflected upwards and downwards from the centre of the patella, might have answered better.

I am very unwilling to be supposed to recommend this plan of operation, as one adapted to all cases of knee excision,—very far from it; there are cases in which it is altogether inadmissible; and I feel persuaded, that, whoever adheres to one mode only, will often find himself wofully disappointed in the result. The general rule of acting according to the features the case presents, is quite as applicable to these particular cases as to others generally.

Preserving the patella, and not dividing its ligament, makes the operation more tedious and difficult; but this is a very secondary consideration, where it results in obtaining a more favourable issue. That it proved so in this instance is abundantly established by the fact already mentioned, that, in less than seven weeks after the operation, this patient is able to raise his foot without any assistance; while a young man who occupies the next bed, and in whose case everything has gone on favourably, was only able to do so in as many weeks.

Jersey, 17, Old-street.

(a) Fourth Edition, Vol. III., p. 314.

(b) This little patient was seen, a few days after the operation, by Dr. Mackenzie, of Edinburgh, who favoured me with a short visit, for the purpose of seeing my cases of excision of the knee joint, and I am happy to find, that, almost immediately on his return to Edinburgh, he performed the operation, following out substantially the plan I adopted in this case. I am happy to find his patient is going on well. The mechanical contrivances I employ in these cases are of the most simple kind, so much so, that my friend Dr. Mackenzie expressed his surprise at their efficacy. It will, at all times, afford me much pleasure to give detailed information on any point connected with this operation to any who may desire it.

(b) In excision of joints, my experience proves to me the necessity of carefully dissecting away every vestige of synovial membrane. I have found it most often in a diseased condition, and I know, when any portion has been left behind, it has been the cause of much irritation, leading to small abscesses and fistulæ, which discharge a pseudo-synovial fluid, and prove of much annoyance to the patient, and trouble to the surgeon.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

EMPLOYMENT OF THE GALVANIC CAUTERY IN CASES OF VESICO-VAGINAL FISTULA, PROLAPSUS UTERI, AND VASCULAR GROWTH IN THE URETHRA.

[Under the care of Mr. MARSHALL.]

Some months since, in detailing a case of excision of a tumour from the tongue, we took occasion to allude to the advantages offered by the galvanic cautery for the removal of vascular structures without risk of hæmorrhage. We have now to bring before our readers a short notice of a series of cases at present under Mr. Marshall's care, in which its usefulness as an actual cautery has been well exemplified. It may, perhaps, be as well to premise, that this instrument consists solely of a platinum wire, heated to red or white heat by means of a galvanic battery, and that its superiority over all others intended for the same purpose consists in the circumstance, that its temperature is sustained, or, if by accident reduced, is immediately replenished, by the galvanic current, without any need to suspend the operation in order to re-heat the wire. All who have had experience in the use of the ordinary cauteries in delicate operations will be aware of the difficulty of getting through the necessary steps, especially if the surface to be touched be large, before the iron has become too cool for use. The moisture of the part very rapidly extracts the heat from a wire which has been removed from the lamp, and the surgeon is consequently under the necessity of continually interrupting his operation to change instruments, or to renew the temperature of his original one. From this objection the wire heated by galvanism is entirely free, as it sustains or constantly renews its heat as long as it continues in contact with the battery. The wires communicating with the trough are made long and flexible, so as to permit of the terminal rods being easily moved about; and as the culminating point may either be a slender piece of wire or a coil, so wound as to present a surface of any wished-for breadth, the whole constitutes a very manageable piece of apparatus. We need hardly state, that this kind of heat does not differ in its properties, so far as is known, from that obtained by other means.

The first of the cases we have to mention was one of vesico-vaginal fistula, which had occurred as the result of laceration and sloughing from pressure during childbirth, in a woman aged 34. She had suffered from the disease for three months before her application at the hospital, and had been rendered miserable by the almost constant incontinence of urine which it induced. In October last we witnessed the first application of the cautery to the edges of the fistula. The patient having been placed on her back on the operating-table, Mr. Marshall introduced into the vagina a speculum, having an aperture in its upper surface through which the posterior surface of the bladder bulged. The opening, which was so large as to admit three fingers easily, and had indurated borders, was thus brought well into view. Mr. Marshall applied the cautery, a coil of wire, heated to white heat, pretty freely to the whole of the exposed edge. The woman was removed to bed, and did not afterwards suffer any pain worth mentioning, or any kind of constitutional disturbance. The operation was repeated in exactly the same manner in November, at which time the aperture had diminished very considerably. It has since been done seven times, at intervals of from three to eight weeks. The diminution in the size of the fistula has been progressive, and, at the present date, June 25, the patient is fulfilling all the duties of a regular nurse in the hospital, and is subject to very little of her former inconveniences. As generally occurs in these cases, great difficulty is found in getting the hole to close up entirely, and there still exists a small slit, through which the point of a common-sized penknife might be passed. Mr. Marshall informs us, that, in a case under his care in private practice, in which the same procedure has been had recourse to, he has attained a like degree of success, without, however, having been able, as yet, to induce a perfect cicatrization.

On Wednesday, June 1, Mr. Marshall applied the galvanic cautery to three patients in succession. The first brought into the theatre was a young woman from whom there had been removed, last Christmas, by another surgeon, a small vascular growth, situated just within the meatus of the urethra. It had been re-produced; and, as she described the bleeding which followed the former operation as having been alarmingly profuse, (at least a quart,) it was thought better to destroy it by means of the cautery, than to attempt another excision. Chloroform having been administered, the patient was laid on her back, and the parts exposed. The urethra was then dilated, and its lips held as widely separated as possible, by means of small blunt hooks. The growth, which sprang from the floor of the urethra, was thus brought well into view, and the heated wire freely applied to its whole surface, in some parts breaking up its structure. On account of its extending far back towards the bladder, Mr. Marshall encountered some difficulty in securing the application of the cautery to the most remote parts; but by further dilatation of the urethra, this was ultimately accomplished. The woman was an out-patient; and as soon as she had well recovered from the effects of the chloroform, left the hospital, and walked home. Mr. Marshall informs us, that she suffered but very little pain afterwards, and that the cicatrization was completed on the tenth day. The floor of the urethra now presents a small pale scar, about the size of a mustard seed. Mr. Marshall does not apprehend any inconvenient contraction of the parts after this operation, as he has had an opportunity of watching the behaviour of the cicatrix in four other cases, for long periods after its performance, and never witnessed any such result.

The next case was one of severe and long-continued prolapsus uteri, for the relief of which, as the vagina was very large, and its walls lax and distensible, it was proposed to make a series of eschars in the course of that passage, so as to diminish its calibre by the subsequent contraction of the cicatrices. Mr. Marshall pointed out to those present the principles involved in this method of treatment, and called attention to the superiority of the operation by means of the cautery over that by the knife, in avoiding all risk of hæmorrhage, and in being very slightly painful, etc. He then exhibited a speculum of peculiar construction, (a French instrument made by M. Leur,) which he had procured for the purpose, as possessing great advantages over those in common use. It consisted of two very large blades, each of which was composed of a light framework of metallic bars, and enclosed double rows of fenestræ, about an inch in length and half an inch in breadth. The instrument was adapted only for a very full-sized vagina, and when introduced, and its blades set apart, it had the effect of widely separating the walls of the canal, and at the same time of allowing the mucous membrane to bulge inwards through the rows of apertures. This, of course, was exactly what was required for the easy application of the cautery. The patient, Emma Smith, aged 34, was a married woman, who had borne three children. Ever since her first confinement, March 1, 1850, she had suffered more or less from prolapse of the womb, and the inconvenience had been increased after each succeeding confinement, until it had latterly almost incapacitated her for going about her household duties. Chloroform having been administered, the patient placed in position, and the speculum introduced, Mr. Marshall proceeded to apply the cautery, which, on this occasion, as an extended surface was needed, consisted of a coil of wire, wound round a small bit of common tobacco pipe, to the surface of the mucous membrane, as exposed through the sets of openings in the framework of the speculum. In this manner eight eschars, all of considerable size, were made on each side the vagina; the operation being performed very quickly, and without any kind of difficulty, as it was scarcely necessary to withdraw the instrument once before its completion. As soon as the patient had a little recovered from the effects of the chloroform, she was carried to her bed, and another woman, suffering from the same disease, in a yet more aggravated form, was next placed on the operating table. Sarah Humphrey, aged 58, the mother of five children, had been troubled with prolapsus uteri for seventeen or eighteen years. It had latterly been constantly down when in the erect posture, but passed into place without much difficulty when recumbent. The exposed mucous lining of the vagina had become greatly thickened, brawny, and in some parts hard and dry, like cuticle; in others, where it had sustained friction against the thighs, it was ulcerated. These conditions were apparent to all present when the patient was placed in position for the operation, for the protrusion was then down to the size of an infant's head. Mr. Marshall remarked, that it might, at first sight, seem advisable to take advantage of this position of the part, in order to apply the cautery; but, from his experience of a former case, in which that had been done, he was not inclined to again attempt it. The application itself was, of course, easy enough; but it was impossible to return and re-invert the protruded mass, without inflicting undue violence on the parts which had just been cauterised; the patient, in the instance alluded to, had suffered afterwards from a slight attack of peritonitis, which he (Mr. Marshall) was inclined to attribute rather to the violence thus done, than to the operation itself. The prolapsus having accordingly been reduced, exactly the same steps were gone through as in the case we have just described, with the exception, that, as the mucous and submucous tissues were much

thickened, it was necessary to apply the cautery more freely, so as to allow it to act deeply.

We must not omit to mention here another advantage belonging to this operation,—viz., that, through all its steps, the surgeon is enabled to see distinctly what he is about. We observed, that, when the cautery was within the vagina, the brilliant incandescence of the wire sufficed to light up all the surrounding parts, in the clearest possible manner.

The after-treatment and progress of these two patients have been almost precisely similar, and destitute of any excepting negative features of interest. During the first fortnight, they were, of course, confined to bed, and, for the first few days, the bowels were allowed to continue costive; after which, a few doses of castor oil were given at different times, and constituted the sole medication pursued. Detergent injections were at first used twice daily, and, as the sloughs separated, were replaced by mildly stimulating ones. The ulcers have now healed, and there is in each case, a very decided diminution in the capacity of the vagina. Both women have been allowed, during the last ten days to sit up and move about the ward a little, and in neither has any prolapse yet resulted. It is intended, however, to repeat the operation very shortly on both of the patients; and we shall, at some future time, bring before our readers a further report respecting them.(a)

KING'S COLLEGE HOSPITAL.

CONGENITAL VARICOSE TUMOUR ON THE LEG.—LIGATURE BY MEANS OF THE TWISTED SUTURE.—CURE.

[Under the care of Mr. PARTRIDGE.]

A singular example of varicose dilatation of the external saphenous vein has recently been under care at this hospital, which excited considerable interest, as well from the fact, that the disease was stated to have been congenital, as from the complete success which attended the treatment pursued.

Elizabeth Stockwell, aged 15, a servant-girl, living in the country, tall, and rather stout, came up to town to consult Mr. Partridge, respecting a large varicose tumour on the posterior aspect of her right leg. She stated, that the disease had been there as long as she herself could remember, and that her mother believed it to have existed, more or less, from very early infancy. It had, however, only been inconvenient lately, when it had given rise to slight œdema and aching pains in the leg, especially after much standing, which symptoms, combined with the fact, that it was increasing in size, made her anxious to have something done for its cure.

On examination, the tumour was found to be composed of a convoluted mass of enlarged veins, placed just below the popliteal space, at the lower boundary of which they abruptly terminated, apparently by dipping in among the deep parts. Lower down on the leg were several single tortuous trunks of large size, which appeared to constitute channels of supply; but the chief disease was limited to a patch about two inches across and four in length. The skin over it was elevated, but not discoloured, though here and there the purple hue of the veins could be seen through. The patient having been put under the influence of chloroform, Mr. Partridge pinched up the tumour, and introduced beneath its upper part a long straight needle, over the projecting ends of which a ligature was then twisted with considerable tightness. The like process was repeated at the lower part of the tumour, and again lower down on the leg, beneath the trunks of two large dilated veins, which ran side by side. In the latter instance, it did not differ from the plan which we see very frequently adopted for the cure of common varicose veins; but, in the others, it involved the application of the constriction to large bunches of veins, instead of to a single trunk. On account of the thickness of the mass included, it was not deemed wise to twist the ligature very tight, and the needles, consequently, occupied afterwards a considerable time in ulcerating to the surface. In order to make sure of the complete obliteration of the enclosed vessels, the needles were allowed to come very nearly to the surface before they were withdrawn, the lowest being taken out by Mr. Edwards, the dresser of the patient, about three, and the others nearly five, weeks after the operation. During this time, with the exception of the first day, the girl had not suffered any material pain, and she had throughout been quite free from any kind of constitutional disturbance. At the time of her discharge, she was in perfect health, and all trace, both of the tumour itself and of its supplementary trunks, had quite disappeared.

In connexion with this subject we may state, that we hope very shortly to bring before our readers the particulars of two very interesting cases, in which operations have been successfully performed for the cure of *pulsating* varices.

(a) Mr. Marshall's Paper, "On the Employment of the Heat of Electricity in Surgical Operations," will be found in Vol. XXXIV. of the "Medico-Chirurgical Transactions." Since its publication, Mr. Marshall has accumulated much experience on this subject, the results of which, we believe, he intends to make public at some future time. M. Fabré Palaprat was the first to use the galvanic cautery; and its first application to purposes of cure was, we believe, by Mr. Marshall, in November, 1851.

ST. BARTHOLOMEW'S HOSPITAL.

OPERATIONS.

EXCISION OF THE HEAD OF THE FEMUR.—REMOVAL OF A CANCEROUS GLAND.

On Saturday last, Mr. Stanley performed the operation of removing the head of the thigh bone, in a case of very long-standing disease of the hip joint. The patient, a little boy aged 7, was extremely reduced in strength by the long-continued suppuration. Sinuses in all directions surrounded the part, and the affection appeared likely to terminate fatally, if nothing were done. Under these circumstances, Mr. Stanley undertook the operation. The position occupied by the head of the bone was very peculiar. It had been dislocated, and lay immediately in front of and below the anterior superior spine of the ilium. We saw a case under Mr. Hilton's care, in Guy's Hospital, some months ago, in which the bone occupied a similar position. The dislocation had been the result of violence, and had occurred in a young man. We shall, of course, give Mr. Stanley's case in detail when it is concluded, and shall add to it the particulars of another case still in the hospital, in which Mr. Stanley performed the same operation a year and five months ago.

After the above, a patient of Mr. Paget's was brought into the operating theatre, whose name has already appeared in our pages. The operation, which we reported in No. 121 of the *Medical Times and Gazette* for Oct. 23, 1852, consisted in the amputation of the left forearm, on account of a superficial, but malignant (epithelial) ulceration on the back of the hand. The subject of it, Patrick Keller, aged 62, left the hospital quite well, and remained so for about seven months, when he noticed a commencing enlargement of the axillary glands. The swelling gave him no pain, but continued to increase in size, and on the 18th of the present month he again applied to Mr. Paget, having in his arm-pit a hard lump the size of a small orange, freely movable on the deep parts, but attached to the skin. The excision of this constituted the present operation, and was conducted in the usual manner, all the skin adherent to the growth being removed with it. In dissecting deeply to the back of the mass the axillary vein was wounded, and had to be secured by ligatures above and below the incision. The accident did not occasion much loss of blood. Some of our readers may possibly remember, that a circumstance of great interest in this case was, that, from the man's history, the original disease appeared to have gone through much the same stages as the ordinary form of chimney-sweep's cancer, and that he further stated, that in his occupation as a bricklayer he had been employed very frequently in altering fire-stoves, flues, etc., during which his hands were much exposed to *soot* and dust. We must remark, that the amputation, as a palliative remedy, has certainly been successful. It rid the patient of a loathsome and very painful ulcer, and enabled him to enjoy seven months of complete immunity from disease. Indeed, up to the present time he has had scarcely any pain, and his general health now appears to be much better than it was at the date of his former admission.

Leicester.—In consequence of the appointment of Mr. Buck to the Medical Superintendency of the Leicester County Asylum, that gentleman has resigned the appointment of Officer of Health to the Leicester Board. He says, in his letter of resignation, "Although resigning official connexion with you, yet I shall ever continue to feel the liveliest interest in the prosperous issue of those great works of Sanitary Reform in which you are now so honourably engaged." The thanks of the Council were presented to Mr. Buck for the manner in which he had discharged his duties. Mr. Kirby, in seconding the motion of thanks, said he believed there was not a man in the town who had given such universal satisfaction to those with whom he came in contact,—the poorest of the poor. He had got the lodging-houses into a state of almost perfection, which contrasted most remarkably with what they had been.

The Prince of Wales has been suffering under an attack of measles for some days past.

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Medical Times & Gazette.

SATURDAY, JULY 2, 1853.

OUR NEW VOLUME.

THE commencement of a New Volume is an occasion on which we may venture, without impropriety, to draw the attention of our subscribers to our past performances and future prospects. Of the past we need say but little. Our volumes must speak for themselves. But we may, perhaps, be allowed to express an opinion, after reviewing them with as much impartiality as we could command, that they afford evidence of a gradual improvement, and of an earnest desire to collect the best material to supply the literary wants of the Profession. Since the accession of strength gained by union with the *Medical Gazette*, we can boast of an array of contributors altogether unequalled, whether we regard numbers, high professional standing, ability as writers, or experience as practical men. It requires the labour of many years to attach such a body to any Journal, and to assure them, that their characters are not compromised by that of the medium through which their communications are made known. It is not less a work of time to bring together an editorial staff which can make the most effective use of the observations of such contributors, and which, while fairly representing the feelings and wishes of the different classes and conflicting interests of the Profession, may still presume, in some humble degree, to attempt to guide the opinion of the medical public. By the kind encouragement of our readers, and the means placed at our disposal by an increasing prosperity, time and means have been afforded us of approaching, at least, towards that state of completeness in all the departments of the Journal which it will be our constant aim to attain. We sincerely hope that our New Volume will afford further evidence of progressive improvement; and we think most of our readers will perceive, that this hope is not entirely unfounded, after they have looked over the following statement of the fare we propose to set before them.

In addition to the Lectures of Dr. Hofmann on Organic Chemistry, Dr. Budd on the Diseases of the Stomach, and Dr. Boon Hayes on the Microscope, all of which will be terminated in this Volume, we shall give the course of six Lectures by Dr. George Johnson, of King's College Hospital, delivered in the spring of the present year before the Royal College of Physicians, on the Relation of Therapeutics to Pathology, with especial reference to Diseases of the Heart and Kidneys, and certain forms of Nervous Disorders. Dr. Bence Jones will also contribute lectures on the subject he has made so peculiarly his own. An occasional Clinical Lecture from Lawrence, Fergusson, Todd, Burrows, and others of the most eminent teachers in our Metropolitan Hospitals, will more than suffice for the space we are enabled to devote to this section of the Journal.

The department of Original Communications will acquire a new value from a series of abstracts and extracts from the Official Reports made by the Medical Officers of the Army and Navy to the chiefs of their respective departments. We have been permitted access to these Reports under certain necessary and obvious restrictions, by Sir William Burnett and Dr. Andrew Smith, and have been promised copies of annual returns made by the superintending surgeons of the East India Company's Service, with other documents containing valuable information on the state of medicine in India. We propose to publish at least one paper weekly from the most important and interesting of these documents, in addition to short notices, among our miscellaneous intelligence, of novel facts and various communications which it may not be advisable to give in an extended form. It has been a matter of regret, and even of some reproach, that so little use has been made of the experience gathered by the Medical Officers of our public services, in the extensive fields for observation they have so long enjoyed. It is true, that, at intervals of some years, voluminous reports have been published, containing the result of great labour. But the matter which is most interesting to Civil Practitioners has been so obscured by a mass of statistical detail, that the Blue Books have been regarded rather as volumes of reference for the scholar or compiler, or of analysis for the reviewer, than as works on which the practical man can employ his leisure with either pleasure or profit. Yet, we are all interested in the discovery of new medicinal plants in different countries,—in the medical topography of the foreign stations in which our troops and emigrants reside, and from whence our patients return home to seek for the health they have lost,—in tracing the source of diseases which do or may arrive among us, and spread as epidemics,—in hearing how various climates affect the constitution of the British abroad,—in modes of treatment differing from our own adopted by foreign practitioners, or the natives of yet uncivilised districts,—in the state of medicine in other lands,—in the results of certain methods of treatment applied upon large bodies of men whose state of health is known for several years afterwards, affording us a means of judging of the relative value of opposite plans, which can be acquired in no other way with equal certainty. All this, and more, we confidently expect our reports of the state of medicine in the public services, will present to our readers, not as a heap of dry statistics, but in the form of a series of instructive and interesting narratives.

Our Journal partakes, in some degree, of the character both of the Half-yearly retrospects and the Quarterly and Monthly Journals. It is a retrospect, inasmuch as we endeavour to give an abstract of every important paper which appears in the British, American, and Foreign Journals. In the Review department, it resembles, in some degree, the Quarterlies, although the preponderance of Original Communications necessarily prevents the insertion of those long analytical and critical articles to which the Quarterlies owe their chief value. The Monthly Journals, which are principally remarkable for the value of the Original articles they contain, are again represented by our weekly Journal. In the amount of such communications we far exceed either of them. The value must depend upon and be judged by our correspondents and readers. We have not a word to say against any of these Retrospects or Journals. None more fully than ourselves can appreciate the study and care required to bring them to the high position they already occupy,—none can estimate more highly the degree of their varied utility. At the same time,

they labour under certain disadvantages. They appear at such long intervals and in such a size that the intelligence they contain has seldom the charm of novelty, the writer having been anticipated by others; and their length is not adapted to the short time the busy surgeon can steal from his few moments of leisure for reading. The pure Retrospects, again, must condense their contents so greatly, that very frequently those details must be omitted which are precisely of the greatest interest to the practical man, who cannot be satisfied with conclusions without being allowed an opportunity of judging of the facts on which they are grounded.

We shall devote especial attention to our Clinical reports. Two parties may be said to exist in the medical world at present; the one leaning towards a general scepticism in the powers of medicine, the other actuated by unbounded faith in it. Our reports of the actual result of practice at the bed-side may assist in guiding the reader into the happy path between the two errors. Since the application of physical diagnosis, minute pathological anatomy, and chemical and microscopical observation to the study of disease many seem to have forgotten that the object is rather to cure the patient than to make discoveries in the natural history of disease; and not to regard him so much as an object entrusted to his care for the relief of suffering, as an object for scientific investigation. Others, again, run into the opposite error of pure empiricism, decrying as theoretical everything of which the direct practical utility is not at once made clear to the most obtuse intellect. Our reports, we hope, will enable the reader, by watching the practice of our most eminent Professors, to avoid both these extremes; to estimate correctly the value of practice which aims at uniting art with science; to follow the practical application of new discoveries, so that he may adopt what is useful, and be warned from what is useless or injurious. We hope, also, gradually to make them so complete, that they may be regarded as stores of statistical information, upon which the degree of success of various operations and modes of treatment may be tested.

Some words of explanation appear to be necessary with regard to Reviews. It is not generally understood whether the opinions expressed of books are solely those of the Editor, or of a Committee of Examination, who affix the magic "we" to their decisions. We may state, therefore, that, while the Editor is solely responsible for all opinions expressed in the name of the Journal, there are among our contributors many gentlemen who have distinguished themselves in some special department of the Profession,—some in anatomy and physiology; others in pathology, chemistry, or microscopic science; others in practical medicine, surgery, or midwifery, and so on. To one or other of these gentlemen, the Editor forwards books he may receive for review, of course taking care that no personal feeling is likely to be called into play from an acquaintance with the author. The notice may or may not be modified by the Editor himself, as may appear desirable, so that every security is afforded for giving fair play, both to author and reader,—that the former will not be unjustly praised or decried, and that the latter will obtain an honest and probably a just opinion as to the value of a book and the nature of its contents, to guide him in the selections for his library. We have made such arrangements that every book received for review shall be noticed in due course; and we beg to state most distinctly, that the name of the publisher of a book has no influence whatever in affecting an opinion as to its value. On the contrary, all our contributors are directed to act with the strictest candour and impartiality, and to judge every book by its merit alone.

The great object we shall constantly have in view is the advancement of practical and scientific medicine in all its branches. The cure of disease is the real aim of the medical man. Success is the criterion of his knowledge, the measure of his reward. To obtain success he must thoroughly understand the disease. To do this he must be acquainted with the auxiliary sciences upon which a satisfactory diagnosis can alone be based. We trust, therefore, that our readers will find that, in pathological anatomy, in physiological and pathological chemistry, and in the application of the microscope to diagnosis, they will be enabled to keep pace with such continued advancement in science as may lead to the foundation of a rational system of therapeutics.

The student engaged in the daily routine of his avocations in the hospital and lecture-room; the practical man whose life is passed in his consulting-room or at the bedside of the patient, has but little leisure or mental energy to spare upon the numerous works on medical science which are daily appearing, not only in our own language, but in those of Germany, France, and Italy. He cannot afford the time to select what is valuable from the mass of crude and undigested matter presented to him, even if his knowledge of foreign languages and his purse enable him to keep up his library to the requirements of the day. Yet, if he do not attempt this in some degree, he is left behind in the race of professional progress, or he must obtain assistance. It is precisely this assistance we are ambitious of affording; and we trust it will be found, that the medical man who reads the *Medical Times and Gazette*, and preserves it as a book of reference, will not be behind the state of knowledge of the day in anything which can have an influence upon practice; that he will be a better informed man than his neighbour, who does not read it; that he will, therefore, be more deserving of success, and, in all probability, be more likely to attain it. It would be too much to expect, that all we have in view can be accomplished at once. The difficulties of the task before us are great, but we hope to meet them by an earnest endeavour towards constant improvement.

THE NAVAL MEDICAL SERVICE.

The Medical Department of the Royal Navy has of late years been more before the public than, perhaps, any other subject of medical polity.

Its condition was one of the many points brought under investigation by the Committee appointed to inquire into Naval and Military Promotion and Retirement, in the years 1839-40; and it must be owned, that the result was far from being fruitless to the Naval Medical Service; for the grades of Inspector and Deputy-Inspector of Hospitals and Fleets were now, for the first time, established, and some benefits in point of emolument, and reckoning of time actually served, were likewise conferred upon the Surgeons and Assistant-Surgeons. The latter class, however, was still doomed to exclusion from the society of officers of their own rank, as it was considered by the Commissioners inexpedient or impracticable to remove them from the midshipmen's berth.

Notwithstanding that the Naval Medical Service has been considerably improved since 1840, it was all along apparent that there was still something unsound in its constitution and rule; for while the services of the Army and the East India Company obtained medical candidates at will, and in numbers far exceeding their demand, the Director-General

of the Medical Department of the Navy was obliged to confess that he was frequently without a single candidate on the list for the appointment of Naval Assistant-Surgeon.

It was evident to all in any way acquainted with the subject that no increased amount of prospective advantage held out by the Admiralty could induce medical students to enter a Service, one condition of which was the forfeiture of that position to which their profession, their age, and their social standing in civil life so justly entitled them.

Sooner, therefore, than enter the Navy, where they might remain in the midshipman's berth ten or twelve years, medical men of good attainments who otherwise would gladly have joined this arm of the public service, preferred seeking their fortune in the Colonies, taking employment in ships of the mercantile marine, or embarking on the vast, but precarious and already densely-occupied field of private practice at home.

Such a state of things could not exist long without being known and commented upon by the public. Accordingly, since the sitting of the Royal Commission, several of the Universities, the whole of the Medical Corporate Bodies, the General and Professional Press, and the Profession at large throughout the United Kingdom, have warmly espoused the cause of the Assistant-Surgeons of the Navy. In the course of a few months, during the Session of 1850, nearly one hundred Petitions, from these various sources, were presented to both Houses of Parliament, strenuously urging the Legislature to redress the grievances complained of, with the view to put the Naval Medical Service on such a footing as should at all times insure for it a proper supply of well-qualified candidates.

The result is well known. After considerable discussion, both in the Lords and in the Commons, the Lower House resolved, by a majority carried against the Government of the day, that "the accommodation provided for the Assistant-Surgeons on board Her Majesty's ships-of-war is inadequate and insufficient for securing the full benefit of their Professional services."

After such a declaration by the House of Commons, it was reasonably expected, that all further obstacle to the admission of a superior order of Medical men to the Service, would, as far as possible, be removed. The cause of obstruction was obvious, and the means of its removal were equally patent and simple; but, to render their operation efficacious, it was necessary that their application should be fair, general, and impartial.

Their Lordships of the Admiralty, however, were not disposed to view the matter in this light. An Admiralty Memorandum, it is true, was issued, in consequence of the Resolution of the House, in which, most improperly to our thinking, the Assistant-Surgeons were divided into two classes—viz., those who had served three years, and had passed the examination for Surgeon; and those whose length of service was under that period, and had not passed the second examination;—the one class to have the rank and privileges of ward-room officers; the other to continue, as before, with the midshipmen,—a proceeding at once anomalous in every sense, and injudicious, if not actually illegal.

What precedent, we would ask, was there for such a course? What could be more ill-judged, or more likely to excite invidious feeling among officers of the same Profession, having the same education and the same rank in virtue of an Order in Council nearly half a century old, than to place them in the most dissimilar relative positions on board ship?

Thus far, as regards the Medical officers themselves; but, unfortunately, the chief evil of the Memorandum remains yet to be told; for, while we freely admit that its effect was to improve the position of those who had served the prescribed period, it was at the same time fatal to the main object intended by the Profession, the Public, and the House of Commons.

That object was, to open the door of the Naval Service to a high order of Medical men; but it was wholly defeated by the obnoxious probation of three years which the Memorandum requires the Assistant-Surgeon to undergo, and to which experience has abundantly shown, such a class of men refuse to submit.

The general result, then, of the Memorandum of July, 1850, has been to place the Senior Assistant-Surgeons in their proper position on board ship, to leave the Juniors as they were before, *and to deter men, who would benefit and do honour to the Service, from entering it.*

The Candidate-book has, indeed, been almost a blank since its promulgation.

It therefore created little surprise to find, that, within the last month or two, the Admiralty have caused the Director-General of the Medical Department to forward to the Medical Schools throughout the Kingdom, with a request to "fix up upon a board," and to "promulgate among the students with as much publicity as possible," a new set of "Regulations for Candidates for the Office of Assistant-Surgeon in the Royal Navy," in which we regret to state, that the qualifications are reduced. Instead of two years' hospital attendance, eighteen months only are now required; and instead of the number of beds in the hospital being 150, they are now contented with 100. Attendance on botanical instruction is reduced from six to three months; and the age, which was formerly limited to from 20 to 24 years, now extends to 26 years.

How different is the attitude of the Director-General of the Army and Ordnance Medical Departments!

No one can be admitted into either of these Services, unless he be a member of the Royal College of Surgeons, and has had an extended course of medical and surgical education, with attendance on Natural History and Natural Philosophy. Commissions in the Medical Service of the Army, wherever they are offered as prizes at the Medical Schools, are looked up to as honourable and valuable objects of competition. We understand, that the Director-General, seeing the benefit to his department from thus disposing of commissions for Assistant-Surgeoncies, is about to establish "Commission Prizes" at each of the Universities, and some of the other Medical Institutions in the United Kingdom, exacting, of course, in Medicine and Surgery, and in Natural History and Philosophy, attainments of a very high grade.

By this means alone, the Army will annually receive from eighteen to twenty Assistant-Surgeons of the highest order of qualification.

In the service of the East India Company the number of applicants for medical employment is altogether beyond the demand; and the eagerness with which an Assistant-Surgeoncy is competed for, when offered as a prize at a Medical School, bespeaks, unmistakeably, the favour with which that Service is regarded by Medical men.

In short, while, in the Army and in the East India Company, the qualifications of medical candidates are being raised, in the Navy they are being diminished. While the two former services can command, at will, any amount of first-rate medical talent, the Navy supplicates for the refuse. While the authorities at the Horseguards and at

Leadenhall-street promote the growth and vigour of their respective Medical departments, by those aids which science and the spirit of the age suggest, the Naval Medical Service is left to pine and wither in an atmosphere of discouragement more suited to the time of the Second James than to the intelligence of the present day.

To arrest this downward course, before the Naval Medical Service is irreparably injured, the Admiralty have only, in their treatment of Assistant-Surgeons, to substitute liberality for illiberality, to adopt impartial, instead of partial measures of redress. In a word, they have only to grant those officers the privileges attaching to that rank, bestowed upon them by an Order in Council in 1805, and to act in conformity with the "Resolution of the House," of 1850, by constituting them Ward-room Officers immediately upon their entrance into the Service. This would be no *favour*, but a *right*, granted by the King in Council, in 1805. The Lords of the Admiralty, for nearly fifty years, have treated the order of their Sovereigns with contempt; and still, after all that has been done in the House of Commons, persist in doing so, and in lowering the standard of excellence of the very men upon whom they themselves, in the hour of danger, have to depend for health, or life itself. Surely, so suicidal a policy cannot be allowed to operate much longer.

ELECTION OF SURGEON TO ST. THOMAS'S HOSPITAL.

The recent election of Mr. Solly, as Surgeon to St. Thomas's Hospital, took place under circumstances so peculiar in many respects that some special notice of them appears to be necessary.

On the 15th of June, an Advertisement appeared in the papers, to the effect, that, on the 28th,—less than a fortnight after the announcement of a vacancy, a General Court of Governors would be held to elect a Surgeon. Those who know the system on which the medical officers of the Metropolitan Hospitals are elected, were astonished to see in addition to the above notice a statement that "The Governors, desirous to maintain the efficiency of the Surgical department, by electing those who are most distinguished by their talents, character, and acquirements, to fill the higher offices, without regard to any other consideration, are prepared to receive all persons as candidates who may be duly qualified to fill the vacant office."

The history of this unusual proceeding, evincing a spirit of liberality and cordial desire to obtain the best surgical assistance for the patients in the hospital, apparently as sincere as rare, is not a little curious. It appears that in accordance with the system which has too long prevailed in our hospitals, Mr. Green has held the office of Surgeon for some years after he has performed the duties of a purely Consulting Surgeon. The Hospital Authorities have been naturally desirous to make use of his name and reputation to add lustre to the Surgical Staff; but, instead of doing this in the manner they did last Tuesday by electing him Consulting Surgeon, they let him act as such without the title, while the Assistant-Surgeons had to do the duty of Surgeon, also without the rank to which the performance of their duties entitled them. Consequently Mr. Solly and Mr. Clark, though only holding the nominal office of Assistant-Surgeons, became in reality Surgeons of the hospital, each having forty beds under his charge. Besides this, Mr. Simon, whose only connexion with the hospital arose from his having a lectureship in the School, and who did not even hold the rank of Assistant-Surgeon, also had charge of forty beds, and thus became in reality another Surgeon. Of course the position of the Surgical Staff was a most extraordinary one,—a Senior Surgeon who held office and delegated the performance of its duties to others,—Assistant-Surgeons doing the duties of Surgeon, and at times being obliged to leave their own duties of attending upon the out-patients to the House Surgeon or some senior pupil,—lastly, a gentleman acting as Surgeon without any hospital appointment whatever.

At length it became necessary to elect a Surgeon. No one could doubt as to the entire fitness of either Mr. Solly or Mr. Clark for the office. They had long done the work, and done it well. Why, therefore, refuse them the title they had earned by their labours? Why not at once grant them in name the position they had long held in reality? The answer is another singular instance of hospital tactics. Some time since it became necessary to elect some gentleman to fill one of the offices in the Medical Staff. Some of those who had influence in the Direction thought that the candidates who came forward were on some accounts ineligible. It therefore became necessary to advertise for others, and a real announcement of the want was made in the same catholic spirit which appears to shine through that now used with regard to the vacant Surgeoncy; and it occurred to some persons, that if this step had been taken when a medical vacancy had been open, it ought also to be taken now that a surgical vacancy was to be filled up, although the same necessity for well-qualified candidates no longer existed. This was accordingly done, and a precedent has been established which we should only be too happy to see universally followed in every hospital in the kingdom. The grand principle of obtaining the best man, no matter where he has gained his knowledge and experience, once established, and free competition permitted for every official position in our medical charities, the effect must be to advance our science, improve our art, and benefit suffering humanity far more than on the old exclusive system, under which, doubtless, many great men have been formed, but which has also been both a shield for mediocrity and a grave for despairing talent.

The principle of free competition established, the question arises, Who are to decide upon the comparative merits of rival candidates? The Governors of our hospitals can seldom be either fair or competent judges on such matters; yet as they support the institutions, they would be unwilling to give up the patronage connected with them. Even supposing them to be uninfluenced by all private solicitations, or the interest of friendly or family connexion, they have not the necessary professional knowledge to enable them to estimate degrees of professional merit. The difficulties of establishing a system of concours, as in Paris, would be almost insuperable, and it is even a question whether, if these could be overcome, the system has worked so well there as to merit imitation here. The plan adopted at St. Mary's, where the Governors delegated their power to a Committee elected from among themselves, would probably be the best adapted to our institutions; and if the Committee really determined to act upon pure principles, and consisted of well-informed men of sound judgment, the result would probably be, on the whole, nearly all that could be desired. It would probably satisfy their love of power if they retained the privilege of rejecting any candidate recommended by the Committee to whom they had good grounds for objection.

The Governors of St. Thomas's appear also disposed to take the lead in another very necessary measure of hospital reform; namely, an increase in the numbers of the Medical

Staff. Last Tuesday, at the same Court where Mr. Green was elected Consulting Surgeon, and Mr. Solly Surgeon, Dr. Leeson moved, pursuant to notice, a Resolution that it would be for the advantage of the hospital to elect Mr. Clark and Mr. Simon to the office of Surgeon, and that the General Committee should be requested to consider and report what regulations and alterations might be expedient in reference to any vacancy in the office of Assistant-Surgeon, more especially with respect to any further addition to the Surgical Staff, as at present subsisting. What the Committee will do remains to be seen; but we trust that if they agree to the first part of Dr. Leeson's motion, as we sincerely hope they will, they will not think, for a moment, of adopting another proposition, which appears to us absosolutely preposterous, that these gentlemen should also continue the superintendence of the Surgical out-patient department. How can a man with forty beds under his charge possibly attend to other hospital duties? We know perfectly well that there are hospitals in London where the Surgeons have 120 beds, but sincerely hope that this will not be allowed to continue much longer. Forty beds are as much and more than any man can attend to; we do not say that he may have time for scientific investigations of disease and its consequences, but simply to do justice to his patients.

This subject, however, is too important to treat at the end of an article; and we must, therefore, conclude for the present by expressing the hope that the Governors of St. Thomas's will set the admirable example of increasing their Surgical Staff; and that they will not be satisfied with electing Mr. Clark and Mr. Simon, thus raising the number of Surgeons to five; but that full justice may be done to the out-patients by the election of five Assistant-Surgeons, each Surgeon having his own assistant to be trained up for the position he may afterwards fill.

ASSISTANT-SURGEONS IN THE NAVY.

[The following is the Petition to which we alluded in our Number of June 8th. It has been thought injudicious, by some well acquainted with the subject, to bring forward the grievances of which the superior medical officers complain, until those of the Assistant-Surgeons have been redressed. It is the great object to obtain as many Petitions as possible from all parts of the country; and, as the precise form is not a matter of great importance, it might be advisable to omit the concluding paragraph of this Petition, if it should be thought that the attention of Parliament might be diverted by it from the principal object for which we have so long been labouring.—Ed.]

TO THE HONORABLE THE COMMONS' HOUSE OF GREAT BRITAIN AND IRELAND, IN PARLIAMENT ASSEMBLED.

The Petition of the undersigned Members of the Medical Profession.

Humbly Sheweth,—

That your petitioners being deeply interested in the honour and advancement of the Profession to which they belong, have learned with heartfelt regret, that a large portion of their brethren, now serving in Her Majesty's Navy, continue still to be placed under circumstances ill calculated to permit their advancing in the knowledge of, or upholding the important interests of, their Profession.

That your petitioners more particularly allude to the case of the Junior Assistant-Surgeons of the Navy, who have still to pass three years' probation, after admission into the Service, in a position wholly unsuited to the dignity and pursuits of a liberal Profession.

Your Petitioners would beg humbly to recal to mind, that your honourable House had already passed a Resolution, on the 8th day of April, 1850, to the effect,—

"That the accommodation provided for Assistant-surgeons on board Her Majesty's ships of war is inadequate and insufficient for securing the full benefit of their professional services."

That your Petitioners have learned with sincere regret, that the regulations issued by the Board of Admiralty, since the passing of the aforesaid Resolution, have not been in the spirit of, nor fulfilled the intention of, the said Resolution.

That your Petitioners presume to believe, that the three years' probation in the midshipmens's berth might be removed without detriment in any way to the interests of Her Majesty's Navy; and they cannot but feel that the position occupied by the Junior Assistant-Surgeons is derogatory to their age, status, and professional acquirements, and precludes the possibility of their engaging in that earnest study so necessary to retain and advance their knowledge.

That your Petitioners beg to express the deep sympathy felt, not only by them, but by the community at large, for this class of officers, as regards their position, which contrasts invidiously with the more dignified station of their brethren in the Army.

Your Petitioners would also respectfully urge on the consideration of your honourable House, that, as regards the superior classes of Naval Medical Officers, the recommendation of the Naval and Military Commission, bearing date 26th March, 1840, has only been partially carried out, inasmuch as these officers have not been placed on a footing of equality with their brethren in the Army, as to rank, pay, and retirement, as was intended; and being under the impression, that the regulations at present existing tend to affect injuriously the entire Naval Medical Service, and also to deter able Surgeons from entering Her Majesty's Navy, again humbly pray your honourable House to consider the grievances of which the Naval Medical Officers complain.

And your Petitioners will ever pray, etc.

REVIEWS.

Ueber den Heilungsprozess nach Resection und Extirpation der Knocken. Von Dr. Albrecht Wagner, Berlin. 1853. 8vo. Pp. 122.

On the Healing Process after Resection and Extirpation of Bones. By Dr. A. Wagner, Private Lecturer in the Royal University, and First Assistant-Surgeon in the Surgical Clinique of the University of Berlin.

Conservative surgery has made great advances of late. Limbs which were formerly amputated without scruple are now preserved by excising portions of bone of greater or less extent, or, in some instances, by removing entire bones; and a limb is left which is infinitely more useful than any artificial structure could possibly be. Yet our knowledge of the exact consequences of the excision of bones, or of portions of bone, are far from being definite. We hear that, after an operation, a very useful limb has been preserved, but are left to imagine the amount of utility; and the cases in which accurate examination of the condition of the bones and uniting medium has been made are still more rare. The object of Dr. Wagner is to supply what is wanting; and he proceeds to carry out his purpose in a manner worthy of all praise.

He first collects together all that he can find in surgical works respecting the anatomical condition of parts after excision and resection of bones, as proved by examination of the limb after its removal, or the death of the patient at various periods after operation. This section of his work is a valuable compilation of the experience of others; and, though not complete, is more so than any other work with which we are acquainted.

In a second section he collects together what has been proved by others on this subject, by experiments and anatomical researches on animals; and he then proceeds, in a third, to relate the results of his own experiments on dogs and pigeons, and from these to represent the course of the healing process. His second section concludes with the following propositions:—

"1. The periosteum plays the principal part in the replacement of defects of bone resulting from excisions, because it is alone sufficient to form new masses of bone which can replace the removed bone. Probably the dura mater takes the place of the periosteum in the bones of the head.

"2. Yet reproduction of bone may take place in the periosteum, though only to a small extent.

"3. This reproduction occurs—

"*a* From the medullary cavity or the diploë, according to the extent they are injured.

"*b* From the soft parts surrounding the bones.

"4. The substance of the bone itself does not appear to contribute to bony reproduction. Klencke alone expresses himself for it, and assumes a partial softening of the bony substance during the process of exudation.

"5. It appears that the exudation necessary for regeneration of bones is promoted by inflammation of the parts just named. Stimulants which increase inflammation also increase the reproductive process.

"6. The exudation is at first reddish, glutinous, or gelatinous, and contains the material of cartilaginous development before it becomes converted into bone.

"7. The new-formed bony mass is at first solid; it is only subsequently that a medullary cavity can form in it.

"8. In the rarest cases of all, the bony defect is completely, even superfluously, replaced by new masses of bone. Still more rarely does the new bony mass acquire the form of the removed bone. If the restoration of the defect is entirely by bone, there is still a quantitative difference between the new and the removed bony mass; and it is only equalised by approximation of the divided surfaces of the bones to each other, with considerable shortening and curvature of the limb. If this has not taken place, or if, from other circumstances, the new-formed bony mass is not sufficient to replace the defect completely, this either remains incomplete, or a fibrous tissue takes its place in which granules of bone are frequently included."—Pp. 49, 50.

The section comprising the experiments of the author himself upon animals is so interesting that we shall shortly translate it, and bring it before our readers in a complete form. In the mean time we can cordially recommend the work to all those who wish to make themselves masters of the literature of the subject before us. It is just such works as these—in which the knowledge of others is collected, and presented in an abridged form, while additions are made by the researches of the author himself—which not only tend to add to his reputation, but do so in the most legitimate manner, by proving that he has done something to assist in the progress of surgical science.

Chemistry of the Four Seasons,—Spring, Summer, Autumn, and Winter. An Essay principally concerning Natural Phenomena, admitting of Interpretation by Chemical Science, Illustrating Passages of Scripture, and Exemplifying the Wisdom and Beneficence of God. By Thomas Griffiths, late Professor of Chemistry in the Medical College of St. Bartholomew's, etc. Fcp. 8vo. Pp. 436.

This is a popular work, which we suppose has many admirers, since one edition has already been exhausted, and this new one prepared, with many alterations and additions. The following paragraphs will show the eminently poetic style in which the subject has been treated:—

"Behold the wondrous phenomena of the Four Seasons! In spring, fresh verdure clothes the earth, fair flowerets adorn its surface; rippling streams wind throughout the fields; fragile buds, tender leaves, and sweet blossoms bedeck the trees; delicious odours float upon the air; soft showers descend to fertilize the soil; the glorious sun shines forth to cherish all nascent forms with its genial warmth; the gorgeous rainbow spans the heavens, to enhance the loveliness of the unfolding scene; whilst ethereal light and heat augment in power unto the glow of summer.

"Then, limpid waters teem with countless forms of life; luxuriant foliage crests each waving bough, and proffers cool shadow from the scorching sun; clustering flowers vie in display of beauty and emission of perfume to the dazzling sky; exuberant productions of smooth meadows and furrowed lands bend gracefully to the balmy gale, and ripen speedily for the scythe and sickle; anon, the sultry noontide heat, the cool night dew, the lowering thunder-cloud, and the vivid lightning, herald the advent of autumn.

"It comes, crowned with azure, and arrayed in a russet robe, wreathed with brilliant flowers, and sparkling with aqueous gems; laden with purple fruit and golden grain; it pours the abundant produce of the cultivated earth into the wide store-houses of the provident, to reward arduous labours, to realise anxious hopes, to afford generous support in time of need; and, having thus fulfilled its beneficial purpose, slowly departs with declining radiance upon its destined course. Humid mists appear; portentous clouds accumulate; impetuous winds blow cold; bright flowers fade, droop, and die; rustling leaves wither, fall, and decay; whilst glittering hoar-frost encrusts their parent branches; flowing waters are arrested in their rapid course, and fettered with hard transparent ice; fierce tempests rush throughout the darkened air, and spotless snow-flakes form the winter mantle of the earth."—P. 3.

We must add, however, that those who read this book for themselves will find in it much more favourable specimens of the author's style than that we have selected rather as a curiosity than as a fair sample of the whole work.

Remarks on Hysteria, in Connexion with Hydrophobia and other Convulsive Affections; With a Glance into the Mesmeric Mystery. By John Dalziel, M.D. Edinburgh. 1853. 8vo. Pp. 32.

It is not very easy to follow Dr. Dalziel's line of argument, but, so far as we can understand him, he wishes to prove that the cerebral congestion in all convulsive affections is dependent upon impeded respiration produced by spasmodic contraction of the muscles about the pharynx. The practical result he deduces from his theoretical views is, that in the treatment of hydrophobia the operation of bronchotomy might be expected to ward off, or at least to abate, the violence of the convulsive paroxysm. We would just remark, however, that this practice has been tried on dogs, and failed; that it has not yet been tried on the human subject; and that patients die of hydrophobia without any cerebral congestion, and with the mental faculties unimpaired almost to the last moment of life.

Plain Advice on the Management and Diet of Infants; with Observations on the Symptoms of the Diseases to which they are Liable. By Wm. Pearce, Esq., M.R.C.S. 12mo. Pp. 46.

We generally look with suspicion upon medical books directed rather to the public than to the Profession; but we must say there is nothing objectionable in the spirit of the little work before us. It contains much good advice, which, if followed, would save the mother endless anxiety, and greatly benefit the infant. Indeed, the only recommendation to which we at all object, is the substitution of a compound of suet, oatmeal, and sugar candy, with milk, for the pure cow's milk. We much prefer the latter, and cannot at all agree in the propriety of giving bread, baked flour, or farinaceous food to infants during the early months of life.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

CYSTICERCUS IN THE HUMAN BRAIN.

By A. BRUNNICHE.

A servant girl, aged 43, of healthy frame and aspect, but for three years subject to epileptic fits, came to the hospital May 3, 1851, suffering from supposed ague. Upon admission, her symptoms were, localised pain over the left part of the forehead and temples, weakness in the muscles of the face, sparks and flashes of light in the right eye, occasional dilatation of the pupil, squinting, marked diminution of the intellectual capacity, combined with erroneous ideas and hallucinations, slow unconnected utterance, frequent vomiting, involuntary discharge of fæces, slow pulse, and weakness in the lower extremities. She had often complained of cold, and want of circulation in the fingers; so that, at the commencement, her illness had been mistaken for ague. She died May 21.

Examination of the Body.—Skull-cap thinner than natural; the surface of the brain bulged forwards from the cranial cavity; the membranes were thin, but full of blood. There were three cysticerci within the cranium. The largest lay in the substance of the anterior lobe of the left hemisphere in a cavity the size of a hen's egg, projecting into the anterior part of the lateral ventricle, and making a marked depression into the corresponding corpus striatum. One

worm was contained in this cavity, but in no way connected with the wall. It was surrounded by a sac as large as a hazel-nut, whence proceeded other similar, but distinct prolongations. A second worm was found in the middle lobe of the left hemisphere, near the preceding; and a third in the posterior part of the right hemisphere, both invested in a surrounding membrane. The three worms were unconnected with one another, and in no organic union with surrounding parts; yet they had formed for themselves a well-organised capsule or bag. As regards the question, how these animals or their ova found their way into the human organism, the author believes, that they must have been conveyed to the brain by the current of blood, after being taken up from the free surface of the body. Some authors have, in these cases, remarked no cerebral symptoms. In this there was marked disturbance of the intellectual faculties, although the substance of the brain was not in any way altered.—*Hospitals Meddelelser, bd.* 4.

POISONING WITH CANTHARIDEN.

By Dr. LAFITTE.

A strong young man, aged 24, took, for the purpose of stimulating himself, 1 grm. of canthariden powder, in two doses, and experienced in a short time violent desire to pass water; increased secretion of urine; priapism, and pain in the stomach; there was subsequently dysuria. An emultion, with 1 grm. of camphor, allayed these symptoms; but subsequently there was noticed a vesicular eruption in the mouth, which probably spread over a great part of the alimentary canal.—*Rev. Thér. du Midi.*

[In the *Gaz. des Hôpitaux*, the sulphate of lead in solution is strongly recommended as a disinfecting liquid to stinking wounds and sores.]

ENTRANCE OF AIR INTO A VEIN.

By A. GIRBAL.

A well-built, powerful man, aged 50, had a large, irregular, and tolerably hard swelling, of bluish colour, which extended from the base of the neck and the upper part of the chest, towards the shoulder. The swelling was of three years' duration. It had suppurated at one spot, and discharged a fluid of fetid odour. Under chloroform-narcosis it was quickly extirpated, and the vessels were tied without much loss of blood. When everything appeared finished, the operator remarked still a small portion of the firm mass upon the subclavian vein behind the clavicle. In peeling it off, the operator suddenly noticed a considerable flow of venous blood, accompanied with a whizzing sound; the colour left the face of the no longer narcotized patient; he gave a cry of distress; the extremities became cold; the pulse too weak to be felt; cold sweats broke out on the breast; consciousness, sensibility, and motion were entirely gone. Over the region of the heart was heard, for three or four minutes, at intervals, a gurgling sound. During this time the opening in the subclavian vein was closed with a sponge; frictions were applied to the body, and salts held to the nose, until the fainting passed away and the hæmorrhage was controlled. An hour afterwards the pulse was normal, respiration free; the patient could speak, and there was nothing remarkable in the auscultation of the heart and lungs. About thirteen hours afterwards dyspnœa suddenly ensued; then came a feeling of oppression; heat of the head and redness of the face, and the man died an hour afterwards. There was no examination of the body. Death must be ascribed in this case neither to the effect of chloroform nor to the loss of blood, but simply to the admission of air into the veins.—*Gazette de Paris.*

ACCIDENTAL OBLITERATION OF THE VAGINA.

By NELATON.

Frequently as occurs congenital deficiency or occlusion of the vagina, the accidental obliteration of this part is of very rare occurrence. The author had the opportunity of observing an instance in a woman, aged 40, who had always menstruated regularly; she was suddenly attacked with cholera, lay many days senseless, and could give no account of any feelings which she experienced during the time. Upon her recovery, it was noticed, that instead of the return of the menstrual secretion, there came on severe pain in the pelvis, and swelling of the lower part of the abdomen. The author ascertained that the menstrual fluid was retained, in consequence of obliteration of the vagina, within the cavity of the uterus.

Boyer and Dupuytren feared, in such cases, to puncture the vagina, because they always remarked that peritonitis ensued. But this inflammation is not an immediate consequence of the operation; it results from air making its way into the uterine cavity, producing decomposition of the remaining clots of blood, and thus exciting irritation. It is, therefore, desirable to make the opening from the vagina small, that the admission of air may be prevented. In this way was made the opening in the case here related. It was subsequently enlarged, and the remaining blood was extracted with the fingers.—*Gaz. des Hôp.*

UPON THE TREATMENT OF VESICO-VAGINAL FISTULA.

By Dr. BERTHEZ.

If the fistula be of moderate size, the author is convinced, that its closure may be brought about by cauterisation. He has had, during the last ten years, six opportunities of bringing this method into practice, and of witnessing quick and permanent cicatrisation of the wound. Before proceeding to cauterization, he clears out the bowels by mild medicines, and the bladder by the use of the catheter. He then introduces a thick, elastic canula into the urethra. The patient is put in the position as for the operation of lithotomy, and a speculum, composed of separate blades, is introduced into the vagina, so as to bring the fistulous aperture into view. The bladder is next distended with air, which, making its way through the fistula, distends the opening, and shows the windings of its borders. The author prefers the hot iron to any other kind of caustic. The application will fail to a certainty, unless the whole border of the aperture is cauterised; and, without the inflation of the bladder, it is impossible to trace all the sinuosities and excavations of the fistula. The safest mode of applying the actual cautery is by using several small pointed balls fixed at their base to a right angle with the handle of an instrument, of such size as to be readily introduced within the interior of the speculum. If the first application does not suffice, it should be repeated after fourteen days. The granulations are often so abundant, that they require to be kept down by the use of the nitrate of silver. That the case should go on well, a fixed and non-stimulating diet must be directed. The patient must be kept in that position which prevents the urine from making its way to the abnormal opening; little fluid should be drunk, that the secretion from the kidneys may be inconsiderable; and a plug of wadding should be introduced into the vagina, and renewed twice or thrice a day. Cicatrisation usually is complete in five or six weeks. If the opening is very large, cauterisation has no effect; and the author then recommends the autoplastic operation of Jobert.—*L'Union.*

ÆTHERIC SOLUTION OF BALSAM OF TOLU IN CHRONIC BRONCHIAL CATARRH.

By Dr. ROZIERE.

The author employs, in cases of bronchorrhœa and obstinate cough, also in cases of aphonia, from continued talking and singing, as well as in other chronic affections of the chest, æther. sulphur. 60 grmm.; bals. tolutan. pur. 20 grmm. He puts the mixture into a suitable vessel, and makes the patient inhale the vapour every half hour, for two or three minutes.

PROSTATIC CONCRETIONS IN THE FEMALE.

Leuckhart states, in an excellent article upon "Weber's Organ (das Weber'she Organ) and its metamorphoses (*Münch. Illust. Med. Zeitung*, 1852, Heft. II. s. 90, Note), that the well-formed female possesses a prostate gland, composed, as in the male, of a great number of isolated mucous follicles, which open close by the meatus urinarius, at the entrance of the vagina. He cites Haller ("Elem. Phys., T. VII. p. 88), and De Graaf ("De Mul. Org. Gen.," 1672, cap. 6.)

This notice brought to Virchow's remembrance a number of cases, where he had seen, in the female body, structural changes in the mucous membrane of the bladder and urethra, which pointed out the existence of a prostatic organ. He finds, by no means uncommonly, even in old women, at the neck of the bladder, by the internal orifice or along the course of the urethra, small swellings, which appear as round, grey, or yellow pearly knots, passing into larger, darker coloured, brownish bodies, apparently sunk into the mucous membrane. They are not found so often by the external orifice of the urethra, but nearer to the internal orifice, that part corresponding with the pars prostatica in the male.

In both sexes the composition of these bodies is the same. Virchow concludes, rather hastily perhaps, that, inasmuch as there is no difference here between the male and the female, the prostate must be regarded not as an organ exclusively belonging to the genital systems, but as constituting an important part of the urinary apparatus.—*Virchow's Archiv.*, 1853.

GENERAL CORRESPONDENCE

MR. PRETTY'S CASE OF DETAINED COAGULUM.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just read, with no little surprise, a case reported by Mr. William Pretty, in the *Medical Times and Gazette*, June 25, entitled "Detained Coagulum removed fourteen days after Delivery by an Experienced Accoucheur, and mistaken for a portion of retained Placenta." It brought to my recollection a case in which my aid was sought for, some time since, by Mr. Pretty. The young lady who was the subject of his anxiety had been perfectly blanched from frequent hæmorrhages since her confinement; she could scarcely be moved with safety. The cause of this hæmorrhage was to be found out. I was told that the os uteri was open, and what seemed to be a tumour protruded through it. The previous history of the case given me was just as related by Mr. Pretty. The placenta was retained after delivery, "pressure not causing its expulsion; and a gush or two of blood occurring, it was deemed advisable to remove it; and this I attempted to do by first passing my hand into the vagina, and *then two fingers through its substance*, drawing it down, aided by moderate traction of the cord with my other hand. Not succeeding in this manner, I passed my hand into the uterus, grasped the placenta with my fingers, for it was small, and it was then very easily removed. I examined it, in a part of the chamber which was but imperfectly lighted by a candle, but did not discern that any portion was wanting, *though from its broken state such was possible*. . . . . From this time, up to the fourteenth day, the discharges from the uterus were sometimes copious and florid; sometimes serous, and but slightly coloured; at other times clots would pass, and *a very offensive smell*, much beyond that which often attends the first discharges, was very discoverable, even at the bed-side. These appearances were accompanied with great tenderness over the uterus, some abdominal pain, loss of rest and strength, with much constitutional disturbance. It was thought, that there existed some *post-partum* inflammation, which *the free hæmorrhagic discharges would relieve*. The tenderness became considerably diminished, and the pains much abated; the uterus gradually acquiring its natural size; but the hæmorrhage, though less in amount, was still going on, *producing an ex-sanguineous countenance and rather serious debility*. I found the urethra and vagina generally very sensitive to moderate pressure; the os and cervix uteri not tender to the touch, and within the os, and slightly projecting into the vagina, a firm substance about the size of a damson. It was so confined by, and attached to, the cervix uteri, that I could not easily remove it. A consultation with a Physician-Accoucheur took place the next day." (a)

I was summoned under these circumstances, and, having made an examination, found this damson-like tumour within the os uteri, but not in the least attached to it. I passed two fingers higher within the cavity of the uterus, along what seemed to be a pedicle of the tumour, that ascended to the fundus, but could not reach its termination. However, I grasped as much of it as I could, and endeavoured to twist it off, supposing, at the time, from its resistance, that it might be a polypus. It broke, and I removed the greater portion. This was examined in the presence of Mr. Pretty, and his son, Mr. J. R. Pretty. It seemed to me a fragment of the placenta, infiltrated with blood, forming a coagulum around and through it. The history and symptoms of the case gave strong support to my opinion. From this, Mr. Pretty may have, at the time, dissented; but his objection was offered in such a *sotto voce* manner that it conveyed to my mind the impression that he had a very natural and anxious doubt upon the point, rather than an absolute dissent from my opinion. His hesitation, so far from "exciting some little surprise in the Doctor's mind," seemed to me the most natural thing in the world. Had I supposed at the time, that Mr. Pretty meant to state that I was mistaken, I should have taken very good care to determine the point at once. Had I believed that he had it in contemplation to publish the case as it now appears, I should not have allowed him to take away a single fragment of what I removed, but should have asked his assent to have it examined by a third party in our presence,—so essential do I think it to have facts incontrovertible when a charge is to be founded upon them, directly or indirectly affecting professional character. Mr. Pretty, however, took home the fragment, macerated it in water, made a longitudinal incision through it, placed it under the microscope, and decides, with the assistance of mutual friends, that it was only a coagulum.

(a) *Medical Times and Gazette*, p. 649.

It is totally out of my power now to rebut Mr. Pretty's assertion, because the evidence upon which it is founded is entirely in his own hands, which should not have been the case had I known his object. The circumstantial evidence is all that remains for me, which goes very strongly in favour of the opinion I had given.

The placenta was removed after delivery by Mr. Pretty, in consequence of hæmorrhage. He forced his fingers through its substance,—it was taken away in a broken state. This is just what would happen if a portion of the placenta were morbidly adherent. The uterus was well contracted after delivery, and continued so. All went on well for the first two or three days; but, from this time up to the fourteenth day, hæmorrhage was going on more or less. "Very offensive discharges were accompanied by great tenderness over the uterus and abdomen, with loss of rest, etc. It was supposed, that this *post partum* inflammation would be relieved by *the free hæmorrhagic discharges*. The adherent portion maintained a draining hæmorrhage, and, undergoing decomposition, caused the offensive discharges, and perhaps some inflammation,—a retained portion of placenta would cause such symptoms, a coagulum would not. At length, the debility and exhaustion became so alarming that I was sent for. I removed what, at the time, I supposed to be a retained portion of the placenta, and "no further hæmorrhage occurred." Such were the facts, upon which your readers can readily form their own opinions.

I freely admit, that the examination which I made was "hasty and superficial;" and from the history of the case, and the symptoms, I had "the preconceived opinion" that the cause of the hæmorrhage was either a polypus or a portion of placenta; but hasty as the examination, it was sufficient to convince me that I removed more than a mere coagulum; and notwithstanding the careful examination made by Mr. Pretty, even with the aid of the microscope, I am still of the same opinion that I expressed.

With regard to the subsequent treatment of the case, Mr. Pretty quotes a prescription which I had suggested to him, viz.:—

℞ Liq. opii sed. ʒij.; spir. ætheris sulph. ʒij.; syrupi ʒj.; tinct. secalis ætherizat. ʒiij.; mist. camph. q. s. ut ℥vj. One table-spoonful to be taken every two hours.

To this Mr. Pretty attributes the alarming state of depression in which he found his patient the next morning; and remarks, that "If I ever should again be a party to giving those same medicines in the same doses, (liq. opii sed. ♏ x.; ætheris ♏ x.; tinct. secalis ætheriz. ♏ xv. every two hours,) I shall direct that the effects be most narrowly watched." I thought that I had done so at the time, and, if I did not, it must have been because the state of the patient when I saw her was such, her debility so great, as to render such a direction superfluous. I do not know whether I understand Mr. Pretty correctly; but it would seem, that the patient got the whole of this medicine without being watched at all. If so, it was quite contrary to my intention.

I deeply regret being obliged, in self-defence, to give these explanations, because I think it might have been unnecessary. Having had frequent intecourse with Mr. Pretty, and being on terms that I supposed were friendly, he had it quite in his power to give me some previous intimation of his intention to publish his case, and to expose my supposed blunder. I never imagined, that he would publish to the Profession my so-called mistakes, without at least giving me some previous notice of his purpose. I could not believe, that he would make upon me so ill-disguised an attack without some justification. Had I spoken of his case to his disadvantage privately, or reported it publicly, he might, perhaps, feel himself authorised to meet my statements in the manner he has done. But Mr. Pretty has no such justification. I never alluded to his case directly or indirectly, making it a rule to myself never to do so in cases where I am consulted, especially if I have any doubt of the propriety of the practice pursued.

I am, &c.,

EDWARD W. MURPHY.

12, Henrietta-street, Cavendish-square.

[We have omitted a few sentences from the conclusion of Dr. Murphy's letter which appear to us calculated to lead to the very evils he complains of in the abuse of Medical Journalism. We would also remark that no one could discover from the quotation from Mr. Pretty's letter who was the "Physician-Accoucheur" consulted.—ED. *Medical Times and Gazette.*]

REPORTS OF SOCIETIES.

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. Greenhow, Esq., President, in the chair.

Mr. Greenhow communicated the following case of the

RESTORATION OF THE NOSE.

It may not be either uninteresting or uninstructive to bring before your notice a case illustrative of a branch of surgery which, in actual practice, is not of very frequent occurrence, and the more so as the instance I have to adduce was, in the beginning, of the most unpromising character, and has had a very favourable termination. During a pretty long professional life, I can only call to mind two instances in which I have witnessed the performance of this operation in its full extent; but in both of these the object of restoring a substitute for the most prominent feature in the human countenance was pretty well accomplished. The first of these cases occurred in St. Thomas's Hospital, where, about twenty years ago, I saw a new nose in course of manufacture (if I may use the term), under the management of Mr. Green, by whom the case was pointed out to me. Adhesion had taken place of the new graft, taken, of course, from the forehead of the patient, but the new organ was as yet "without shape and void;" but I remember one remarkable phenomenon connected with it, which, doubtless, obtains in all similar cases; namely, that when the new organ was touched at its apex, sensation was felt on the forehead whence it had been detached, showing that the nervous branches were still faithful to their original destination. I believe this case ultimately did perfectly well. The other case occurred in this Infirmary, under the care of the late Mr. M'Intyre, and was also successful. Within the last two or three years, one or two successful operations, on the same principle, for the restoration of the mobility of joints, whose action had been impeded by extensive cicatrices from burns, have been performed in this Infirmary by Mr. Potter; and a like operation was done some months ago by the same gentleman, to hide a deformity at the upper part of the nose, in consequence of a deep ulcer, attended, if I mistake not, with caries of the nasal bones.(a) But reserving further remarks till a subsequent part of this paper, I shall now briefly relate the case of Charles Simpson, aged 28, who was received as an out-patient August 11, 1851, as I supposed at the time, with secondary syphilis; but he always denied having suffered from venereal disease, and the destructive ulceration which had made such havoc in his face began, as he said, at the early age of 7 years. I therefore subsequently believed that I had been too hasty in attributing his condition to the ravages of syphilis, which, indeed, could scarcely have been the case, unless the disease had been congenital. The face was nearly covered with superficial ulcerations, confined at this time to the cutis vera, but the destruction it had occasioned showed that other and deeper structures had, from time to time, been under its destructive influence. The disease commenced with erysipelas of the face, when 7 years of age, and had never been healed since that time. In its progress it had attacked the entire structure of the nose, the cartilaginous and bony portions of which organ had been entirely destroyed, so that its place was occupied by an irregular, red, ulcerated surface, with two ovoid holes passing to the posterior nares. The destruction of the nose was effected at the age of 14. About six years ago, the left eye was attacked with suppurative inflammation, or sloughing, which completely destroyed its structure, and buried it within adherent lids, the tarsal margins of which have been so entirely obliterated as to leave scarcely a trace of them behind. At one point, indeed, towards the inner canthus, a slight vestige remains, with an opening too minute for the introduction of a probe, but through which an occasional oozing of lachrymal secretion takes place. The opposite eye has escaped uninjured, except that the lower eyelid, towards the inner canthus, is tucked down in a manner which, if not the cause of much serious inconvenience, is still an unseemly deformity. At the period of his admission, the countenance exhibited, from the causes I have described, an appearance and expression as repulsive and little accordant with all that is agreeable and prepossessing in the human countenance as can easily be conceived. Nor was this effect diminished by a strange obliquity and contraction of the mouth, especially on the left side, where the seams and cicatrices of old ulceration were most conspicuous. The breathing was harsh and noisy, almost approaching to the respiration of croup. On examining the throat, extensive ulcerations were discovered in the tonsils and adjoining parts, which the state of respiration might lead you to suspect extended to the glottis; a hoarse cough attended this condition of the throat, but his general health was much as it had always been, that of an habitual invalid. The medical history of this patient, if I may properly use the term, is somewhat curious, and serves at least to prove the *ars longa* of our curative science. He enumerated to me no fewer than seven medical gentlemen, many of the greatest eminence, whom he had at different times consulted. The first he mentioned was the late Mr. Wilkie, resident apothecary at the Newcastle Dispensary, under whose care he remained six months; 2ndly, the late Mr. M'Intyre, of this Infirmary, for two months; 3rdly, Mr. Baird, also of this Infirmary, for six weeks; 4thly, Mr. Paget, for eighteen months; 5thly, Sir John Fife, one year; (a) 6thly. Mr. Liston, then of Edinburgh, three months. After this, a considerable interval seems to have passed without professional assistance; but, at length, 7thly, he consulted Dr. Fenwick, of North Shields, by whom he was again advised, after remaining one month under his care, to apply to the infirmary. At the time of my first seeing him, as I have already noticed, I attributed his condition to secondary syphilis. It would seem, however, that this opinion was too hastily formed. But, though scrofula (that wide, comprehensive, and not very precise epitheton) may be considered as the basis or essential nature of the disease, I must confess that I am at some loss to give a specific name to this particular form of destructive ulceration. Whether "scrofulous lupus" will meet the difficulty, I can scarcely determine; but, till I am supplied with a more satisfactory name, I shall so designate it. But perhaps it is of more practical importance shortly to review the treatment which led to its ultimate cure. At first, the internal treatment consisted of the syrup of iodide of iron, ʒi. three times a day; 5 grs. of blue and aloetic pills each night; a gargle with nitric acid was used to the throat; and to the ulcerated surface of the face was applied a lotion of camphor mixture ℥viii., solution of lead and laudanum, each ʒss. Under this plan, some evident improvement soon showed itself. The healing process began in the face, and the throat also greatly improved; but the sonorous breathing continued, accompanied by frequent cough, and sometimes decided pain in the chest. An occasional blister was found useful. Cod-liver oil(b) was substituted, after some time, for the iodide of iron; the constant use of the pills was discontinued, and various applications were from time to time applied to the face—sometimes the lotion already noticed, sometimes a solution of sulphate of copper, and sometimes the nitrate-of-mercury ointment. As he was an out-patient, regular notes of the progress of the case were not taken; I must, therefore, content myself with this broad and not very definite outline. But the healing of the face went on, the throat got well, the breathing improved, and the cough disappeared; and, early in June, 1852, his health was so much restored, that he was made an in-patient, for the purpose of endeavouring to repair the mischief that had been done, in some degree at least, by the operation of Taliacotius for the restoration of the nose. There was nothing remarkable in the method of operating, except that, I believe, from the unhealthy character of the newly-restored integuments, few of the spectators had any faith in its ultimate success; but, in the central and upper part of the forehead, the original integument remained, and hence it was that the new organ was to be supplied. The shape and size were indicated by a piece of wash-leather, previously fitted to the site of the absent nose. By this the incision was guided; the dissected portion was brought down to its new location; deep incisions were made for its insertions, and it was secured by three interrupted sutures on each side. At first, some dossils of lint were introduced, to give form and elevation to the new organ; but a little reflection soon convinced me that this was a serious error, and in a few hours I removed them, with care and some difficulty, just in time, I believe, to prevent their increasing bulk, from the imbibition of bloody serum, from separating the new attachments. The margins of the wound on the forehead were approximated by a strong suture, and it was dressed with adhesive straps and a bandage. The patient was kept perfectly quiet in bed for some days, the general health being carefully attended to. In a few days, adhesion was found to be complete, the stitches were removed, and the healing process continued to go on well. A piece of wax, properly modelled, was introduced,

(a) Sir John, some years ago, restored the ala nasi from the integument of the cheek, in a patient of the Newcastle Infirmary.

(a) Sir John Fife stated, that when this patient was under his care he considered his complaint porrigo favosa, and that several times when he appeared nearly recovered the disease again returned.

(b) Of the cod-liver oil, he calculates that he took in all the ample quantity of five gallons.

which maintained the opening of the nares, and gave a degree of elevation to the new member. But still it remained to complete the work, by the formation of a septum. At first, this appeared a matter of some difficulty, from the contracted and cicatrised condition of the upper lip; and the more so, as it was throughout adherent to the gum above the upper teeth. A deep square incision was made into the lip, not interfering with the red margin of the mouth. The part thus defined was carefully dissected, and raised from its natural attachments, to be united by suture with the little tongue of integument of the new organ. Oiled lint was introduced on each side, to keep open the nostrils. The wound in the upper lip was drawn together with adhesive straps. The parts united favourably. In a few days, portions of elastic tube were introduced, through which he breathed freely; and since then silver tubes have been substituted, which are constantly worn, to prevent the contraction of the nares. At this time the lip is healed, and the result of the operation may be pronounced successful; but a small sore still remains on the forehead. I may observe, that the connecting link between the nose and the forehead was never divided, as appears usually to have been the practice, because I hardly saw that I could improve, by such procedure, the appearance of the part. Whatever may be thought of the beauty or symmetry of the new organ, it certainly greatly improves the appearance of the patient, and renders respiration both more comfortable and more healthy. He is free from the harsh, sonorous, breathing from which he formerly suffered, and his general health is better and more robust than at any former period of his life. It has been a question with me, how far it might be possible to still further improve the beauty of his countenance by re-opening the closed and adherent eyelids, and placing within them an artificial eye; but the complete adhesion which they have formed to each other, nearly obliterating all trace of their tarsal margins, and the probability of their having become closely adherent to the remains of the eye-ball and other textures beneath, render the success of such an attempt extremely improbable.

Mr. Greenhow related a case of

EXCISION OF OS CALCIS.

in which, at the end of five months, the other bones of the tarsus had become so much diseased as to render amputation of the foot necessary. The patient is now recovering well.

[To be continued.]

PRESENTATION FOR DEGREES AND HONOURS, AND THE DISTRIBUTION OF PRIZES.—1853.

KING'S COLLEGE LONDON.

DEPARTMENT OF GENERAL LITERATURE AND SCIENCE.

Scholars.—Senior Classical, R. J. Donne.
Junior, James Heath.
Junior Mathematical, W. Cochrane.
Divinity, John Mee Fuller.
Modern History, H. M. Thelwall.

Divinity.—Third year, F. Garrett, Charles Alabaster.
Second, E. A. Lane, W. Cochrane.
First, F. E. Thompson, Henry B. Swete.

Classics.—Class 1, Div. 1, C. Alabaster.
Div. 2, F. R. R. Stebbing.
Class 2, W. Glynn, A. G. P. Wilks.
Class 3, R. J. Forest, A. Inglis.

Latin Verse.—Edward Ernest Bowen.

Mathematics.—Class 1, Div. 1, F. Bullock.
Div. 2, E. J. Stone.
Class 2, Robert Allen.
Class 3, J. D. Howell.
Class 4, Div. 1, R. Swinhoe.
Div. 2, J. T. Firby.

English Verse.—Original Poem, J. W. V. Blackburn.
Translation, F. Garrett.

English History.—Div. 1, C. H. O. Daniel, W. W. Hopwood, equal.
Div. 2, Ed. S. Powles, J. Heath.

Stephen Endowment.—Henry M. Thelwall.

French.—Senior Class, W. W. Aston.
Junior Class, W. Lush.

German.—William Cochrane.

Hebrew.—Div. 1, John Mee Fuller.
Div. 2, J. C. Hose, E. S. Powles.
Div. 3, John F. Messenger.

Italian.—George Lingham.

DEPARTMENT OF THE APPLIED SCIENCES.

Scholars.—Senior, Charles Cochrane.
Junior, Alfred C. Newton.

Divinity.—3rd Year, Charles Cochrane.
2nd ,, Walter West.
1st ,, C. H. Fynes Clinton.

Mathematics.—R. Allen, W. West, J. B. Rogers, F. W. Pinney.

Mechanics.—3rd Year, E. Young.
2nd ,, W. West.
1st ,, E. J. Standen.

Chemistry.—J. S. Rock, J. B. Rogers.

Practical Chemistry.—C. Cochrane, T. B. W. Sheppard.

Manufacturing Art.—T. W. B. Sheppard, C. H. Fynes Clinton.

Geometrical Drawing.—W. West.

Geology.—Ed. Wm. Young, T. B. W. Sheppard.

Practical Geology.—Charles Cochrane.

Surveying.—3rd Year, E. W. Young.
2nd ,, C. J. Anderson.
1st ,, George Winslow.

Mineralogy.—T. B. W. Sheppard, E. W. Young.

Arts of Construction.—C. Cochrane, E. W. Young.

The Workshop.—3rd year, T. B. W. Sheppard.
2nd ,, T. Field.
1st ,, Geo. Winslow.

Certificates of Honour.—C. Cochrane, T. B. W. Sheppard, E. W. Young.

Certificates of Approval.—C. J. Anderson, A. C. Newton, W. West.

MILITARY DEPARTMENT.

Divinity.—2nd year, J. H. F. Blyth.
1st ,, Harry D. F. Savary.

Fortification Drawing.—Joseph F. V. Des Barres.

Permanent and Field Fortification.—G. E. Legget.

Field Works and Surveying.—T. D. Baker.

Military Drawing.—J. H. F. Blyth.

General Proficiency in Subjects not strictly Professional.—J. H. F. Blyth.

Mathematics.—Harry D. F. Savary.

ST. THOMAS'S HOSPITAL.

CLASSICAL AND MATHEMATICAL EXAMINATION.

W. M. Ord.

MEDICAL SCHOLARSHIPS.

W. M. Ord.
R. B. Sweeting.

PHYSIOLOGY.—(Mr. Grainger.)

3rd Year Prize.—J. E. Moreton.
2nd Year Prize.—W. M. Chipperfield.
Hon. Certificate.—S. Jones, E. Clapton, E. L. Dixon, S. H. Dickerson, A. Fernie, J. T. Rudall.

MATERIA MEDICA.—(Dr. Bennett.)

1st Year Prize.—E. L. Dixon.
Hon. Certificate.—G. T. Keele, S. H. Dickerson.

CLINICAL MEDICINE, ETC.—(Dr. Goolden.)

President's Medical Prize.—J. E. Moreton.
Treasurer's Prize to Clinical Clerks—J. Brake, E. Clapton, J. E. Moreton.
Mr. Newman Smith's Prize Essay.—J. E. Moreton.

DESCRIPTIVE ANATOMY. — (Mr. Le Gros Clark.)

2nd Year Prize.—W. N. Chipperfield.
1st Year Prize.—W. M. Ord.
Hon. Certificate.—J. E. Moreton, S. Jones, E. L. Dixon, G. J. Wood, R. B. Sweeting, F. W. Way.

MIDWIFERY.—(Dr. Waller.)

Resident Accoucheur.—W. T. Fernie, H. G. Trend.
Practical Prize.—H. G. Trend.
2nd Year Prize.—J. Brake.
1st Year Prize.—W. N. Chipperfield.
Hon. Certificate.—E. Clapton, W. T. Fernie, J. Croft, J. E. Moreton, H. Webster, H. B. Hurman, E. L. Dixon, S. Edmonds, S. H. Dickerson, J. T. Rudall, H. G. Trend, W. Allingham, G. T. Keele, S. Morgan, J. F. West.

BOTANY AND PHYSICAL SOCIETY. — (Dr. Bristowe.)

Botanical Prize.—E. L. Dixon.
Treasurer's Prize to Physical Society.—E. Clapton.
Physical Society's Prize.—W. N. Chipperfield.

OPHTHALMIC SURGERY.—(Mr. Macmurdo.)

Prize.—J. E. Moreton.

DRESSERSHIPS.—W. C. Blackett, J. Brake, E. Clapton, J. Croft, W. T. Fernie, A. W. Hopton, S. Jones, R. H. Leeson, J. E. Moreton, F. W. Rutter, G. M. Slaughter, H. Smith, E. H. Snoad, G. W. Sparke, W. Tyrrell, H. Webster, E. M. Wrench.

MEDICINE AND FORENSIC MEDICINE.—(Dr. Barker.)

3rd Year Prize for Medicine.—J. E. Moreton.
2nd Year ditto.—W. N. Chipperfield.
Hon. Certificate.—E. Clapton, E. L. Dixon, S. Edmonds, J. T. Rudall, S. H. Dickerson.
Prize Forensic Medicine.—J. Brake.
Hon. Certificate.—E. Clapton, J. E. Moreton, W. Tyrrell.

CHEMISTRY.—(Dr. Gladstone.)

Practical Prize.—J. A. Fulton.
1st Year Prize.—W. M. Ord.
Hon. Certificate.—E. Clapton, R. B. Sweeting, F. W. Way, J. Atkinson, W. G. Johnson.

SURGERY.—(Mr. South.)

2nd Year Prize.—W. N. Chipperfield.
Hon. Certificate.—J. E. Moreton, E. Clapton, S. Edmonds, A. Fernie, J. T. Rudall.

FOR SURGERY AND SURGICAL ANATOMY.—(Mr. Green,)

Cheselden Medal.—J. E. Moreton.
President's Surgical Prize.—H. Lankester.
Mr. Dixon's Prize Essay.—W. Tyrrell.

FOR GENERAL PROFICIENCY AND GOOD CONDUCT.

Treasurer's Gold Medal.—J. E. Moreton.

MEDICAL NEWS.

Royal College of Physicians.—At the usual Quarterly Meeting of the Comitia Majora, held on Saturday, June 25, the following gentlemen having passed the necessary examinations for diploma, were admitted members of the College :—

Evans, Dr., Birmingham.	Ogle, Dr., Cambridge.
Halley, Dr., London.	Maxwell, Dr. Worcester.
Jencken, Dr., the Cape.	Symonds, Dr., Clifton.

At the same Comitia the following gentlemen were chosen Censors for the ensuing year :—

Barker, Dr., London.	Rees, Owen, Dr., London.
Nairne, Dr., London.	Thompson, Seth, Dr., London.

The following gentlemen were elected Fellows of the College :—

Brown, Dr., London.	Sibson, Dr., London.
Milroy, Dr., London.	Taylor, Dr., London.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at the meeting of the Court of Examiners on the 24th inst. :—

Baker, Slade Innes, Hayford Warren, Oxfordshire.
Barker, Joseph, Durham.
Griggs, William, Little Easton, Dunmow, Essex.
Knaggs, William Angelo, Kensington.
Pendlebury, William Hitchin, Bolton, Lancashire.
Pratt, Henry, Montreal, Canada.
Smart, Robert Bath, Balsham, Cambridgeshire.
Sturkey, Henry G., Fachwen Tregynon, Montgomeryshire.
Tuttiett, Harry Barrington, Ventnor, Isle of Wight.

New Fellows.—*(Errata.)*—In the list of gentlemen admitted to the Fellowship of the Royal College of Surgeons, and published by us last week, the following names were inserted by mistake :—Messrs. J. C. Cornelius, S. Courtney, J. G. French, A. Rogers, J. Stephens, and J. W. Winchester.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 23, 1853 :—

Armstrong, Fergus, Appleby, Westmoreland.
Chapman Edmund.
Curtis, William Kaylet, Harting, Petersfield.
Debenham, Horace Kersey, Norton, Suffolk.
Deighton, Christopher, Edinburgh.
Lindley, Joseph Ferguson, Stalybridge, Lancashire.
Marchant, William Robert Faun, North Curry, Somerset.

APPOINTMENTS.

Medical.—Joseph Henry Green, Esq., was elected, on Tuesday, Consulting-Surgeon to St. Thomas's Hospital; and Mr. Solly, Surgeon.—Mr. W. J. Clarke and Mr. T. R. Tatham were elected Surgeons to the Huddersfield Infirmary on the 24th inst.

Military.—Hospital Staff: Assistant-Surgeon William Legge Reid, M.D., from the 34th Foot, to be Assistant-Surgeon to the Forces, vice John Collis Browne, M.D., placed upon half-pay.

Militia.—Staffordshire Militia: Michael Hool Ashwell, Esq., to be Surgeon, vice Wood, resigned.

APPOINTMENTS, ETC., IN INDIA.

Bombay.—Admitted to the Service :—Mr. William Ashton Shepherd as an assistant-surgeon; date of arrival at Bombay, April 19, 1853.—Removals and Postings :—Surgeon Harrison, deputy medical storekeeper and staff surgeon at Poona, and Surgeon Babington, holding the same appointment at Ahmedabad, are permitted, at their own request, to exchange appointments.—Colloquial Proficiency: The undermentioned officers have been reported by Committees assembled at Belgaum, Poona, and Ahmenuggur, to have acquired that colloquial proficiency in the vernacular language of the men, which is contemplated by G. O. C. dated June, 27, 1844 :—Assistant-Surgeon T. E. P. Martin, medical establishment, April 25, 1853; Assistant-Surgeon W. J. Moore, medical establishment.—Furlough to Europe: Assistant-Surgeon Mills, medical establishment; Assistant-Surgeon Watson, medical establishment.—Leave of Absence: Superintending Surgeon E. W. Edwards, of the medical establishment, is allowed leave of absence for eighteen months, to proceed to Egypt and Syria, on medical certificate.

Madras.—Surgeon Duncan Macpherson, M.D., to take rank from December 11, 1852, vice Cannan retired; Surgeon Edward Green Balfour to take rank from December 31, 1852, vice Davidson retired; Surgeon Thomas Glen Johnston, M.D., to take rank from January 22, 1853, vice Cornfoot retired; Senior Assistant-Surgeon James Robson, M.D., to be Surgeon from February 8, 1853, vice Smith deceased; Senior Assistant-Surgeon John Daniel Vittoria Packman, L.R.C.P.L. to be Surgeon from February 28, 1853, vice Wright retired; the services of Assistant-Surgeon John Andrew Reynolds, of the 49th Regiment Native Infantry, are placed at the disposal of the Government of Bengal for employment as civil Assistant-Surgeon at Moulmein.—Furlough to Europe: Assistant-Surgeon James Mackintosh, of the D troop horse artillery.—Leave of Absence: Assistant-Surgeon F. Day, 1st Madras Fusiliers, in continuation to December 31, 1853, Neilgherries, s. c.—Passed in the Native Language: The undermentioned officer has been examined in the Hindoostanee language: Assistant-Surgeon G. W. Walter, for medical charge.

Bengal.—Surgeon John O'Dwyer, of the 3rd light cavalry, is appointed garrison surgeon, vice Senior Surgeon William Montgomerie, appointed superintending surgeon on the establishment; Assistant-Surgeon G. R. Skinner to be civil Assistant-Surgeon of Tipperah; Senior Surgeon Sir J. Thomson, K.C.B., Surgeon General, to be Physician General; Senior Surgeon G. G. Spilsbury, Superintending Surgeon to be Surgeon General; and Senior Surgeon H. Guthrie, M.D., Garrison Surgeon, Allahabad, to be Superintending Surgeon. In succession to Senior Surgeon W. S. Stiven, Physician General, retired, either from the date of the departure of the screw steam-ship Queen of the South, or that of the vessel on which he may embark, Senior Surgeon J. Graham, M.D., to officiate as Superintending Surgeon, pending the return of Superintending Surgeon W. Montgomery from Burmah; Assistant Surgeon F. J. Mount, M.D., F.R.C.S., to officiate as Chemical Examiner to Government until further orders.—Returned to Duty: Surgeon Andrew Wilson, date of arrival at Fort William, April 15, 1853; Surgeon Alexander Gibbon, date of arrival at Fort William, April 16, 1853; Surgeon Duncan M'Rece, of the Medical Department, date of arrival at Fort William, April 26, 1853.—Removal and Postings: Surgeon R. Christie is removed from the 54th Regiment of Native Infantry to the 3rd Regiment of Light Cavalry, at Nowgong; Surgeon J. Wilkie, M.D., is removed from the 61st to the 19th Regiment of Native Infantry; Surgeon A. Gibbon, returned from furlough, is posted to the 61st Regiment of Native Infantry.—Furlough to Europe: The undermentioned officers are permitted to proceed to Europe on furlough :—Surgeon Charles Murrary Henderson, M.D., of the medical department, on private affairs; Assistant-Surgeon Alexander Christison, M.D., of the medical department, on medical certificate.—Invalid Establishment: Surgeon Thomas Smith, M.D., of the 58th Regiment Native Infantry, having been declared incapable of performing the active duties of his profession, is, at his own request, transferred to the invalid establishment, from March 10, 1853.

Civil.—Bombay.—Surgeon W. Arbuckle, M.D., is appointed Surgeon to the Police, the County Gaol, and the House of Correction, from April 30, the date on which he assumed charge of the duties of civil surgeon at the Presidency; Assistant-Surgeon W. Peach has been appointed Superintendent of Vaccination, S.E. Division, Goozerat; Assistant-Surgeon Imlach, 23rd Regiment Native Infantry, has been appointed Civil Surgeon at Shikarpoor; Assistant-Surgeon J. F. Steinhaeuser is appointed Civil Surgeon at Aden.

DEATHS.

Barlow.—June 24, at Writtle, Essex, William Frederick Barlow, Esq., F.R.C.S., aged 37. It is with deep regret that we record the death of this gentleman. He possessed talents of a very high character, and had earned distinction at every period of his career,—from the early and successful efforts of a student to the later more matured researches and writings of the educated and accomplished man. He was a student at St. Bartholomew's Hospital, and distinguished himself by obtaining Mr. Lawrence's first prize in Surgery, Dr. Marshall Hall's first prize in Medicine, Mr. Stanley's for Anatomy, and Dr. Rigby's first prize in Midwifery. After passing his examination for two or three years, he held the office of House-Surgeon to the Tonbridge Wells Infirmary, and subsequently a similar position in the Children's Infirmary. In 1848, he was elected Apothecary to the Westminster Hospital; and, while in this Institution, he deservedly obtained the confidence of the Physicians and Surgeons, who appreciated his value, and will severely feel his loss. With two of them he was on the closest terms of intimacy, and this friendship was cemented by the estimate in which his taste both in literature and art was held; for there were few men in the Profession better read in the higher branches of English literature. He had contributed many very interesting papers to the Medical Journals. The subject of Fatty Degeneration had largely engaged his attention, and some very interesting observations on this subject have appeared in our columns. A paper "On the Relation of Sleep to Convulsive Affections," was printed in the "Medical and Chirurgical Transactions" of 1851. The subject of muscular contractions after death, and rigor mortis, had also received copious and interesting illustration in a series of communications to the *Medical Times and Gazette*. He was a Fellow of the Royal College of Surgeons, a Fellow of the Royal Medical and Chirurgical Society, a Member of Council of the Sydenham Society, and Member of the Pathological Society. His illness had been preceded by some circumstances of an irritating and vexatious character, which had kept his nervous system in a state of much excitement; some regulations, emanating from the Weekly Committee of the Hos-

pital, requiring his signature each time he visited the wards, together with other changes in his department, harassed and annoyed him; headache of some days' duration, with sleeplessness, were followed by febrile symptoms; rapid symptoms of exhaustion followed, and he died, at his father's house, at Writtle, on the 24th of June. His loss will be severely felt by all connected with the hospital; for he gained and merited the esteem of the Physicians and Surgeons, as well as of the Pupils, who respected him highly.

Byne.—June 20, at Hammersmith, Henry Thomas Lucas Byne, Esq., surgeon, late of Marlborough, of consumption, aged 32, deeply lamented by his family and friends; M.R.C.S. Eng. 1851.

Nicholl.—June 23, at Upper Rochester-street, Cambridge-square, London, William K. L. Nicholl, M.D., formerly of Ryde, Isle of Wight, aged 75; M.D. Paris, 1815; M.R.C.S. Eng., 1812.

Peene.—June 20, at Maidstone, aged 58, William Gurden Peene, M.D. Cantab. 1823 (Trinity).

M'Dougall.—June 18, at Exeter, Henry John M'Dougall, Esq., surgeon, late of Henrietta-street, Cavendish-square, in his 33rd year. The deceased was well known to the Profession by his editing the English version of Lallemand's work on "Spermatorrhœa," a second edition of which, enlarged, and enriched with much original matter, appeared about two years since. Mr. M'Dougall also commenced a series of interesting papers on spermatorrhœa, which were published in the columns of this Journal, the completion of which was prevented by the advent of the fatal disease under which he ultimately sank. They evinced great skill and knowledge of his subject, and considerable erudition. Mr. M'Dougall was, in early life, a pupil and dresser at the Exeter Hospital, and afterwards pursued his studies at the University College Hospital, of which he was, at one time, one of the house-surgeons. He was a kind and true friend, a clever surgeon, and a neat operator. Had he lived, there is no doubt he would have attained high honours in the Profession. Too intense and protracted study of the microscope led to the advent of the disease of the brain, which terminated fatally on the 18th inst.

Weatherhead.—June 22, at Foot's-cray, Kent, George Hume Weatherhead, aged 63; retired from practice; M.D. Edin. 1815; M.R.C.P. 1820; Senior Physician and Trustee of the Royal Free Hospital; Honorary and Corresponding Member of the Royal Hufelandian Society of Berlin; author of "A Synopsis of Nosology," wherein diseases are classed together according to the tissue which is the seat of the morbid action; "Diseases of the Lungs;" "Syphilis without Mercury;" "Headaches;" "Rickets;" "A Pedestrian Tour through France and Italy;" proposer of summary jurisdiction to be vested in magistrates, for the punishment, by fine and imprisonment, of quacks and other irregular practitioners.

Graves.—June 27, at 40, Trinity-square, Tower-hill, after a short illness, deeply lamented by all who knew him, William Henry Graves, Esq., surgeon, in his 53rd year; M.R.C.S. Eng., 1823, L.S.A., 1823.

Orr.—June 19, at Dunoon, Dr. James Orr; M.D. Glasgow, 1834.

King's College.—The annual distribution of prizes at King's College took place on Monday, when the chair was filled by the Archbishop of Canterbury, and among the visiters present was the King of Hanover. Dr. Jelf, the Principal, read his Report on the state of the College, which represented it to be in a very flourishing and satisfactory condition; after which the prizes were awarded.

St. Thomas's Hospital.—The distribution of scholarships and prizes took place on Thursday, June 23. The Bishop of Oxford presided.

Foreign Medical Schools.—The Council of the Royal College of Surgeons of England have just placed the Royal Caroline Medico-Chirurgical Institute and Royal Seraphimer Hospital of Stockholm among the Continental Medical Schools from which they are ready to receive certificates of professional education from candidates for their diploma of fellowship or membership; in addition to those of Paris, Montpellier, Strasburg, Berlin, Vienna, Heidelberg, Bonn, Göttingen, Leyden, Liege, Pavia, New York, and Philadelphia.

English University Procedure.—In the draft of a Bill to be proposed by Mr. James Heywood, M.P., entitled, "A Bill to simplify the Procedure at Matriculation in the University of Oxford, and on taking the first or Bachelor's Degrees in Arts, Law, and Medicine, in the Universities of Oxford and Cambridge," it is proposed, that the benefits of academical education should be extended, and that simple forms of procedure should be adopted at matriculation in the University of Oxford, and, on taking the first or Bachelor's degrees in arts, law, and medicine, in both the Universities of Oxford and Cambridge. That from and after the 10th October, 1853, it shall not be necessary for any person at matriculation in the University of Oxford to take any oath, or to subscribe to the Thirty-nine Articles. That from and after the 10th October, 1853, it shall not be necessary for any person, on taking the first or Bachelor's degree in arts, law, or medicine, in either of the Universities of Oxford or Cambridge, to take any oath whatever, to subscribe to the Three Articles of the Thirty-sixth Canon, or to subscribe to any declaration of *bonâ fide* membership with the Church of England as by law established; and that, in lieu of all the oaths or declarations now customary on taking the first or bachelor's degree either in arts, law, or medicine, in either of the Universities of Oxford or Cambridge, declarations of allegiance to the Crown, and of obedience to the University authorities shall be made.

India.—Merit.—The following is an extract from a Dispatch of Brigadier-General Sir J. Cheape, K.C.B., Commanding the Bengal Division, to the Deputy-Adjutant General Army of Ava, dated Donabew, March 25:—"To Surgeon Andrews, 67th N. I., and the Medical Department, I have to return my best thanks for the performance of their very arduous duties in the care of the sick and wounded; and to Assistant-Surgeon Murphy, Staff-Surgeon to the Division, in particular, my special thanks are due: he was the senior Medical officer until the arrival of the reinforcements from Rangoon, and all the arrangements made by him have been most perfect. On the 19th instant, the wounded men were attended to by him under a very heavy fire, and though wounded, (I am happy to say very slightly,) it did not deter him a moment from the zealous discharge of his duties; he has performed them throughout in the most unwearied and able manner, accompanying the men in the boats to the steamers, and seeing them carefully attended to and disposed of. I consider the Force fortunate indeed in having a Medical officer of his talent and character in such trying circumstances; and I feel assured the Major-General will accord his approbation of the services of this officer.

The Governor-General of India has prohibited all officers from borrowing money from native princes or chiefs, or from functionaries in their service, whether in foreign territories, or within the possessions of the East India Company.

Union Medical Officers.—In the House of Commons, on Thursday week, Mr. F. Scully presented a Petition from the Guardians of the Carrick-on-Suir Union, praying that the salaries of the Medical Officers may be paid out of the Consolidated Fund.

Photographic Soiree.—On Thursday night, Mr. Philip De la Motte, the proprietor of the Photographic Institution, in New Bond-street, gave a *soirée* in his rooms, at which various specimens of this curious art were exhibited. The collection comprises views taken with the nicest accuracy in all parts of the world, as well as photographic reproductions of microscopic objects, shells, plants, etc. In illustrating the results of a scientific research, there is no doubt that photography will prove a most important art. Without the slightest knowledge of drawing, the traveller, who has been armed with the proper apparatus, may bring home with him the scenes of his voyage; and the collector of natural curiosities, similarly provided, may give the world a transcript of his cabinet, almost as instructive as the original contents.

Storm at Portsmouth, and Loss of Life.—On Monday, the weather blew a heavy gale. A shore-boat, in which were Lieutenant Lambert and Mr. Muirhead, Assistant-Surgeon, of the Edinburgh, foundered, and they, with two watermen, have been lost. They were "reported" as "missing" on the same day, and were last seen, we are informed, in Bath-square, Portsmouth, on Sunday night, about to go off to Spithead to join their ship.

The Way Invalids are Treated.—The Oberon brought home a large number of military invalids from Malta. The poor devils were put on board—men, women, and children—without hammocks or bedding, and would have been sent to England in that state but for a strong remonstrance. At the eleventh hour bedding was sent on board for the invalids only, but no hammocks; and the poor fellows were thus compelled to come to England lying about on the decks,—women, too,—and the decks so leaky that they had to put into Gibraltar to caulk them!—*United Service Gazette.*

Female Physicians.—The Female Medical College of Pennsylvania will commence its next course of lectures on the 1st of October. Its Faculty consists of five male and two female Professsors,—the latter regularly graduated physicians as well as the former,—while the Demonstrator in Anatomy is also an able female physician.

Salt.—In the House of Commons, on Monday, the Marquess of Westminster, in presenting a Petition from the inhabitants of the town and neighbourhood of Northwich, praying that English salt might be imported into all parts of British India upon the same terms and conditions as other goods and manufactures. said: If the advantage from opening the trade would be great to the commercial gentlemen of Lancashire and Cheshire, it must be much more so to the unfortunate Hindoo, who, during eight months of the year, lived entirely on rice, and, during the other four months, on any other vegetable matter he could obtain. Salt to the Hindoo was an absolute necessary of life, and it saved him from disease and death. Notwithstanding the importance of a sufficient and pure supply to

the people of India, the policy pursued by the Government of India had introduced a system of adulteration which was utterly incredible. It was well known that the impurities attaching themselves to salt amounted to about 13¼ to 100 lbs. But in the salt sold wholesale by the Company the impurities increased to 185 parts of the ton; and it had been estimated, that of the salt sold in retail the adulteration was not less than one-half. From this cause the salt sold to the natives was so distasteful to them, that previous to using it, they were obliged to resort to a process of purification.

MORTALITY NOTABILIA.—The deaths registered in London in the week that ended last Saturday were 990, and show an increase on the return of the previous week. In the ten corresponding weeks of the years 1843-52, the average number was 976, which, if raised in proportion to increase of population, becomes 1,074. Hence it appears, that the actual mortality of last week is less than the estimated amount by 84. On a comparison of the results of the last two weeks, a small increase is observed in all the more important classes of disease, except that of "diseases of the respiratory organs," which shows a decrease from 127 to 116. Zymotic diseases, in the aggregate, rose from 208 to 214; among these, diarrhœa increased from 24 to 33, typhus from 30 to 52; while measles fell from 20 to 15, scarlatina from 39 to 27, hooping-cough from 67 to 56.

The Fever Hospital.—Six deaths occurred between the 19th and 24th June, inclusive, in the London Fever Hospital, Islington. Mr. Watts, the Registrar, states, that "there has been a great influx of cases into this hospital for some time past. 120 patients now occupy beds in the wards; many are convalescent, and their support falls heavily on the funds of the Establishment. The annual subscriptions have been decreasing for some years, while the accommodation has been much extended."

Scarlatina.—In the sub-district of St. Nicholas, Deptford, scarlatina of the most malignant kind prevails.

Lead Palsy.—In King's College Hospital, a man, 32, died of "palsy dependent on lead-poisoning; gout, suppression of urine." The medical certificate says, that "this man was a potman, and he attributes his lead palsy to cleaning pewter pots. The superficial extensor muscles of both arms very pale, almost white. The other muscles their normal colour."

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·597 in. The mean temperature was 57·4°, which is 3·1° below the average of the same week in 38 years. The mean daily temperature was below the average on every day, except Friday and Saturday; and this depression, on Monday and Tuesday, amounted to more than 7°. The highest temperature was 78·7°, and occurred on Friday; the lowest was 44·1°, and occurred on Tuesday. The mean difference between the dew-point temperature and air temperature in the week was 7·7°; the greatest difference was 20·1°, and occurred on Friday; the least differences were 1·6° and 1·5°, on Wednesday and Friday. The wind blew from the north or north-east on Tuesday, Wednesday, and Thursday, and from the south-west at the beginning and end of the week.

DEATHS *in the Metropolis for the week ending Saturday, June* 25, 1853.

CAUSES OF DEATH.	JUNE 25. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	487	326	176	990	9757
SPECIFIED CAUSES	485	326	176	988	9702
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	166	38	10	214	2161
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	23	19	46	468
3. Tubercular Diseases	84	102	4	190	1861
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	52	30	31	113	1203
5. Diseases of the Heart and Blood-vessels	3	22	16	41	316
6. Diseases of the Lungs and of the other Organs of Respiration ...	53	33	30	116	959
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	32	25	12	69	645
8. Diseases of the Kidneys, etc. ...	1	3	6	10	105
9. Childbirth, Diseases of the Uterus ...	...	6	...	6	112
10. Rheumatism, Diseases of the Bones, Joints, etc.	3	6	2	11	83
11. Diseases of the Skin, Cellular Tissue, etc.	2	2	1	5	17
12. Malformations	2	...	...	2	19
13. Premature Birth and Debility ...	18	2	...	20	241
14. Atrophy	31	2	6	39	189
15. Age	...	...	32	32	389
16. Sudden	8	...	...	8	237
17. Violence, Privation, Cold, and Intemperance	26	32	7	66	697
CAUSES NOT SPECIFIED	2	...	...	2	55

MORTALITY IN PUBLIC INSTITUTIONS for the week ending June 25:—

	Males.	Females.	Total.
Workhouses	52	39	91
Military and Naval Asylums.. ...	7	...	7
General Hospitals	32	16	48
Hospitals for Special Diseases ...	2	4	6
Lying-in Hospitals	...	1	1
Lunatic Asylums	3	3	6
Military and Naval Hospitals ...	2	...	2
Hospitals for Foreigners, &c. ...	...	1	1
Prisons	10	3	13
	108	67	175

BOOKS RECEIVED.

Remarks on the Case "Epsilon *v.* Dr. Carpenter." By H. Parker.
India Reform. No. 8. Public Works.
Braithwaite's Retrospect of Medicine. Vol. XXVII.
Report on the Medical Topography and Statistics of the Nizam's Army.
The Decline of Life in Health and Disease. By B. Van Oven, M.D.
Goodsir's Annals of Anatomy and Physiology. No. 3.
Plates of the Brain. By Joseph Swan.
Notes on Pericarditis, Endocarditis, etc. By C. Morehead, M.D.
Every Mother's Book. By W. Pearce, M.R.C.S.
Ueber den Heilungs Prozess nach Resection und Extirpation der Knochen. Von Dr. A. Wagner.
The Sophistry of Empiricism.
Confessions of an English Opium Eater.

TO CORRESPONDENTS.

Thomas E. Amyot, Esq., of Diss, Norfolk, informs us, that the case of *sarcina ventriculi*, reported in this Journal last August, has since gone on favourably, the patient having remained in good health. He suggests, with reference to the case related by Dr. Neale in a late Number, that the hyposulphite of soda should be tried alone without vegetable bitter. We agree with him, that, in testing the value of any medicine, it should be given uncombined with anything which could modify its action. We do not think it advisable to publish the other two cases.

Medicus.—If we were to attempt to explain all the stories that are told about table-moving, without waiting for proofs that they are true, we should enter upon a very unprofitable task. If "Medicus" takes the trouble to inquire into the case he mentions, he will doubtless find that it is a pure fabrication.

A Foreign Surgeon is thanked for his communication. He states, that Purkinje, the Physiologist, having been born in Bohemia, cannot properly be styled a "Dutch philosopher," as he has been called in a recent lecture.

Dr. W. G. Maxwell should state the reasons for the opinions he holds on the nature and treatment of cholera.

Mr. Rickett's is thanked for the "little Common-sense about Doctors."

If *Mr. Greenway* will describe his apparatus in such a way that a plate would be unnecessary, we shall be happy to insert his communication.

A Licentiate of the College of Physicians will do wrong if he act as he proposes. We would remind him of the very proper reply given by the President of his College to a Homœopathic Practitioner, who wished to become a candidate for the licence. It runs thus:—"Sir,—The foundation of the Royal College of Physicians was for the purpose of guaranteeing to the public skilful and safe Practitioners. The College of Physicians regard the so-called Homœopathists as neither skilful nor safe Practitioners. Therefore the College cannot, without betraying a sacred trust, give its licence to persons whom they regard as wholly unworthy their confidence, and with whom it is not possible they can hold any communion.—I remain, &c., JOHN AYRTON PARIS."

Mr. Gramshaw's case of Delirium Tremens shall be inserted as soon our space will permit.

John Hodgson, Esq., Northallerton.—We do not know where to find the report of the opinion denied by our Correspondent.

We will endeavour to insert *Mr. Henry Smith's* interesting case of Tracheotomy next week.

Dr. Hofmann's Lecture is postponed until next week, owing to an accidental detention of his proofs.

Erratum.—In our last Number, in a paper by Mr. W. H. Flower, on "A Case of Perforating Ulcer of the Œsophagus," the ulcer is described as being three "*inches*" and a half in diameter instead of "*lines*."

COMMUNICATIONS have been received from—
THOMAS E. AMYOT, Esq., Diss, Norfolk; MEDICUS; A FOREIGN SURGEON; Dr. W. G. MAXWELL; Mr. RICKETT; Mr. GREENWAY; A LICENTIATE OF THE COLLEGE OF PHYSICIANS; Mr. GRAMSHAW; JOHN HODGSON, Esq., Northallerton; Mr. HENRY SMITH; Dr. HOFMANN, etc.

ORIGINAL LECTURES.

LECTURES
ON THE
ORGANIC DISEASES AND FUNCTIONAL DISORDERS OF THE STOMACH.

By GEORGE BUDD, M.D., F.R.S.
Professor of Medicine in King's College, London.

Lecture IV.—Continued.

Ulceration of the Stomach.—1. The Simple or Perforating Ulcer—2. Minute Superficial Ulcers.

We have considered the symptoms and effects of a simple ulcer of the stomach, and the circumstances by which, after it has existed some time, it may generally be distinguished from other diseases.

Supposing the existence of the ulcer to be thus made out, the question arises,—How can we best alleviate the sufferings to which it gives rise, and obviate its dangers, and promote its healing?

We have seen that there are several circumstances which impede the healing of the ulcer, and which cause the repair of the lost substance, when healing does take place, to be less perfect there than in lower portions of the alimentary canal. These circumstances are,—the great and frequent changes of volume to which the stomach is subject; the writhing movements that are constantly going on in its coats while digestion continues; the mass of crude substances that are put into it, which, being constantly driven round and round, must continually irritate and fret the ulcer; and, as regards the ulcer, and the secretion from its surface, the irritating and solvent action of the gastric juice. It is by lessening as much as possible the unfavourable influence of these circumstances, that we best promote the recovery of the patient. Our chief means of effecting this is by proper regulation of the diet. The patient should prevent the ill effects of distension of the stomach, and, as much as possible, of change of volume of the stomach, by eating little at a time; and the food taken should be of the least irritating kind. Whatever would irritate an ulcer on the skin will irritate an ulcer in the stomach.

Milk, and compounds of milk with farinaceous substances, which would make a soothing poultice for an ulcer of the skin, are the articles of food which are most soothing, or, rather, which cause the least pain, in ulcer of the stomach, and are, therefore, those on which the patient should mainly subsist. As a diet of this simple kind requires to be persevered in for a considerable time, especially when the ulcer is of long standing, care should be taken, that the milk is of good quality; and the farinaceous substances given with it should be of the most nutritious kind. Bread, maccaroni, semolina, biscuit-powder, and other substances made of flour; Indian-meal, where there is no repugnance to it; and oatmeal,—are preferable to arrowroot, and those other farinaceous substances which mainly consist of starch. If the milk be good, and the farinaceous substances be properly selected, a person may be kept for a long time on such a diet, in conjunction with sugar and tea, without any impairment of strength.

When the irritability of the stomach is not great, finely-mashed potatoes, mashed turnips or carrots, and other soft and well-cooked vegetables, in small quantity, may likewise be given; and there will then be little danger that the general health of the patient will suffer from the restriction of the diet, unless he has previously been of intemperate habits, and his nervous system requires the stimulus of alcoholic drinks.

Many persons find that they cannot readily digest milk; that, if they take much of it with their ordinary diet, it lies heavy on the stomach, and causes biliousness and headache.

It very seldom happens, however, that milk produces this effect when the diet is sufficiently restricted, and when the animal food and fermented drinks which are commonly taken by persons in health, are excluded from it, and when the milk, instead of being taken alone, is intimately mixed with farinaceous substances. When milk, by itself, is rapidly swallowed in considerable quantity, it is apt to coagulate in the stomach in solid masses, through which the gastric juice does not readily filter, and which are, consequently, hard of digestion; whereas, if it be sipped slowly, or be intimately mixed with farinaceous substances before it is eaten, the casein it contains coagulates in small flakes, which are exposed on every side to the action of the gastric juice, and which are, consequently, soon dissolved.

As the condition of the stomach improves, a little jelly or beef-tea, or the yolk of a soft-boiled egg, may be allowed; and, at length, a small quantity of fish, or of tender and easily-digested flesh, when this can be taken without inducing pain.

Medicines are of secondary importance to a properly regulated diet.

Where there are sour eructations, or where, in case of vomiting, the matters vomited are very sour,—that is, where the stomach does not completely empty itself, or where the irritation of the ulcer causes an outpouring of acid in the empty stomach,—from 5 to 10 grains of trisnitrate of bismuth, suspended in water by means of compound tragacanth powder and syrup, may be given with advantage, two or three times a day, a quarter of an hour before meals, and a dose of magnesia at night. These medicines will tend to prevent undue acidity of the stomach,—the bismuth by lessening the secretion of the mucous membrane; the magnesia by neutralizing any excess of acid when digestion is over—and they do not, of themselves, irritate the surface of an ulcer. For correcting undue acidity, magnesia is, perhaps, better than potash or soda, as the latter medicines, if given in quantity more than enough to neutralize the acid, irritate the ulcer, and have a tendency to occasion hæmorrhage from it.

If the stomach be very irritable, the patient may often derive benefit from swallowing now and then a small lump of ice, which will allay the sense of heat in the stomach, and render the vomiting less frequent.

When the pain at the stomach is harassing, and the nights are restless, much relief may be afforded by opium, which is best given in its crude form and in pills.

When the bowels are much confined, an aloetic, or a compound colocynth pill, should be given. These medicines irritate the stomach less than castor-oil, rhubarb, or the saline purgatives. They exert their chief action on the large intestine, and may generally be given in cases of ulcer of the stomach, without bringing on or increasing the pain. When ulcers exist in the intestines, on the contrary, and a purgative is necessary—as sometimes happens during convalescence from typhoid fever and in dysentery—the purgative that is safest and best is castor-oil, and of this small doses are then always sufficient. A drachm, or two drachms, will act as surely as two or three times the quantity, and with much less offence to the stomach and much less irritation to the bowels.

In these diseases, as in ulcer of the stomach, great care should be taken in diet until there is reason to believe that the ulcers have healed. Many a case of typhoid has terminated fatally from perforation of the bowel during seeming convalescence, and many a case of dysentery has become chronic, from want of attention to this point. The appetite has been indulged without stint, and the raw surface of the ulcers continually fretted.

If vomiting of blood should occur, the means most likely to restrain the hæmorrhage are, ice swallowed in small quantity, or applied to the epigastrium, rest in the horizontal posture, *prolonged fasting*, and medicines which have an astringent or styptic action,—such as oil of turpentine, acetate of lead in conjunction with opium, alum, and tannin.

The oil of turpentine, the most efficient, perhaps, of these medicines, was, I believe, first employed, as a remedy for hæmorrhage in the stomach, by John Hunter, in a case, of which he has left the following account:—

"A young man applied a strong solution of corrosive sublimate for the cure of an itching of the pubes; by this application a violent inflammation was produced. I ordered a wash of lime-water to decompose any part of the sublimate still adhering, and a poultice of oatmeal and lime-water to cover the parts, with tinctura thebaica sprinkled over it, which gave him much relief. This was continued

two days, when I ordered him the bark, to diminish irritability; but the apothecary chose to give him an emetic first, which brought up a great deal of blood from the stomach, for which Dr. Heberden, who was called in, ordered tincture of roses; but this proved ineffectual. Seeing the patient dying, and well knowing the good effects of turpentine in stopping bleeding externally, I gave him two spoonsful every two hours of an emulsion made with chio turpentine; cold water clysters being also used. He continued for some time very low, and had scarcely any pulse, having lost so much blood; but he recovered, and grew strong and fat."

Of late years, the oil of turpentine has been highly spoken of, as a remedy for hæmorrhage from the stomach, by Dr. Graves, Dr. Seymour, and other physicians. The turpentine is best given, as recommended by Dr. Graves, in *cold* water, in doses varying from ten to twenty minims, repeated, more or less frequently, according to the urgency of the symptoms.

It is, I believe, more effectual where the blood escapes by exhalation from the mucous membrane, or from the minute vessels of a raw surface, than in cases like those we are considering, where it issues from a vessel of considerable size, laid open by the spreading of the ulcer, and where the patient usually gets rapidly faint, and brings up *at once* an enormous quantity of black, clotted blood.

After the occurrence of profuse hæmorrhage, (and often without this in young unmarried women, who seem to be especially liable to ulcer of the stomach,) a state of great anæmia exists, and, from the irritability of the stomach and the disordered digestion, the reparation of the blood is more than commonly difficult. In such cases, two or three grains of citrate of iron may be given three times a-day, immediately after meals, as soon as food fit for persons in this condition has ceased to cause pain. The citrate of iron does not then irritate the ulcer; and it not only tends to invigorate the body, and to remedy the nervous and other disorders which a state of anæmia causes, but most probably, by rendering the nutritive processes more active and healthy, also promotes the healing of the ulcer.

When, in the course of the malady, feverish symptoms arise, with much tenderness at the epigastrium, indicating a spreading of the ulcer or the occurrence of inflammation in the portion of peritoneum above it, the most efficient remedies are, abstinence from food as long as it can be well borne, opium, and rest. We have seen that perforation and hæmorrhage are often preceded for a day or two by increased pain and soreness of the stomach. Aggravation of the pain betokens a spreading of the ulcer, and should always be promptly opposed by restricted diet. Prolonged fasting is, doubtless, the most efficient remedy for any aggravation of the symptoms, and the surest means of obviating the danger which such aggravation threatens.

The plan of treatment I have described naturally suggests itself, when it is clearly seen that an ulcer of the stomach exists; and, in most of the cases in which it is tried, its good effects are soon apparent. After the patient has been kept for a few days on a diet consisting exclusively of farinaceous substances and milk, the pain has generally much abated, and the vomiting, if any existed, has ceased. Sometimes the amendment is progressive; and, if the plan be persevered in for a few weeks, the ulcer heals, and the patient recovers. In other cases, on the contrary, the pain and soreness, though much lessened, continue to be felt; and, if the ulcer heal at all, it is only after the lapse of many months. As a general rule, the ulcer is slower to heal, the longer it has lasted. Old ulcers are generally larger and deeper than recent ones; and they often have a raised and hard margin, which prevents, or very much retards, the process of healing.

At the hospital, I have had positive proof, in several instances, that an ulcer of the stomach has healed under treatment such as I have described. The first instance of the kind I met with occurred six or seven years ago. The patient, who was a labouring man, was long in the hospital with symptoms of ulcer of the stomach, and was an object of much attention. He left the hospital apparently well, and afterwards went to live in the country, where, sometime subsequently, he died under the observation of Mr. Tudor, who was a student at the hospital while he was an inmate of it. Mr. Tudor, recollecting the man's former history, had the curiosity to open the body, and found, in the stomach, the cicatrice of a former ulcer.

Another case occurred in a man named Joseph Marshall, who came to the hospital, five or six years ago, on account of vomiting of blood, and other symptoms of ulcer of the stomach. He was kept on a milk and farinaceous diet for many weeks, and the gastric disorder ceased. In the beginning of March, 1851, he became an out-patient of the hospital, on account of erysipelas of the head, of which he died. His wife, knowing the interest I had previously taken in the condition of his stomach, informed me of his death. I obtained permission for an examination of the body, which was made by Dr. Beale. The stomach, which is now in the Museum of the College, presented, in its big end, about two inches from the cardiac orifice, a scar, or rather seam, of an ulcer, which, by its contraction, had very much puckered the adjacent portion of the mucous membrane.

Another case occurred in the hospital in the winter of 1850. Benjamin Brown, a man 64 years of age, who had led a very intemperate life, and drunk great quantities of gin, was admitted into the hospital on the 28th of October, 1850, with jaundice and ascites, and complaining much of pain in the stomach and vomiting.

He stated, that his health was good until six weeks before his admission to the hospital, when he was taken with vomiting, purging, and severe pain in the epigastric region. The pain continued, the stomach rejected almost everything he ate, and, a fortnight after the commencement of his illness, he vomited more than a pint of dark-coloured, clotted blood. A week after the vomiting of blood, jaundice came on, and he subsequently noticed that his belly was swelled. After his admission to the hospital, the irritability of the stomach abated; but the jaundice persisted, the dropsy increased, and he died from the effects of Cirrhosis on the 3rd of January, between nine and ten weeks after his admission to the hospital, and nearly four months from the commencement of the gastric symptoms. When the body was opened, two ulcers, freshly skinned over, were found in the stomach. The liver was in a high degree of cirrhosis, and the pylorus was slightly strictured by a narrow ring of white fibrous tissue, under the mucous coat. The healing of the ulcers, which must have been impeded by these conditions, was probably due to the strict diet enforced soon after their formation, before their edges had become thick and hard.

In most cases, perhaps, the chief impediment to the cure of these ulcers, when they are not of long standing, arises from the difficulty of making the patient submit long enough at a time to the restricted diet that is necessary for it. The pain may not be sufficiently severe, or the general symptoms sufficiently alarming, to furnish an adequate motive for so much self-denial. The ulcers consequently persist until they cause perforation, or until, from their edges having become thick and hard, they are very difficult to heal.

SMALL SCATTERED ULCERS.

Another kind of ulceration of the stomach which is not unfrequent, and is of great practical importance, is that which has been described by Cruveilhier and Rokitansky as "hæmorrhagic erosions" of the mucous membrane. When the stomach is opened, a number of roundish, dirty brown, or soot-black spots are seen, from the breadth of a pin's-head to that of a small pea, which owe their colour to blood blackened by the acid secretions of the stomach. Sometimes, instead of roundish spots there are narrow streaks of the same colour. When the minute blood-clot is washed away, there is a slight depression, the result of a superficial ulceration, or "erosion," of the mucous membrane, and the adjacent portion of the mucous membrane is often swollen and soft.

These superficial erosions of the mucous membrane are found in all parts of the stomach, but are most common in the pyloric end; and now and then, with them, erosions of the same character, and having, doubtless, a similar origin, are found in the upper part of the duodenum.

The erosions are attended by a catarrhal state of the membrane, and the stomach usually contains a considerable quantity of mucus, often mixed with brownish flakes, like coffee grounds, the result of effused blood.

They form at all ages, and in the course of various diseases, but occur especially in active inflammatory diseases, in continued fevers, in persons in whom an impediment exists to the passage of the blood through the liver or the chest, and at the close of lingering diseases, when the power of digestion fails,—in diseases, that is, in which, from a state of fever, or from an impediment to the passage of the blood

through the liver or the chest, or from nervous exhaustion, there is a scanty secretion of gastric juice. The "erosions," as I have before observed, are attended by a catarrhal state of the mucous membrane, and seem to arise from superficial irritation of the membrane by food, when that protection is wanting which the stomach naturally derives from an active nutrition and a plentiful secretion of gastric juice. They occur not unfrequently in drunkards, and in persons in whom, from any of the conditions I have just mentioned, the natural secretions of the stomach are scanty, and are occasionally brought on in the course of other diseases by the untimely or excessive use of ardent spirits, of ether, of calomel, corrosive sublimate, or other medicines which have a corrosive action on the mucous membrane.

I have several times had reason to ascribe it to an excessive use of stimulants, given in the hope of remedying the sense of sinking in the last days of life, especially when this has been cut short by cirrhosis, or by organic disease of the heart.

Some years ago, I met with a rude plate, giving a good general idea of this form of ulceration of the stomach, in a book called the "Teetotaller's Companion." The plate professed to be a representation of the "ulcerated stomach of a drunkard."

A clue to the explanation of these minute superficial bleeding ulcers, is given by the observations of Dr. Beaumont, on the effects which excess in eating or drinking had on the stomach of St. Martin.

On the 30th of December, 1832, the stomach of St. Martin was found to be clean and healthy; the gastric juice was pure, and distilled more freely than common. At 1½ p.m. it was examined again, and found to be empty and clean.

In the afternoon St. Martin became intoxicated, and the condition of the stomach on the following morning is thus described:—

"Dec. 31.—At seven o'clock, a.m., weather cloudy; atmosphere damp and chilly; wind S.; thermometer 30°; temperature of the stomach 100½°; colour darker red than natural, and arid. Mucous coat abraded in spots, and rolled in small shreds; more irritable than usual."

Dr. Beaumont adds:—"The diseased appearance of the stomach at this examination was probably the effect of intoxication the day before."

Dr. Beaumont states, as the result of his observations on St. Martin, that, whenever a feverish state existed, or St. Martin had eaten more than the stomach could digest, or had drunk ardent spirits or other intoxicating liquors to excess, for some days in succession, the mucous membrane of the stomach lost its smooth and healthy appearance, and its secretions became vitiated and greatly diminished, or entirely suppressed.

And he further observes, that, under such circumstances, "there are sometimes found, on the internal coat of the stomach, eruptions, or deep red pimples, not numerous, but distributed here and there upon the villous membrane, rising above the surface of the mucous coat. These are, at first, sharp-pointed and red, but frequently become filled with white purulent matter. At other times, irregular, circumscribed, red patches, varying in size or extent from half an inch to an inch and a-half in circumference, are found on the internal coat . . . There are also seen, at times, small aphthous crusts in connexion with these red patches. Abrasion of the lining membrane, like the rolling up of the mucous coat into small shreds or strings, leaving the papillæ bare for an indefinite space, is not an uncommon appearance."

We almost seem here to be witnesses of the formation of the minute superficial ulcers, or erosions, in question.

There are, probably, other conditions, unfavourable to healthy nutrition, which may lead to the formation of these minute ulcers. The singular fact, discovered by Mr. Curling, that burns often cause sloughing ulcers of the duodenum, shows that this portion of the intestinal canal has, with the skin, a physiological relation, of the nature of which we are yet ignorant.

From the cases yet recorded, it would seem, that these ulcers result from burns, more frequently in children than in grown-up persons,—a circumstance which affords a presumption, that the nervous system furnishes the connecting links.

Some years ago, Mr. Simon discovered that bleeding ulcers of the stomach may be caused, in cats, irrespective, seemingly, of the nature of their diet, by keeping them for some weeks in close confinement in a dark place. In the spring of 1846, through the kindness of Mr. Simon, I had an opportunity of examining the stomach and duodenum of a cat which had been kept for three weeks in a rabbit-hutch in a dark cellar, and during this time, had been fed entirely on cat's-meat and water. The creature was much emaciated, and the stomach and upper part of the duodenum presented several irregular linear abrasions of the mucous membrane, which were of a dark-brown colour, from the presence of altered blood, and resembled the linear hæmorrhagic erosions of the human stomach. It is possible, therefore, that confinement, with other conditions unfavourable to nutrition, may occasionally have the same result in man.

These minute superficial ulcers usually cause pain in the stomach after solid food; frequent vomiting, excited by the presence of food; and hæmorrhage. The effects are so far like those of common simple ulcer; but there are several circumstances which may serve to distinguish the two forms of disease.

1. The hæmorrhage which results from the minute scattered ulcers consists of an oozing of blood from the capillary vessels of the abraded surface. It occurs as soon as the ulceration takes place, and continues, day after day, while the ulcers exist, but is usually small in amount at any one time. The hæmorrhage in simple ulcer arises from the ulcer eating into one of the vessels of considerable size which run in the cellular tissue under the mucous coat. It usually occurs suddenly after the other symptoms of simple ulcer have existed for some time, and is profuse; and, where it does not prove fatal, seldom continues more than two or three days.

2. When these superficial ulcers exist there is usually a catarrhal or inflammatory condition of the mucous membrane in great extent, and, as a consequence, probably, of this, there is often a thin white coat on the tongue, and there is much greater irritability of the stomach, and the appetite and power of digestion are very much more impaired than in cases of simple ulcer, in which the stomach is usually healthy, except at the ulcerated spot. For the same reason, the matter vomited in cases of hæmorrhagic erosion often contains much mucus tinged with blood, which seldom happens in cases of simple ulcer.

3. The two forms of diseases may be further distinguished by the different circumstances in which they respectively occur. The minute superficial ulcers, like the deep ulcer, may continue long, if the stomach be constantly irritated by food which it cannot digest, or by alcoholic drinks, or irritating medicines: they may, perhaps, by such means, be fretted into deep ulcers; but, as long as they remain superficial, they may, in most cases, be readily healed, and the stomach be restored to its healthy condition. A few leeches, or a blister, or the daily application of a large mustard poultice to the epigastrium; the frequent sipping of iced water, which tends greatly to allay the vomiting; and a diet restricted to the lighter farinaceous substances and milk, to be taken cold, and in small quantities at a time,—are all the means that are generally necessary. As the stomach becomes less irritable, the diet may be improved; but, as long as food has a tendency to cause pain or vomiting, it should be given in the form of pulp, so as not to irritate the stomach mechanically, or needlessly tax the power of digestion. Alcoholic stimulants, and aromatics of all kinds, greatly irritate the stomach, and should be strictly forbidden. If, in spite of these means, there be much pain in the stomach, or frequent vomiting excited by food, powdered opium, with small doses of nitrate of silver, in pills, may be given with advantage. Powdered opium is less irritating to a raw surface, and agrees better than tincture of opium, or the salts of morphia, especially when these salts are given in solution.

If constipation exist in such a degree as to increase the disposition to vomiting, or cause unpleasant distension of the belly, it may be remedied by enemas, or, as in cases of perforating ulcer, by an aloetic, or the compound colocynth pill.

When the disorder is thus treated at its first occurrence, the irritability of the stomach, in most cases, as I have already stated, soon subsides; but, when the disorder has been neglected, or the ulcers have been fretted by improper physic or food, persistence, for a considerable time, in the means I have mentioned, may be necessary to effect their healing.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture X.

SACCHARINE SUBSTANCES.

The substances which I brought under your notice in the preceding Lectures are all capable of being produced by the ordinary processes of the laboratory. To-day I have to call your attention to a series of compounds, the formation of which is still a secret which, at this moment, the living organism possesses alone. These compounds, equally interesting for their remarkable diffusion both in the vegetable and animal kingdoms, for their extensive application, and for the variety of products which are derived from them by chemical changes, are known under the collective terms of saccharine substances, or sugars. The saccharine substances are very distinctly characterised by their properties, by their composition, and by the changes which they undergo under certain conditions. They are all extremely soluble in water, to which they impart a taste more or less sweet; they consist of carbon, hydrogen, and oxygen, and contain the two latter elements in the proportion in which they form water. Lastly, under the influence of certain substances which are themselves very prone to decomposition, and which are generally termed ferments, they undergo a remarkable alteration, the products of which are carbonic acid and alcohol. We shall presently return to this peculiar decomposition.

There are generally distinguished four different varieties of sugar, which may be readily recognised by their physical properties. They are—cane-sugar, uncrystallizable sugar, (fruit-sugar,) grape-sugar, and milk-sugar.

The progress of science has lately led to some farther subdivisions, especially since the deportment of sugar-solutions, under the influence of polarised light, has been made the subject of a more minute investigation.

The most definite of all the sugars is the ordinary sugar —the sugar *par excellence*—chiefly derived from the cane, —hence called cane-sugar,—but also from beet-root and from the maple-tree, and existing in a great variety of plants. Cane-sugar is remarkable for the facility with which it crystallizes. The cane-sugar of commerce is called sugar-candy, or loaf-sugar, according as it has been allowed to assume the shape of well-defined crystals, or to crystallize in a confused mass. A third variety of cane-sugar is what is used by confectioners under the name of barley-sugar. It is obtained by heating sugar to about 160° C. (320° Fahr.), and pouring the fused mass on a marble slab, when it solidifies into a transparent, glass-like substance, which is amorphous sugar. When kept for some time, it gradually loses its transparency, and becomes crystalline again. The crystalline and the amorphous sugar have exactly the same composition; it is represented by the formula—

$$C_{12}\ H_{11}\ O_{11}$$

If a solution of cane-sugar be boiled for some time, it undergoes a perfect change. On evaporating the solution, it no longer crystallizes, but dries up to a syrupy mass which, when dried in the water-bath, differs from cane-sugar, by containing one equivalent of water more; its composition being

$$C_{12}\ H_{12}\ O_{12}$$

It is the formation of this uncrystallizable sugar which is particularly dreaded by the sugar-manufacturer. On this account, the juice expressed from the cane, after having been boiled for a very short time in order to coagulate the albuminous substances, is concentrated at the lowest temperature; and most expensive and complicated machinery, such as air-pumps, etc., have been constructed, in order to diminish the loss arising from this source; for it is impossible to avoid it altogether. The uncrystallizable sugar thus produced is known by the technical term "molasses."

The same change which a solution of cane-sugar undergoes when boiled for some time is produced even more readily by the action of dilute acids upon it. Sulphuric acid and hydrochloric acid produce this effect very readily. The organic acids act more slowly, but ultimately give likewise rise to the formation of uncrystallizable sugar. It is necessary that the acids employed should be very dilute, for concentrated acids produce another series of changes. By concentrated sulphuric acid, as is well known, sugar is carbonised.

A variety of sugar, perfectly similar to that produced by boiling, or by the action of acids upon cane-sugar, if not the same, is found in the juice of many fruits, which, like grapes, cherries, currants, etc., are remarkable for the quantity of free acid which they contain. The juice of these fruits, separated by ebullition from the albuminous constituents, and freed by convenient processes from the organic acids present, yields on evaporation a gum-like residue, which has the same composition as the sugar derived from cane-sugar by the action of acids. The two substances are probably identical; for they not only agree in their chemical composition, but also in their physical characters, especially in their deportment with polarised light, on which they act in an absolutely different manner from cane-sugar, uncrystallizable sugar reflecting the plane of polarisation towards the left, while cane-sugar exerts a deflecting action towards the right.

The uncrystallizable sugar, whether produced by boiling or treating with dilute acids a solution of cane-sugar, or whether obtained directly from the juice of fruits, undergoes a farther change. A concentrated solution becomes gradually crystalline; but the form of the small granules which are formed essentially differs from that of cane-sugar crystals, from which the new sugar differs, moreover, by its composition which is represented by the formula

$$C_{12}\ H_{14}\ O_{14}.$$

This new sugar is generally called grape-sugar, probably because it was first obtained from the grape; but, since it is not the direct product of the grape, since it may be obtained from a variety of other fruits equally well; moreover, since, as we have seen, it may be likewise produced from cane-sugar, I follow the proposal of M. Dumas, who first adopted the term *glucose* for this substance. Besides, this sugar has been met under several other very remarkable substances, to which I have to direct your attention bye and bye. On comparing the composition of glucose with that of cane-sugar, it is evident that the former contains three equivalents of water more; and the change which the cane-sugar undergoes consists simply in a gradual assimilation of water. I say gradual, because it is first converted into uncrystallisable sugar; and it is by no means improbable that a farther modification exists between the latter and glucose, as indicated in the following diagram—

Cane-sugar	$C_{12}\ H_{11}\ O_{11}$
Uncrystallisable sugar. .	$C_{12}\ H_{12}\ O_{12}$
(?)	$C_{12}\ H_{13}\ O_{13}$
Glucose	$C_{12}\ H_{14}\ O_{14}$

The formula

$$C_{12}\ H_{14}\ O_{14}$$

represents the composition of glucose when dried at the common temperature. At a higher temperature it loses water; when dried at the temperature of boiling water, it loses two equivalents of water, and becomes

$$C_{12}\ H_{12}\ O_{12}.$$

It has then the composition of uncrystallisable sugar; but it has undergone no change, as is proved by its optical deportment, (glucose, like cane-sugar, reflecting the plane of polarisation towards the right,) and the readiness with which it crystallizes again when re-dissolved in water.

In its chemical properties, glucose differs in great many points from cane-sugar. I have already alluded to the difficulty with which this substance crystallises. It is far less soluble in water than cane-sugar, 100 parts requiring at least 150 parts of cold water, while 100 parts of cane-sugar dissolve in less than forty parts of water; hence, its sweetening power is far inferior. In the dry state, these two sugars are readily distinguished by their aspects; but even their solutions may be readily recognised by chemical means. Solutions of these two sugars have the power of preventing the precipitation of certain metallic oxides. Thus, a solution of sesquioxide of iron, and of protoxide of copper, are no longer affected by potassa, when previously mixed with a solution of sugar. In the case of copper,

deep azure blue transparent liquids are obtained in this manner. If the copper be kept in solution by glucose, the blue liquid, after standing a few minutes, more readily on gently warming it, assumes a deep orange colour which gradually turns brick red. The protoxide of copper is reduced by this process to the suboxide, the sugar combining with half its oxygen, whereby its elements are more or less burnt. The cane-sugar solution, when treated in the same manner, undergoes no change; only, when heated to ebullition, a deposit of suboxide of copper gradually takes place. Ebullition with potassa likewise enables us to distinguish the two varieties of sugar. Cane-sugar is not affected by the caustic alkalies; while glucose, under the same circumstances, undergoes a series of changes, in consequence of which it assumes a deep brown colour.

In other respects the two varieties greatly resemble each other. When treated, both lose the elements of water, and furnish a substance known by the term of caramel, which contains two of water less than cane-sugar, and five less than glucose, its composition being

$$C_{12}\ H_9\ O_9$$

This substance, which has a deep brown colour, and a peculiar flavour, is still soluble in water; it is used to a considerable extent for colouring and flavouring liquors. The action of nitric acid upon both sugars is also perfectly alike, the product being in the first place a peculiar acid, saccharic acid, then oxalic acid, and, lastly, carbonic acid. All the oxalic acid now consumed in the arts is manufactured by the action of nitric acid upon the inferior varieties of sugar. Lastly, as has been already mentioned, both cane-sugar and glucose exhibit the same optical deportment, although in different intensities.

I have alluded to the extensive occurrence of glucose, both in the vegetable and animal kingdoms. It is, as I have stated, furnished by a great many plants, especially by those whose juice is of an acid character. The whitish deposit upon dried raisins, figs, or French plums, consists of glucose, which has been gradually formed by the action of the acids present in these fruits upon the uncrystallizable sugar which they originally contained. If fruits which contain a great deal of free acid, are preserved by cane-sugar, it is frequently found that nearly the whole of the latter is converted into glucose. In all the cases which I have pointed out, glucose exists in the free state in some plants; however, it is found in a peculiar state of combination, from which it is released only by the action of chemical agents. Thus, the bark of the willow contains a crystalline substance, called salicin, which is remarkable for its composition and properties. Under the influence of acids, this body splits into salicylous acid and glucose. A similar substance, populin, is present in the leaves of the poplar, which has even a more complicated composition, consisting, as it does, of benzoic acid and salicin.

In the animal kingdom, likewise, glucose is frequently met with. The white granules which are deposited from bees' honey consist of pure glucose; and the same substance constitutes the sugar which is found as a morbid constituent of urine in diabetes mellitus.

I have still to mention a production of glucose which presents particular interest, and to which I must devote a few moments before leaving this subject. Among the prominent constituents which may be separated from plants, there occur two bodies, which, by their composition, are closely related to the sugars. These substances are cellulose and starch: the former constituting the greater part of the cellular tissue of the plant; the latter forming the substance with which the cells of a great many plants are filled. It is not my object to give here a full description of these remarkable substances, which, at present, interest us only in their relation to sugar. The composition of cellulose and starch is represented by the formula

$$C_{12}\ H_{10}\ O_{10};$$

i. e., they have the composition of glucose, less three equivalents of water. Now, experiment has proved, that these two compounds may be converted into glucose with the greatest facility. It suffices to boil them for a sufficient length of time with dilute acids, in order to produce this metamorphosis. This transition, however, is not immediate. Starch, when converted into glucose, passes, like cane-sugar, through a series of stages. If the action of acids be interrupted as soon as the starch or cellulose is completely dissolved, the liquid furnishes, on evaporation, a gum-like residue, which re-dissolves in water, but is insoluble in alcohol,—a property which enables us to precipitate the same body by the addition of alcohol. This substance is called dextrin, from its more powerful action on polarised light, which, like cane-sugar and glucose, it deflects towards the right. It may be obtained from starch by other processes; for instance, by the action of heat; and is now manufactured, on a large scale, as a substitute for ordinary gum, which it is capable of replacing in many applications. It is better known by the commercial term, "British gum."

Dextrin has exactly the same composition as starch and cellulose, from which substance it differs, however, essentially, by its properties. Dextrin readily undergoes a farther change by the influence of acids. If the acidulated liquid be boiled for a short time, the dextrin entirely disappears, for the solution no longer yields a precipitate by alcohol. It now is found to contain sugar, and on standing crystals of glucose are actually deposited. If we compare the formulæ of starch and glucose, and if we bear in mind the gradual assimilation of water which is observed in the transformation of cane-sugar into glucose, we feel inclined to think, that the formation of the latter body from starch may be preceded by that of cane-sugar and uncrystallizable sugar. However probable this conjecture may appear, it is not fully corroborated by experiment; for, although the solution seems to contain uncrystallizable sugar at a certain period, all attempts to arrest the action at the stage at which the starch has assimilated only one equivalent of water, in other words, to produce cane-sugar from starch, have hitherto entirely failed. Here, then, a chemical problem of intense interest presents itself, the successful solution of which could not fail to reward the happy experimentalist by a fortune of colossal magnitude.

In the several transformations effected by means of sulphuric acid, which I have had to bring under your notice in this lecture, this acid plays a most extraordinary part. Its action obviously differs from that observed in ordinary chemical processes. If you precipitate a barium-salt by means of sulphuric acid, the amount of baryta capable of being thrown down stands to the acid employed in an unchangeable relation, which is expressed by the comparatively simple ratio of the equivalents of the two substances. After the reaction has taken place, the acid is in a state of combination; that is, it is no longer capable of producing the same effect. In the action of sulphuric acid upon starch and upon cane-sugar, a very different deportment is observed. An extremely small quantity of sulphuric acid is able to convert 50, nay, 100 times, its own weight of starch, and, after having performed this task, we find it uncombined in the liquid, ready to do the same work over and over again. Chemists have as yet vainly endeavoured to explain these changes in a satisfactory manner. The sulphuric acid, in this case, appears to act by its presence only, by its contact with the substances under decomposition, and hence the terms, "*contact-actions, contact-effects, catalytic processes,*" which you frequently meet with in chemical writings; words, of course, which are intended only to convey the meaning, that, in the present state of our knowledge, these actions cannot be explained. The progress of science has, however, thrown much light even on these recondite processes; and I may have to return to this subject in one of the following lectures, in order to show you that several successful attempts have been made.

The action of acid is not the only mode in which starch may be converted into sugar. There is another process, which appears even more enigmatical. The germination of seeds gives rise to the formation of a peculiar substance, which is capable of changing starch in exactly the same manner as dilute acids do; producing, in the first place, dextrin, and ultimately glucose. The chemical composition of this substance, which is generally called "diastase," is unknown, because all attempts to prepare it in a state of purity have hitherto failed. If germinated barley be rubbed to a powder, and exhausted with water of about 30° C., (86° F.,) and the filtered liquid be mixed with absolute alcohol, a yellowish-brown flaky precipitate takes place which contains the active principle; but the analysis of which has not led to concordant results; in fact, all that is known about it at present is, that it is very rich in nitrogen. You are all aware that the germination of barley is carried out on a large scale, for the purposes of the brewer. He thus obtains what is generally called "malt." For this purpose,

the barley is left for some time in contact with water, whereby the grains swell up considerably. In this state it is left exposed to the atmosphere, in localities the temperature of which should be under the command of the operator, much heat being evolved during germination. An air-temperature of 7° C. (45° F.) is found most convenient, but the temperature of the germinating mass is scarcely less than 15·5° C. (60° F.) The air is frequently renewed, and the thickness of the layers in which the barley is heaped up diminished in the same measure as the germination advances. As soon as the length of the germ nearly equals the size of the grain itself, it is known from experience that the largest amount of diastase has been produced. The farther progress of the germination is then interrupted by drying the seeds at a high temperature in a kiln, whereby the vitality of the grain becomes destroyed. The malt produced in this manner contains now, in addition to the diastase, a certain quantity of dextrin and sugar, produced by the action of the newly-formed diastase upon the starchy matter of the seed. The remainder of the starch is readily converted into glucose by digesting the malt with water, at a temperature of 71° to 76° C. (160° to 170° F.), an operation which is called *mashing* by the brewer, and which furnishes a clear solution of dextrin and glucose, called *sweet wort*, and ready to be submitted to a farther transformation, which I shall mention bye and bye.

The mode in which diastase exerts its action upon the starch is not better understood than that of the acids. We are at present only in possession of the fact; but this fact is of so much importance, both in a practical and theoretical point of view, that I must not omit to exhibit it to you experimentally as far as possible. The conversion of starch into glucose is too slow to admit of its performance in a lecture-experiment; but its transformation into dextrin takes place with great rapidity, and becomes at once perceptible. For this purpose, I will introduce an infusion of malt (*i.e.*, diastase) in lukewarm water into a vessel filled with starch-paste, the temperature of which is kept as near as possible at 71° C. (160° F.) After the lapse of a few minutes, the change becomes manifest by the liquefaction of the mass. Now, if you have time and leisure to follow the re-action by testing from time to time portions of the solution with iodine-solution which, as you know, produces a blue coloration, as long as any starch is present, you will find that the intensity of the colour is rapidly diminished, and that soon a point is reached when the perfect cessation of coloration indicates the total transformation of the starch into dextrin. The passage of the latter into glucose is not perfectly accomplished before the lapse of several hours.

In order to complete the description of the several sugars which I have enumerated, it remains to say a few words regarding the saccharine compound found in the milk of the mammalia, and which is generally called milk-sugar, lactin, or lactose. A few words, however, may suffice. Milk-sugar is always obtained from the milk after the butter and cheese has been separated. One or two re-crystallizations renders it perfectly pure. The milk-sugar which we meet in commerce is nearly all prepared in Switzerland.

Milk-sugar has the same percentage composition as uncrystallizable sugar. Chemists are, however, in the habit of representing it by the formula

$$C_{24}\ H_{24}\ O_{24}$$

because it is capable of exchanging 5 equivalents of hydrogen for an equivalent amount of lead,—a quantity which would lead to fractions if the simpler formula

$$C_{12}\ H_{12}\ O_{12}$$

were assumed.

Milk-sugar is readily distinguished from cane-sugar and glucose by its being far less soluble in water, 1 part of milk-sugar requiring as much as 5 or 6 parts of cold water. In alcohol, it is perfectly insoluble, and the aqueous solution is slowly precipitated by alcohol. The most characteristic difference, however, is observed if milk-sugar be treated with concentrated nitric acid. In this re-action, milk-sugar is converted into a peculiar crystalline acid, (*mucic acid*,) which is difficultly soluble in water, and which, both by its composition and its properties, essentially differs from oxalic acid, which, as you know, is the product of oxidation of the other sugars.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. I.

ON AN EPIDEMIC OF VARIOLA AT CORFU, IN 1852.

EXTRACTED FROM THE OFFICIAL JOURNAL OF

T. SPENCER WELLS, F.R.C.S.,

For H.M.S. Modeste, for the year 1852.

On the 27th of February, 1852, a case of small-pox occurred in the Jews' quarter of the town of Corfu. Small-pox had been prevalent for some months on the opposite shores of Albania, which were only placed under a quarantine of observation of twenty-four hours. No communication could be traced between any infected person or object, from Albania, to account for the appearance of the disease in Corfu. There had not been a case in the island since November, 1849, when one case appeared, and the patient being sent to the lazaretto, the disease did not spread. In the same year, a regiment arrived at Corfu with cases of small-pox among the men, but these were confined in the island of Vido until all danger of infection had passed away. The last epidemic of variola in the island was from December, 1841, to January, 1842, when the cases amounted to 278, and the deaths to 76. A few scattered cases continued up to July, 1842, but none were fatal. In 1841-2, when the first cases occurred, the house was segregated, and guardians were appointed to check communication. Afterwards cases were sent to hospital under charge of guardians. Infected houses were guarded and fumigated. The effects of those who died were boiled, the houses whitewashed, and the family not admitted to free communication until fourteen days after death or cure, and then only by permission of the chief officer of health. The total expense of these arrangements to the Government was only 107*l.* 9s. 5d.

In 1852, the first case, which occurred on the 27th of February, recovered; the second case was reported on the 5th of March; the first death on the 18th of March. The first cases were sent to the Lazaretto and segregated there, but they had existed some time before they came to the knowledge of the police. The following cases could not be traced to any communication with the first; indeed, they sprang up in different and distant parts of the town, and so numerously, that, after the first few days, measures of segregation were not carried on.

The following Table shows the progress of the epidemic from its commencement until we left the island in this ship, the number of cases and deaths in each month, and the ratio of the mortality:—

Months.	Cases.	Deaths.	Percentage.
March	9	2	22·22
April	24	5	20·83
May	48	7	14·58
June	165	23	13·93
July	288	38	10·41
August	496	80	16·12
September	1048	173	16·50
October	785	170	21·63
November	814	152	18·42
Total ..	3677	650	17·67

The population of the island being 70,885, this shows a proportion of attacks to the population equal to 5·17 per cent., or about 1 in 19.

I took considerable pains to ascertain what had been the protective power of vaccination throughout this epidemic, and I procured Reports of the numbers of those who had died who had and who had not been vaccinated, as well as of those attacked. These Reports were made out by medical men, and when a case is stated to have been vaccinated, it is implied, that a medical man had satisfied himself

of the fact. How they arrived at their conclusions I am not aware. Some examined the cicatrix, some may have been satisfied by statements of relations; but, from the numerous cases recorded as doubtful, it may be inferred that considerable care was exercised, and that the numbers of those stated to have been vaccinated approximate pretty closely to the truth. I have given the cases in the following Table in successive thousands, in order that the influence of vaccination might be traced in different periods of the epidemic:—

	Cases.	Deaths.	Per centage of Deaths.
VACCINATED.			
First thousand	468	42	8·97
Second ditto	340	36	10·58
Third ditto	236	25	10·59
Total	1044	103	9·96
NOT VACCINATED.			
First thousand	357	109	30·53
Second ditto	281	81	28·82
Third ditto	331	98	29·60
Total	969	288	29·72
DOUBTFUL.			
First thousand	175	28	16.00
Second ditto	379	54	14·24
Third ditto	433	67	15·24
Total	987	149	15·09

The general result of 3000 cases was, therefore, as follows:—

	Cases.	Deaths.	Per centage of Deaths.
Vaccinated	1044	103	9·96
Not Vaccinated	969	288	29·72
Doubtful	987	149	15·09
Total	3000	540	18·00

I could not ascertain the number of the population supposed to have been vaccinated; but I found that of upwards of 4000 vaccinated since the commencement of the epidemic not one had been attacked by small-pox. I was informed by Dr. Cogevina, the proto-medico, that those who had been vaccinated when first the practice was introduced into the island had almost universally escaped; while many of those vaccinated within the last ten years had the disease, although but mildly. He believed that the virus, by passing through so long a series of individuals, had lost some of its protective power.

I therefore instituted inquiries as to the age of the persons attacked, and the following Table shows the results I obtained:—

Age.	Cases.	Deaths.	Per centage of Deaths.
Under 1 year	229	111	48·47
1 to 5 years	456	143	31·35
5 to 10 years	480	86	17·91
Under 10 years	1165	340	29·18
10 to 20 years	640	41	6·40
20 to 30 „	622	77	12·21
30 to 40 „	212	33	15·09
40 to 50 „	93	16	17·20
Upwards of 50 years ...	34	5	14·70
Age not ascertained ..	234	28	11·96
Total	3000	540	18·00

There having been no Census of the inhabitants taken, I could not ascertain the numbers alive at each year; but it will at once be seen how very large a proportion were attacked in the first ten years of life, and how great the mortality was during this period, especially during the first year, when nearly the half of those attacked died.

It next became an interesting question to compare the influence of age with the protecting power of vaccination; and I therefore ascertained the ages of those who were attacked, and of those who died protected or unprotected. The following Table exhibits the results in the number of attacks and deaths in 3000 cases, separating the vaccinated from the not vaccinated or doubtful.

No. of Cases.	Ages.	Vaccinated.			Not Vaccinated.			Doubtful.		
		Attacks.	Deaths.	Per Centage.	Attacks.	Deaths.	Per Centage.	Attacks.	Deaths.	Per Centage.
229	Under 1 year	19	5	26·31	166	81	48·79	44	25	56·81
456	1 to 5 years.....	89	18	20 22	247	96	38 86	120	29	24 16
480	5 to 10 years	148	18	12·16	214	49	22·89	118	19	16·10
640	10 to 20 years	302	15	4·96	143	17	11·88	195	9	4·61
622	20 to 30 years	300	24	8·00	122	29	23·77	200	24	12·00
212	30 to 40 years	122	15	12·29	32	8	25·00	58	10	17·24
93	40 to 50 years	37	6	16·21	25	7	28·00	31	3	9·67
34	Upwards of 50.....	8	1	12·5	7	...	...	19	4	21·05
234	No age ascertained	19	1	5·26	13	1	7·69	202	26	12·37
3000	Total	1044	103	9 96	969	288	29·72	987	149	15·09

It will thus be seen, that the protecting influence of vaccination, which diminished the general mortality of the vaccinated 20 per cent. below that of the non-vaccinated, was sensible at all ages, but much less so in advanced life than in early youth. Again, it will be seen how very few of those protected by vaccination were attacked in the first ten years of life, and how very large a proportion of those not so protected were attacked at this period; the whole series of facts leading to the inference, that the preserving influence of vaccination, both in preventing attacks and diminishing mortality, is greatest during the first ten years of life, and is afterwards considerably lessened. The conclusion in favour of re-vaccination is obvious.

It was singular, that while, in 1841-2, the epidemic raged principally in the Jews' quarter of the town, this quarter was particularly free from it in the last epidemic. The population of the town is between 15,000 and 16,000; that of the Jews' quarter between 4000 and 5000. There were 1000 cases in the town, but only 183 in the Jews' quarter.

I only heard of two special cases which were at all remarkable. One, that of a child who died on the day of birth. The mother was suffering from small-pox. The child was covered at its birth, and only survived about an hour. In the second case, a woman miscarried at the sixth month of pregnancy. The child was *half alive*, ("*semi-vivo*" was the expression of the attendant,) and had not a spot upon it. The mother afterwards died.

I took an opportunity, in conversation with the Lord High Commissioner, to point out how necessary it was to guard against future epidemics, and diminish their mortality by rendering vaccination compulsory and universal. There was no great prejudice against it among the people; but from ignorance, carelessness, or want of regular vaccinating establishments, or a continuous supply of lymph, it was commonly neglected. The Legislative Assembly not sitting, His Excellency took advantage of powers granted to the Senate by the Constitutional Charter, and caused the following Act of Government to be passed, providing for vaccination throughout the Ionian Islands:—

"*Article* 1. Parents, guardians, and others, entrusted with the care of children, shall, in the case of infants born in the city and suburbs, bring them to the Sanita Office; and, if born in the country, to the place indicated for that purpose, in order that they may be vaccinated within a period of six months from the date of their birth. Whosoever shall fail to obey this provision of law, shall be subject to a fine not exceeding 40s.

"*Article* 2.—On the eighth day of the child being vaccinated it shall be again brought to the place where the operation was performed, in order to be examined as to whether the vaccine matter has taken effect, and to receive

a certificate of the fact from the Health-officer. Whosoever shall fail to obey this provision of law shall be subject to a fine not exceeding 20s.

"*Article* 3.—Parents and others as above may have their children vaccinated at home, but they must produce a sworn medical certificate that vaccination has been effectually performed within the established period of six months. Infractions of the present Article shall be subject to the fine fixed to the 1st Article.

"*Article* 4.—The Sanita is further empowered to renew vaccination in the case of persons previously vaccinated, without regard to age, whenever he shall deem it necessary to do so.

"*Article* 5.—As regards vaccination, with a view to check the progress of an epidemic, the Sanitary Magistrate, in the exercise of the powers belonging to his office, shall adopt such measures as he shall deem fitting, in order to insure the vaccination of the inhabitants.

"All medical men, without exception, in the exercise of their Profession, are placed under the orders of the said Magistrate. They shall, in no case, refuse to give their assistance, according to the instructions which they shall receive from the Sanita, under penalty of being fined from 10*l.* to 50*l.* sterling, and interdicted the practice of their Profession for a year, or permanently.

"*Article* 6.—The Sanita, in order to afford the assistance necessary to those attacked by disease, and, as far as possible, to prevent contagion, with the consent always of the superior authority, shall divide the island into as many sanitary districts as it shall deem expedient. In each of these districts it shall appoint an officer, and one, or more, medical men. It shall determine their respective duties as regards persons attacked with small-pox, the measures to be adopted during the progress of the disease, and in case of death, as well with respect to burial, and to the precautions proper to prevent the spread of the disease.

"Whosoever shall fail to obey the orders of the Sanita, or shall neglect to fulfil the duties confided to him, if a medical man, shall be subject to the penalties already established. If in the employment of the Government, he shall be dismissed, and be liable to a fine not exceeding 10*l.*, save and except the cases provided for in the penal code.

"*Article* 7.—The Government, taking into consideration the services afforded, will fix the recompense to be granted to those private practitioners whom it may employ in vaccinating residents in the country."

If a short Act of Parliament, embodying the first three Articles of this Act, could be passed in the British Legislature, the country of Jenner would not be, as it is now, the last European refuge of variola.

Note.—Since the above was written, I have received from Corfu the report of the numbers of attacks and deaths of small-pox for the month of December,—viz., 376 attacks, and 54 deaths, or 14·38 per cent. The numbers from March to November, as given in my former Table, were—

Attacks..... 3677 .. Deaths 650 .. Percentage 17·67; to these add Dec. 376 .. „ 54 .. giving a total of

4053 attacks and 704 deaths,

a general mortality of 17·36 per cent., and a proportion of attacks to population of 5·71 per cent., or about 1 in 17, and this while the epidemic was continuing its action.

The average strength of the British troops in the island during the period of the epidemic, varied from 1875 to 1910 men, 167 women, and 263 to 276 children. Of these there were 1 officer, 13 men, 1 woman, and 7 children attacked by small-pox, of whom 1 man and 1 child died. Thus, the following strong contrast will be found between the native and military British population:—

Attacks to population,	native,	1 in 17 ..	British	1 in	129
Deaths to „	„	1 in 100 ..	„	1 in	1426
Deaths to attacks „	„	1 in 5¾..	„	1 in	11

This ship and the Scourge were at Corfu during about eight months of the epidemic; and although leave to the men was unrestricted, only one case occurred in each ship. The Arethusa was also there about a month, also without restriction on leave, and escaped entirely. The fleet, with a force of 5000 men, were at Corfu for one week only. Leave was not given to the men, but they were on shore twice to exercise; 4 cases broke out after the ships left.

H.M.S. Modeste, January, 1853.

CASE OF LARYNGEAL DISEASE

IN WHICH THE OPERATION OF TRACHEOTOMY WAS PERFORMED.

By HENRY SMITH, Esq.

Surgeon to the Westminster General Dispensary.

I was requested by Mr. Hunt, of Alfred-place, to meet him and Dr. Theophilus Thompson on the evening of March 11, in the case of a gentleman, aged 27, who was labouring under a serious attack of disease of the larynx, as it was deemed probable that surgical interference might shortly be necessary.

On arriving at the residence of the patient, we found him sitting up in a chair, breathing with considerable difficulty, the acts of inspiration being accompanied with a loud stridulous noise, indicating obstruction in the entrance to the windpipe. The articulation was indistinct and difficult, the pulse was frequent and irritable, and the general system appeared to be suffering much; considerable pain was experienced when pressure was made on either side of the thyroid cartilage. It appears, that this gentleman had been suffering more or less with catarrhal attacks for some weeks previously, in which the mucous membrane of the nasal passages and the fauces had been chiefly involved. He had, however, nearly recovered from one of these attacks, when he imprudently exposed himself to the cold evening air four days before I was summoned to him. On the day following, symptoms of laryngitis somewhat suddenly appeared. Mr. Hunt was called in, applied counter-irritation to the throat, and exhibited calomel and antimony; but after three days and nights of variable suffering, the disease became aggravated, and the assistance of Dr. Thompson was sought. He considered that there was serious mischief in the larynx, and at first entertained the idea that an artificial opening in the windpipe would be necessary, but thought that it was a case which might be benefited by the local application of nitrate of silver. A strong solution was applied to the glottis by means of the sponge and probang. Much temporary distress was produced by this measure, which was adopted a few hours prior to my being sent for.

On consultation together, it was deemed by each of us that the symptoms, although indicating serious inflammatory mischief in the larynx, were not sufficiently urgent to call for the immediate performance of tracheotomy; but it was considered prudent that I should remain at hand prepared to execute it if necessary. The treatment which had been employed was still carried on.

At four o'clock on the following morning, I was hastily called to the patient, and found him in the middle of a severe spasmodic seizure, the distress of breathing being very urgent. A sinapism relieved this for a time, but the symptoms shortly returned, and at six another terrible attack of dyspnœa occurred. During this the patient was compelled to sit bolt upright in the bed, and his distress was evinced by the forcible extension of the arms, clenching of both fists, by the lividity and anxiety of the countenance, and the urgent endeavours to get air. I applied water as hot as could be borne by means of a sponge to the throat, but this did not give any relief; and it appeared to me, that it would not be justifiable to delay the operation longer; accordingly, I dispatched a messenger for Mr. Hunt and Dr. Thompson. During the time he was gone, the distress of the patient became so urgent, that his wife implored me to operate at once. On their arrival, the spasm had, in a measure, abated, but it was considered, that it would not be safe to expose the patient to another of these fearful attacks; accordingly, the operation was determined upon. It was my wish that some chloroform should be inhaled by the patient, and Dr. Thompson cautiously administered that agent, but its influence was different to what was expected; insensibility was not produced, and the respiration, instead of being tranquillised, became more laborious, frequent, and spasmodic; the face became more livid than it was before; the muscles

of extraordinary respiration were thrown into violent action; the sterno-mastoid on each side stood out in bold relief, thereby deepening the fossa of the neck. Without delay, I cut deeply through the tissues over the lower part of the trachea, separated the muscles with the point of the finger, made a hit at the tube, and fortunately opened it in the middle line without wounding any vessel of importance. Some mucous and blood obstructed the opening at first, and, for a few moments, the patient appeared to be in a most critical position; the pulse sank, the face became livid, and the respirations almost entirely ceased, but cold water was dashed violently over the chest, and the orifice in the trachea was kept patent by the handle of the scalpel. In a short time, the breathing became more free, and in a few minutes the alarming symptoms went off, and I was enabled to insert an ordinary silver canula, upon which the relief was immediate. I do not think that more than half a minute elapsed from the time the operation was commenced until the incision was made into the trachea.

During the day, the relief continued most striking; the patient even became jocose. He partook freely of beef-tea and wine. A grain of calomel was given every four hours, and a full opiate was exhibited at night. About 4 a.m. on the 13th, the patient, after having been calm, hastily jumped out of bed before he could be restrained, had a copious evacuation from the bowels, which had been acted upon by the calomel several times, with difficulty got back into bed, and rapidly became delirious. He tossed about from side to side, the brow became fiercely knitted, the eyes stared wildly, and he dashed me away from him with all his strength, and appeared to be rapidly sinking. I examined the tube, and finding that the air did not readily enter, passed a probe through it, and brought away a pellet of hardened mucus, when these distressing symptoms subsided, the delirium ceased, the patient became calm, and shortly fell asleep. At six, Dr. Thompson and Mr. Hunt joined me, and the patient continued pretty well; but, just as we were about to separate, another seizure of the same description, but less distressing, occurred; the tube was again examined, and another pellet of mucus was removed. Air entered pretty freely, but it was evident that there was obstruction, and it now became a question as to whether the tube should be removed or not. I was somewhat fearful, from previous experience, that if the tube were removed, there would be a difficulty in re-inserting it, and that in the critical state of the patient he might be destroyed if any such difficulty should present itself; the other gentlemen felt the same; therefore, I requested the opinion of Mr. Fergusson. Before this gentleman arrived, the patient had again become better, had fallen asleep, and awoke sensible, and stated that he felt more comfortable. However, Mr. Fergusson, on carefully examining the patient, considered that it was necessary to remove the tube. It was, therefore, taken out, and on examination was found to be partially blocked by viscid mucus. Fortunately another was inserted without difficulty, care being taken to keep the edges of the opening in the trachea apart by means of two blunt hooks. The breathing now became quiet, and the countenance lost its livid appearance; but another source of danger presented itself; for within the last few hours excessive swelling of the upper part of the neck had come on, and an erysipelatous redness was diffusing itself over the chest below the wound. Large quantities of wine, beef-tea, and chloric ether were given, and the patient was most assiduously watched. A stick of nitrate of silver was drawn over the margin of the inflamed skin. The calomel was omitted.

14th.—The patient had some nice sleep during the night. The countenance is more natural; the erysipelas has not spread beyond the line of the nitrate of silver; there is a great deal of irritating cough, and a considerable discharge of mucus from the wound. At mid-day, the patient had a sudden attack of difficulty of breathing, which rendered it necessary to remove the tube; it was cleaned and re-inserted, upon which the breathing became calm, and the irritation was lessened. Beef-tea, wine, and other stimulants are freely given.

15th.—After taking a dose of laudanum last night, he had some sleep; and this morning he feels better. Pulse 100, full, and soft; respirations easy, 18 in the minute; tube cleaned and re-inserted.

16th.—Not so well to-day; there have been violent paroxysms of cough, and an immense discharge of purulent matter from the wound; he consequently passed a bad night, and is irritable and depressed. The erysipelas has again begun to spread over the chest, and has reached the right axilla. The tube was removed from the trachea, and left out for a short time, and the irritating cough ceased; tube cleaned and re-inserted; opium, wine, and beef-tea are freely given.

17th.—Slept pretty well occasionally during the night, but the paroxysms of cough have been frequent and violent, and the discharge of matter from the wound is larger in quantity, thinner, and slightly tinged with blood. Tube to be removed and kept out, and the edges of the wound to be kept apart by two bent probes, tied behind the neck. Erysipelas stopped by the nitrate of silver.

18th.—Passed a better night; breathes freely through the opening without the tube; on closing it with the finger, great distress is produced, and he can only take a few inspirations by the natural passage; pulse 80.

19th.—I was called to this patient in the middle of the night, and found him in a distressing state of dyspnœa,—indeed, as bad as before the operation. On examination, I found that the opening in the trachea was almost entirely blocked up by thick mucus. This was cleared away; the patient was immediately relieved, and he has, for the first time, this day taken some solid food. He is assiduously watched night and day.

20th.—Again I was hastily summoned, late last evening, as another attack of dyspnœa had come on. On my arrival, I found the patient better, but ascertained that he had been nearly suffocated, and that he would probably have died, had not a relation, who was a medical man, been in the house, and cleared the wound, which had become blocked up. It being evidently unsafe to dispense with the tube, I re-introduced it, and gave a large dose of laudanum. The patient's mind was at once tranquillized.

22nd.—He has been progressing favourably since the tube was re-introduced, but there has been considerable tracheal irritation, and, therefore, it was left out the whole of yesterday; but to-day, the tracheal irritation, which had considerably lessened when the tube was removed, again came on; consequently, I re-inserted it, and the irritation ceased at once.

Yesterday he sat up for an hour. As there is evidently considerable thickening about the larynx, hyd. cum cretâ is given in doses of three grains every four hours.

25th.—Has been progressing favourably; is getting up his strength; sits up three or four hours daily; mouth is affected by mercury; can breathe more freely by the natural passage; the tube is cleaned and re-inserted every day.

April 8.—It is now a month since the operation; the patient is so much better, that he breathes pretty comfortably for at least ten minutes together when the opening is closed; but the tube cannot be dispensed with, as the noisy sound in the breathing indicates considerable narrowing at the entrance of the larynx. Counter-irritation, by means of blisters and croton oil, has been employed, and, the patient being weak and nervous, takes quinine thrice daily.

20th.—As regards general health, this patient may be deemed convalescent, as he has regained his strength and flesh to a considerable extent; but the remains of the disease in the larynx still persist, and render necessary the use of the tube; for, although he can breathe a considerable time together with the opening closed, the respirations are noisy, and soon become laborious. In order to permit of more easy breathing, a tube has been constructed, with a very large opening on the convex surface, and, at the same time, a stopper has been made to fit in the anterior opening; by this means the patient can close it at will, and the air passes more readily in and out of the lungs than it would if there was simply a tube in the larynx, without an opening on its upper surface. He exercises his breathing in this way for some time together, and gets more confidence. We are keeping up a little counter-irritation over the throat.

May 1.—This patient has been enabled to take carriage-exercise continually, and has been doing well until the last few days, when he has been thrown back in consequence of a domestic misfortune. The tube is worn with great comfort. There is occasionally a considerable secretion of thick pellets of mucus from the trachea. Dr. Thompson has carefully inquired into the condition of the larynx by means of the stethoscope, and is of opinion, from the noisy sound heard during respiration over the glottis, that there is still considerable narrowing at the entrance of the tube; consequently it has been determined to put the patient fully

under the influence of mercury again; accordingly he is taking it twice daily.

25. He was brought fully under the influence of mercury, and the gums were kept sore for some length of time; but the disease in the larynx has not been removed by it, only somewhat lessened. The mercurialisation had the effect of weakening the patient very much; it also was followed by severe periosteal pains. The patient has, during the last month, been enabled to attend to his business. A respirator is worn over the tube, and his neckerchief is so adjusted, that its presence cannot be detected by ordinary observers. He has now retired into the country to spend the summer, and it is hoped, that, in course of time, the remains of the thickening, which undoubtedly exists in the larynx, may gradually be removed, and thus permit the entire disuse of the tube, which could not at present be dispensed with. I must not omit to state, that a very careful examination of the lungs has been made on several occasions, and that there is not any evidence of disease there. The chest expands well, even when the artificial opening is closed.

Although I have refrained from detailing the minute particulars, the above history is sufficient to show with what a harassing and perplexing case we had to deal, and it appears to me to present many features of interest and instruction. There are, perhaps, few instances in which the surgeon is placed in a more trying position than when he is called upon to perform the operation of tracheotomy, for the purpose of rescuing the patient from suffocation, apparently impending from acute disease of the air-tube. He is unwilling to operate unless it becomes absolutely necessary to do so; and it is so extremely difficult to ascertain when this necessity actually exists,—at one period of suffering it may be well marked, and then shortly afterwards the symptoms may give way, and the surgeon congratulates his patient, that he has not exposed him to an additional source of danger. As an illustration, I may mention, that, some time ago, I was hastily summoned to a young person who was in an agony of dyspnœa from acute inflammation of the larynx. There was every appearance of tracheotomy being necessary to save life. I got the consent of the patient and friends, made preparations, but about half an hour was consumed in procuring the assistance of a friend, and by this time the symptoms were not so serious. I therefore delayed, and the patient completely recovered without operation.

On the other hand, the surgeon is as anxious not to delay the operation too long. As it has happened to me to congratulate myself at having refrained from it when it has appeared imperatively called for, so likewise must I confess, that, on two occasions where death occurred, the unpleasant conviction was forced upon my mind, that an operation should have been done, and would in all probability have saved life. Thus, in such cases, are we placed betwixt the Scylla and Charybdis of doubt and difficulty. Even if an operation succeed well, and the patient lives, the doubt will arise in the mind, as to whether he might not have done equally well without the infliction; and, should death speedily ensue after it, an honest man cannot avoid the feeling, that possibly he may have hastened the fatal event.

Fortunately, in the present case, there need not be any cause for regretting what was done. The symptoms beforehand were so striking and so progressively serious, that there was even at that time little doubt as to what was called for; and the subsequent history indicates, that life would have been destroyed had not an artificial opening been made in the trachea. The immediate object of the operation was gained by the rescue of the patient from a distressing and sudden death; but the ulterior object of bringing about a healthy state of the larynx has not yet been attained. At first, it was hoped that the attack was of an erysipelatous or œdematous nature, and that, if the patient survived the operation, his larynx would be restored to its pristine state in a short period; but in this we were disappointed. It is not improbable that some chronic mischief had been going on during the previous attacks of catarrh; and there can be no doubt that, after the operation, an active inflammatory state continued and induced further disease.

Within the last few weeks the following case, showing how rapidly the mischief produced from simple acute œdema of the air passage will give way, after the operation has been performed, fell under my notice. A middle-aged man was suddenly seized with inflammation of the fauces. The symptoms of obstruction in the glottis were such as to call for the immediate operation of tracheotomy. It was ably performed, and the patient was snatched from present death, but before forty-eight hours he sank. On *post-mortem* examination, there was not any disease inside the larynx itself. The aperture of the glottis was not narrowed by any remaining œdema; outside, however, the parts were greatly congested.

The case above narrated shows, that the safety of the patient after the operation depends mainly upon the immediate and constant attention which is paid to him. Most fortunately for this gentleman, he had the means of commanding every sort of attention; and I firmly believe that his recovery was due to this circumstance. A medical practitioner was in his house night and day for more than a week, and, in addition, he had the assiduous care of a devoted wife and an admirable nurse. Thus, every change in the symptoms was anxiously watched, and, when danger existed, it was at once recognised; and on more than one occasion was his life preserved in this way. Had this patient belonged to the poorer classes, I think it would have been next to a miracle if he had recovered. It is well known that a majority of the cases in which this operation is performed turn out fatally within a few hours; in many, death is owing to the operation being executed too late; but in others, it is that there is not that constant attention which is so necessary after such a proceeding.

It will be seen that, in performing the operation, I adhered to the old plan of cutting freely down upon the trachea, and opening it with the scalpel. Various methods of performing tracheotomy have been adopted, both in this country and in France, and certain instruments, of a most ingenious construction, have been brought before the Profession. One of these is depicted in the last edition of Mr. Fergusson's "Surgery," p. 646. Another has been invented by Mr. Henry Thompson, and Dr. Edwards, of Cheltenham, has lately recommended, in the *Lancet*, a somewhat novel mode of executing tracheotomy. Each method deserves consideration, but, it appears to me, that the simple scalpel, directed by a steady hand, is the instrument by which the windpipe may be opened most safely and expeditiously.

There is one feature connected with this case which calls for notice. It will be observed, that chloroform was exhibited to the patient preparatory to his submission to the operation. It was my wish that the agent should be used, as it might save the sufferer pain, and at the same time it might render the operation less difficult, as I thought the anæsthetic influence would calm the nervous system, and relieve the embarrassed and spasmodic actions of respiration. On two previous occasions I had seen the effects of chloroform in such a condition, and when the operation of tracheotomy was performed. In the one instance—a desperate case of croup in a young child—the vapour acted as favourably as possible; the spasmodic breathing was relieved, and I was enabled to finish the operation without giving any pain to the patient. Not long after this, Mr. Fergusson operated upon a man who had serious disease of the larynx, while he was under the influence of chloroform. In both instances, Dr. Snow exhibited it with his usual ability and caution.

In the present instance, the effect of the chloroform was different from what I had hoped and expected. Instead of aiding, it certainly embarrassed me in no slight degree, for it increased the spasmodic breathing; and I most firmly believe that the life of the patient was placed in greater jeopardy than if it had not been exhibited; moreover, it did not render him unconscious; so, in fact, the poor fellow had the double misfortune of feeling the distress produced by the chloroform, and of suffering the pain of the operation as well. I think that I shall not recommend it again in such an operation.

I cannot conclude these remarks without tendering my best thanks to those gentlemen who were in attendance with me, and were consulted upon this most interesting and anxious case. To their assiduous care and valuable suggestions does the patient—whose life was on several occasions after the operation placed in great jeopardy, and who behaved with admirable fortitude throughout—owe great obligations. In no one instance have I more forcibly felt the benefits of the assistance and suggestions of men of great experience and sound observation.

Caroline-street, Bedford-square.

CONTRIBUTIONS TO ORTHOPÆDIC SURGERY.

By BERNARD E. BRODHURST, Esq.,
Assistant-Surgeon to the Royal Orthopædic Hospital, &c.

(Continued from page 11.)

Imperfect nutrition is a frequent source of spasmodic action. We see it in chorea; and, at birth, the result of imperfect nutrition is seen, not alone in bodily development, but equally in want of co-ordinating power—in abnormal excitability and irritability. Impaired nutrition of the nervous centres gives place to muscular irritability, so that any extraordinary excitement will induce abnormal muscular action, and almost necessarily there, where is a preponderance of muscular power, namely, in the flexors and adductors. But it is not necessary that this action shall be developed during uterine existence; frequently, it is first established immediately after birth, on the contact of the cold air, for instance. Now, the effect of anger on a nursing mother, to cause the secretion of the mammary gland to become an irritant to the intestinal mucous membrane of her child, is familiar to all. The effect of any mental emotion—be it anger, fear, joy, or any rapid and violent action of the mind, as sudden, unexpected, and distressing intelligence, and the like—will, by the alteration of the secretions of the fœtus, through the action of the blood in the pregnant female, produce irritation of the organic nerves, and, through them, of the spinal nerves, equally as in the former instance was induced by the secretion of the mammary gland. But, also, any derangement of the system of the mother may be sufficient to impair the nutrition of the embryo; and, whether it be an hereditary taint, or a temporary indisposition, or an habitually impaired indigestion, or an insufficient supply of aliment,—whatever be the cause of the deficient supply of nutriment to the embryo, the result will probably be the same. The effect of excitement on hysterical, irritable, pregnant females, is frequently (and that when excitement is scarcely extraordinary) to occasion violent motion of the fœtus in utero. Therefore, when, from one cause or another, there exists a condition of morbid nervous excitability of the fœtus, a muscular action may be commenced and continued, probably without a repetition even of the exciting influence. Dr. Combe has well said: —"We have demonstrative evidence, that a fit of passion in a nurse vitiates the quality of the milk to such a degree as to cause colic and indigestion in the sucking infant. If, in the child already born, and in so far independent of its parent, the relation between the two is thus strong, is it unreasonable to suppose that it should be still closer when the infant lies in its mother's womb, is nourished by its mother's blood, and is, to all intents and purposes, a part of her own body? If a sudden and powerful emotion of her own mind exerts such an influence upon her stomach as to excite immediate vomiting, and upon her heart as almost to arrest its motion and induce fainting, can we believe that it will have no effect on her womb, and the fragile being contained within it? Facts and reason, then, alike demonstrate the reality of the influence." (a)

Congenital spasm shows there has been irritation of the spinal cord; for all spasmodic action is due to derangement of the cerebro-spinal nervous system. Now, spasm may be in every degree, from slight twitching of the fingers and toes, to the contracted hand and extreme varus. I have often observed, that spasmodic action is in proportion to the emotion excited, or to the imperfect state of nutrition of the fœtus. Dr. Marshall Hall has well said, "The practical physiologist, the physiological physician, sees, that strabismus, the contracted finger, the contracted toe, are one and the same kind of affection, in different parts of the muscular system; that the partial closure of the larynx, inducing laryngismus stridulus, and the total closure of the larynx, suspending the respiration; that strangury and tenesmus, are of the same nature, only seated in other and more vital or important organs; lastly, that the general convulsions of the face, and of the general frame, are still similar morbid phenomena, differing only in their degree of diffusion and intensity, and in being often of centric origin. He perceives, that it would be as unphilosophical and unreasonable to think, and speak, and treat of the condition of the larynx separately, and to view the case as one of partial paralysis, or of inflammatory action, as to view the affection of the muscles of the eyeball, the fingers, or the toes, which differ in no respect from that spasmodic affection of the larynx, except in their less formidable import." (a)

Doubtless, scientific investigation will enable us to clear up many things which were previously involved in mystery; yet what a bundle of mysteries we remain! Truly, the ignorant man and the philosopher are nearly equal in explaining the secrets of nature. The result of an action is obvious, but how difficult to explain its operation! Who is able to explain the development of the ovum, the production of an idea, or the mere animal motion of the frame? We know these to be results of certain causes; they are yet to us, however, hidden books: notwithstanding we possess much certain knowledge; and, with regard to spasti motion of the fœtus and its causes, it is more than probable, that emotion on the part of the mother is a prominent cause. Dr. Todd writes, "Epilepsy is a disease of all periods of life: it seems not improbable that it may commence even in utero, being first developed by some powerful emotion excited in the mother, or due to some other disturbing influence upon the nervous system of the embryo."(b) The following cases are a few of those which have occurred in my own practice, in which I have been able to trace mental emotion on the part of the mother as a source of spastic action in the embryo.

Case 6.—E. H., aged five weeks, December, 1851, the second child of its mother, was brought to me, having been born with double talipes varus. The mother and child were both healthy, and the eldest child, two years old, was healthy and well formed. During the sixth month of pregnancy, the mother was much agitated on seeing a child who was thus distorted playing in front of her house. This was an instance of extreme varus, of the fifth grade of Dieffenbach, or the third of Dr. Little.

Case 7.—C. S., January, 1853, the first child of its mother, a small, unhealthy eight months' child, was born with double talipes varus and cheirismus. At the sixth month of pregnancy, the mother of this child nearly fell into a deep Lincolnshire dyke, in which was from eight to nine feet of water. She saved herself by a great effort, and sustained a severe mental shock. She assured me, that, for four days, she believed her child to be dead.

Case 8.—T. B., aged 2 years.—February, 1853.—Talipes varus congenitus of the left foot. The mother of this child, in crossing over the street at night, fell into a hole which had been left unguarded. This accident not only occasioned her some bodily injury, but also excited much fear.

Case 9.—J. P., aged 6 weeks.—April, 1852.—Double congenital varus. During the third month of pregnancy, a dead frog was suddenly thrust into the mother's face, which caused an intense sensation of disgust; this feeling was never entirely overcome or removed during the remaining period of gestation.

Case 10.—M. C., aged 7 months.—April, 1853, a small, weak, badly-nourished child, was born with double talipes varus. Towards the end of the sixth month of utero-gestation, the father of this child was accidentally killed. He died, leaving a large family destitute, and his wife truly distressed in mind by his loss.

Case 11.—J. B., aged 5 weeks.—March, 1853.—Congenital varus of left foot. This is the eighth child of its mother; the other children were all healthy and well-formed at birth, and the mother herself is a healthy-looking person. During the third month of pregnancy, she was much alarmed by a dog, which, in her presence, flew at one of her children; the mother interposed herself to protect her child.

I possess notes of several parallel cases; but these few instances are, perhaps, as good as a multitude, to show what I wish to insist upon, that it is not example which gives rise to this alteration of function—that it is not necessary that club-foot shall have been seen—nay, this deformity not unfrequently occurs as a congenital affection, when the possibility even of its existence is unknown to the mother; but that it is due to irritation of the cerebro-spinal nervous system, induced, as has been shown, perhaps, by emotion on the part of the mother, perhaps by hydrorachis, by hydrocephalus, hereditary predisposition, etc.

Of all congenital muscular deformities, club-foot is the most common; and of the several varieties of talipes, varus

(a) "On the Physiological and Moral Management of Infancy." Sixth Edition, p. 24.

(a) Essays, p. 12. (b) Lumleian Lectures for 1849.

is the most frequent. Mr. Lonsdale has shown the comparative frequency of the different forms of talipes, in a valuable Table of upwards of 1200 cases, as follows(a):—

	Cases.	
Talipes varus, affecting one or both feet .	583	
T. equino varus	112	
		695
T. equinus	226	
T. valgus	151	
T. equino valgus	40	
T. calcaneus	50	
Compound varieties, as calcaneo-valgus, talipes varus, and valgus of opposite feet, etc.	56	
		523
Total		1218

Thus it will be seen that, of the varieties of talipes, viz., varus, valgus, calcaneus, and equinus, talipes varus is as 4-7ths of the whole. But, in the Table now quoted, adult as well as congenital cases are included. I have no hesitation in asserting, that, of congenital club-foot, nine-tenths of the entire number are cases of talipes varus.

I shall next proceed to consider talipes and its varieties; and, first, talipes varus.

NOTE.—By omission, Mr. Tamplin's name was not mentioned in connexion with Case 4, in my communication of last week. I am indebted to Mr. Tamplin for permission to make use of this case. B. B.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF EXOSTOSIS.

Among the more interesting of the cases of exostosis which have recently come under our notice at this hospital, we may mention that of a young woman, a few months ago under the care of Mr. Stanley for a broad-based bony growth from the mastoid portion of the left temporal bone. It was stated to have been very slowly increasing for five years, and had occasioned no inconvenience. It had a sloping and ill-defined border, and did not appear to be quite half an inch thick in the deepest part, though it covered a surface of an inch and a half in length, and an inch broad. To the touch it felt as if extremely hard; and, judging from the part whence it sprang, Mr. Stanley stated, that he had no doubt but it would be found to be of ivory-like density. From this consideration, from its want of circumscribed base, and also from the circumstance that it was scarcely, if at all, growing, Mr. Stanley decided not to attempt any operation. A course of iodide of potassium was prescribed, in the hope of possibly preventing further enlargement; and the girl was allowed to return home. About the same time, another patient—a servant-maid—was also under Mr. Stanley's care, on account of a pedunculated exostosis in front of the left tibia. It was about the size of a cherry, and occasioned a good deal of inconvenience in walking. As it was placed but a little way above the ankle-joint, and in close relation with the tendons of the part and the anterior tibial artery, some nicety was rendered necessary in the dissection required for its removal. Nothing unusual occurred in the operation, and the wound afterwards healed well. A few weeks ago, Mr. Lawrence removed a crest of bone, about an inch in height, and at its base half an inch wide, from the inner aspect of the upper third of the humerus of a very muscular man. The patient had known of its existence for fifteen years, during which time it had not perceptibly increased in size. It grew from the bone immediately on the outer side of the vessels. In the course of the dissection, some of the trunks of the brachial plexus were laid bare. The incision was made parallel with the long axis of the limb; and, from the muscularity of the arm, was of considerable depth. We must note, that the reason which induced the man to seek for advice, and Mr. Lawrence to undertake the operation, at a time when the tumour had long ceased to grow, was, that, although previously painless, it had for several weeks, apparently in consequence of a blow which had been received, given rise to swelling in the arm, and pain along the course of the nerve trunks. The tumour consisted entirely of bone, without any covering of cartilage, a condition which had been expected from the statement as to its stationary character. Contenting ourselves with these brief allusions to the above cases, and passing by several others of the same class, but not differing materially from those of ordinary occurrence, we shall now proceed to give more in detail the particulars of three examples of the same disease, all of which involve points of unusual interest.

(a) "On Some of the More Practical Points Connected with the Treatment of Deformities." *Medical Gazette*, June, 1849.

EXOSTOSIS FROM THE OUTER SIDE OF THE TIBIA.—OPERATION.—SINGULAR DISPLACEMENT OF THE FIBULA.

[Under the care of Mr. LAWRENCE.]

Hasard Stamers, aged 8, a stout, healthy boy, was admitted on June 17, 1853. In the outer and front aspects of the lower third of his right leg, was a circumscribed, very hard lump, apparently about the size of a small egg. Its exterior was rough, with rounded nodules, and its margins appeared to overhang a deeply-placed base, as the finger could be passed beneath them in some parts, especially behind. No doubt was entertained by those who examined it, but that it was an exostosis springing from the front of the *fibula*. The parents of the boy had been aware of its existence for about three years, and it was believed to be growing rather rapidly. It was painless, and free from tenderness.

On June 18, the patient being under the influence of chloroform, Mr. Lawrence commenced the operation for its removal by making an incision on the outer side of the leg, from a little below its middle to the base of the external maleolus; and afterwards, the better to expose the tumour, a short transverse incision was made from the middle of the former towards the inner side of the leg. Both these cuts had been carried deep enough to reach the morbid growth itself, which, by separating the soft parts from its surface, was then easily laid bare. Mr. Lawrence now examined the relations of the growth, with the view to ascertain whether it had any base which could be cut through without involving the shaft of the bone; but, finding that it projected from the fibula on all sides, and on the inner one so far as to touch the opposed surface of the tibia it became apparent that the removal of the whole thickness of the former bone, as far as involved in the disease, was a measure which could not be avoided. The soft parts being protected by means of spatulæ, the shaft of the fibula, above and below the bony outgrowth, was accordingly cut through with a small saw. This having been done, however, the mass of the tumour was found to be still as firmly fixed as ever; and, on attempting to raise it by taking hold of the detached portion of fibula, the latter separated as a thin shell from its front and inner aspect. The true nature of the case was now evident; the exostosis grew from the outer side of the tibia, and, having passed behind the fibula, had carried that bone before it, and ultimately projected considerably beyond its outer border. By constant pressure from behind, the fibula had been flattened out and bent forwards, until it had become accurately fitted to what was now the front of the base of the original growth. The attachment of the tumour to the tibia was found to be by means of quite a narrow peduncle; and this having been divided by bone forceps, the whole mass, which was of about the size of a bantam's egg, was easily removed. The wound was then covered by a compress of wet lint, and the lad sent back to bed; up to the present date (July 7) his progress has been quite satisfactory.

The tumour proved to be a specimen of common exostosis in a stage of active growth, being osseous in the centre, and covered externally by a thick layer of glistening cartilage. Its surface, though nodulated, was smooth in all parts, and equally so where it had fitted into the cup formed by the expanded fibula, to which bone it was connected by some bands of fibrous tissue. Even had it been possible, before the operation, to have formed a correct diagnosis as to the origin of the growth, it would have been difficult, as remarked by Mr. Stanley, who was present, to have avoided, in its excision, the removal of a portion of the fibula also, so completely did that bone overlap its base.

DEVELOPMENT OF NUMEROUS EXOSTOSES IN THE SAME SUBJECT.—NECROSIS IN THE CENTRE OF ONE OF THEM.—OPERATION.—RECOVERY.

[Under the Care of Mr. STANLEY.]

George Curtis, aged 31, admitted May 25. He is an odd-looking, very short man, standing only about four feet eight in height, of fair complexion, and somewhat knock-kneed. Although none of the long bones appear to be materially bent, yet his physical conformation much resembles that of a ricketty subject. He is the possessor of no less than fifteen distinct exostoses, varying in size from a walnut to that of a large hen's egg. They are arranged with tolerable symmetry on the articular extremities of the bones of the legs and arms—viz., above the ankles, above and below the knees, and above the wrists; a solitary one, however, of small size, is seated on the right acromial process. It appears from his account, that they commenced to grow in very early infancy, and, after a few years, ceased to enlarge more than *pari passu* with the rest of his body. With an exception about to be noticed, they have never occasioned him any annoyance. He states that he has a half-brother who is affected in exactly the same manner, and to nearly a similar extent as himself, but is not aware that any others of his relatives have been so. There is a curious fact connected with his family history which we must not omit to mention. His mother has been twice married, and had children by each husband. The first family consists of himself and an elder brother, who is tall, strong, well-developed, and free from blemish of any kind, while of the second marriage the only issue has been the half brother to whom we have alluded, thus appearing to show that the hereditary predisposition, whatever it be, is derived from the maternal side. To return to the subject of the case: he is a painter by trade, and states that he is a very drunken man, and that when tipsy he has frequently bruised his tumours by knocks and other injuries, so as to make them very painful. The one over the head of the right ulna being very large used to receive more than its share of knocks, and, about a year ago, after an unusually severe one, it inflamed, and became very tender. An abscess gradually formed, which has never since healed; and it is on account of the pain connected with it that he now applies for advice. There is an unhealthy ulceration over the most prominent part of the bony mass, the surface of which is exposed, and a sinus from the sore leads into the middle of the growth.

On May 28, the patient being under the influence of chloroform, Mr. Stanley dissected off the integument, and removed, by means of the saw and bone forceps, the whole of the morbid growth. It was composed of dense, osseous structure, and had in its centre a cavity which contained a portion of loose necrosed bone the size of a filbert. The wound made was necessarily a large one, but it did not in any way interfere with the wrist joint. It was dressed at first with water-dressing, and afterwards with a common bread poultice, under which it has progressed satisfactorily; and, although not yet quite healed, yet it is so nearly so that the man, who is in excellent health, is allowed to be up and about in the open air. It is not intended to interfere with any other of the tumours.

LARGE EXOSTOSIS FROM BEHIND THE UPPER PART OF THE FEMUR, COMPLICATED WITH A BURSAL TUMOUR.—OPERATION.—RECOVERY.

[Under the care of Mr. LLOYD.]

However common exostosies may be on the lower third of the femur, it will, we believe, be readily admitted that it is very rare for them to grow from the upper part. In the latter situation, the difficulties and risks of an operation are, of course, very great, more especially if, as in the following case, the growth be large and complicated with other disease.

Henry Elliott, a hair-dresser, aged 37, was admitted in the middle of February, 1853. He stated, that, five years previously, he received a blow from a policeman's staff on the back of the right hip, which occasioned considerable temporary pain. After a short time, however, the pain entirely subsided, and he felt nothing more of it for three years. At the expiration of that time, he was rather suddenly attacked by pain in the same part, which was followed by swelling, and obliged him to keep his bed. He believes that, in about two weeks, the swelling attained a size quite as great as it has at present. After a short time, however, it began to subside, and, as it did so, he observed what he had never before noticed, that there was a very hard and prominent lump immediately behind the head of his thigh-bone. On various occasions since, he has had more or less of pain and aching in the part, but never so great as to oblige him to give up his employment; in fact, never quite so great as that which now induces him to seek advice. As the condition of the parts seemed to be masked by recent swelling, Mr. Lloyd directed that the man should be confined to the recumbent posture for a time, in order to allow this to subside.

Feb. 28.—The soft fluctuating tumour which, at the time of admission, distended the lower part of the buttock, has now very much disappeared, and there is easily discoverable a large tumour of bone-like hardness, apparently springing from just behind the base of the great trochanter. The nodulated margins of this growth are distinctly felt on its outer and posterior aspects; but, on the inner side, they are very much concealed by a softer tumour, in which, on making careful manipulation, fluctuation may be detected; and it is by deep pressure in the latter direction only that any pain is occasioned. Of these symptoms, taken together with the patient's statement, Mr. Lloyd suggested the following explanation:—That the hard prominence was produced by an exostosis, no one could doubt; and, looking to the history of the case, it seemed very probable, that an adventitious bursa had formed on its inner side, and been the subject of repeated inflammations. Thus, it was possible, that the bony outgrowth might, in the first place, have been induced by the injury alluded to, and, increasing quite painlessly, not have been discovered by the patient until after that an acute inflammation of the adjacent cyst had attracted his attention to the part. This supposition also accounted for the fact, that the man had suffered from time to time an amount of pain altogether unusual in the course of simple exostosis. Mr. Lawrence and Mr. Stanley have examined the patient, in consultation with Mr. Lloyd, and concurring with that gentleman in the opinion, that it was desirable to attempt the removal of the diseased growth, as it was not only painful, but stated to be increasing considerably in size, it was determined to perform the operation as soon as the man's health should be such as to warrant the measure.

March 12.—Chloroform having been administered, and the man placed on his left side, with the right hip flexed, Mr. Lloyd commenced the operation by making a curved incision from the great trochanter backwards and downwards. The flap of skin was then dissected to the inner side, and the cavity of the cyst opened, from which there escaped about a pint of thick grumous fluid, mixed with large solid portions of blood-clot and coagulated lymph. The surrounding soft parts having been dissected aside, the large size of the exostosis was now made apparent. It was attached by a base of about an inch and a half in diameter to the inner side of the shaft of the femur, just above the lesser trochanter, and, expanding thence in all directions, it passed inwards so far as to touch the ischiatic tuberosity, and outwards considerably beyond the margin of the femur. A large overhanging portion which concealed the base having been removed by the saw, and the soft structures being held as far as possible asunder, Mr. Lloyd proceeded to saw through the base close to the shaft of the femur. The depth of the wound, the importance of the surrounding parts, and the extreme density of the bone itself, made this part of the operation no easy matter; it was, however, after a little trouble, accomplished safely, and the whole growth thus detached and removed. In the course of the operation, ligatures had been applied to several vessels, and, the bleeding having ceased, the edges of the wound were supported by a compress and light bandage. As soon as the effects of the chloroform had passed off, a full dose of opium was administered, and on the following morning the man appeared in a much more favourable condition than might have been anticipated. As the subsequent history of the case has been one of steady progress towards recovery we need not take up much space in alluding to it. Neither the hip-joint nor the shaft of the femur became in any degree involved in the inflammation which followed; a healthy suppuration was soon established from the whole wound, and the process of filling by granulations from the bottom commenced. In order to check the amount of suppuration, and to improve the condition of the granulations, Mr. Lloyd had the wound several times sponged out with strong oil of turpentine, and with good results. The man may now, June 18, be fairly considered convalescent; he has regained his flesh and strength, and the large wound is all but closed.

July 5.—The patient was discharged a week ago, quite well in every respect. He had for some time previously been in the habit of walking about the ward, and experienced no difficulty in the movements of the limb.

The removed outgrowth was about the size of an adult fist; its surface, on its outer three parts, was covered with a layer of glistening cartilage, but, on its inner side, which projected into the cavity of the bursa, and towards the ischium, was rough, denuded of cartilage, and almost in a carious condition; it had evidently been the seat of inflammation. The whole exterior

was irregularly nodulated, and, from some parts, sharp spiculæ of bone projected. The section of its base very much resembled that of a thick femur, excepting that it had only porous bone in the centre, and no true medullary cavity; its outer layers were extremely dense and thick.

GUY'S HOSPITAL.

SCROTAL HERNIA. — REDUCTION. — PERSISTENCE OF SYMPTOMS. — DEATH ON THE SIXTH DAY FROM INTERNAL STRANGULATION.

[Under the care of Mr. COCK.]

JOSEPH PUTMAN, a labourer, employed in the vaults of the British Museum, and in the habit of lifting very heavy stones, was admitted on June 5, 1853. He had been subject to a scrotal hernia on the right side for ten years, during which he had worn a truss so inefficient that it allowed of the almost daily protrusion of the bowel. Reduction had, however, always been easy, and there had never been any necessity to call in surgical assistance. On Friday morning, the 3rd of June, while walking to his work rather faster than usual, he suddenly felt his rupture come down, and there immediately followed its extrusion an amount of severe pain in the iliac region of the abdomen, to which he had, on previous occasions, been altogether unaccustomed. Feeling very ill, he went into a public-house just by, and got some brandy, which was, however, at once rejected by vomiting. In great suffering, he continued his walk until he reached his place of labour, where he went aside, lay down on his back, and, after some little difficulty, succeeded in pushing back the tumour. For a few hours after this, he attempted to follow his work, but the pain continued with such severity, that he was shortly obliged to give up and go home. In the afternoon, he procured himself a dose of tincture of rhubarb, and afterwards one of castor oil; but both were vomited almost as soon as swallowed. Throughout the night following he continued extremely ill, retching almost constantly, and throwing up stuff very nauseous to the smell and taste. In the evening, he sent for a neighbouring surgeon, by whom the hernia, which had again come down, was again returned, a fomentation ordered to the part, and some medicine prescribed. On the next day, although the vomiting had considerably abated, he yet remained very ill, and, with the advice of his medical attendant, applied for admission at the hospital.

June 5, 6 p.m.— The hernia had again filled the scrotum, but, on attempting the taxis, the dresser in attendance succeeded, without any unusual difficulty, in reducing it. The man was sent to bed, and Mr. Cock saw him shortly after. He then complained of great uneasiness in the abdomen, which was distended and tympanitic. The bowels, usually open twice daily, had not been relieved since the beginning of the attack. There was a considerable degree of tenderness about the right iliac region; the pulse was sharp, and rather hard; the countenance sunken, and expressive of anxiety. Mr. Cock examined the seat of disease; there was no bowel in the scrotum, and the finger could be easily passed up the inguinal canal, through the external abdominal ring, which was large and free; there was, however, apparently within what felt like a thickened sac, a small softish mass, which could not be returned. This mass was elongated in shape, and, in its doughy feel, much resembled a band of omentum; it was movable, and its non-reduction was evidently caused by adhesions to the testis below, and not by any obstruction above. Under these circumstances, it seemed more probable that the man was suffering from peritonitis, in consequence of previous strangulation, than from the present existence of that condition.

℞ Hydr. chlorid. gr. j.; pulv. opii gr. j., 4tis horis.

June 6.—Has had some sleep in the night, and the vomiting has not recurred. He does not complain of so much pain, and the abdomen is less distended. The hernia having again come down, Mr. Cock had an opportunity of examining it for himself; from its solid, doughy feel, there appeared little doubt but that it consisted of omentum. It was not at all tender, and was returned with the greatest ease, the same portion which was noticed yesterday still appearing to remain in the scrotum; much flatus was passed per anum, and, on the whole, the man's constitutional symptoms are not so severe as yesterday. The bowels not having acted, an enema was administered, but it brought away nothing excepting some small scybalæ. Pt. pil.

7th.—Has slept fairly in the night; pulse 105, sharp, but not hard; skin cool; tongue thickly furred with brownish fur, tending to dry in the centre; countenance dusky, but not remarkably anxious or expressive of pain; abdomen soft, flaccid, and free from tenderness in all parts excepting over the right iliac region, and even there it is not well marked. Vomiting has returned this morning, but is not nearly so severe as before admission; there is, however, a very troublesome hiccup. The omental protrusion has repeatedly come down, but has, on each occasion, slipped back without any difficulty; the bowels have not acted. At two p.m. Mr. Cock and Mr. Hilton met in consultation, and entered fully into the question as to the propriety of performing an exploratory operation; and, after considering all the circumstances of the case, it was their united judgment, that such a measure would be quite unjustifiable. This conclusion was founded on the opinion, that the man's state was not one of danger sufficiently imminent to warrant the performance of so perilous an operation as that of laying open the cavity of the abdomen, and then instituting a search for the seat of obstruction; while from the almost certainty that no constricted bowel existed within the inguinal canal, it was not likely that any measure less extensive would afford a chance of success. It seemed useless, under the circumstances, to think of laying open the sac and inguinal canal, unless the operator were prepared, should no cause for the symptoms be found there, to prolong his incisions, and make a general examination, which, in the case of a man whose abdomen was flaccid, and whose symptoms, although of five days' duration, were not on the increase, did not appear to be called for. Rep. pil. sine hydr. chlorid.

On the morning of the 8th, the man was much in the same condition as on the previous day; he had slept tolerably, and was not in pain; the bowels had not acted, but there was no vomiting present. In the course of the afternoon, a change for the worse suddenly took place, extreme prostration came on, and terminated fatally in a very short time.

The *post-mortem* examination was made on the following day, and, in order to ascertain whether it would have been possible to have afforded relief by the knife to the existing state of things, Mr. Cock commenced by performing an operation for hernia on the affected side. The sac having been laid open it was found to be thickened, adherent to the surrounding parts, and empty. The little mass, which during life had been mistaken for adherent omentum, was external to the sac, and consisted of an elongated cyst, which had formed in the cord, and was surrounded by fat and condensed tissues. The whole of the inguinal canal was free, but adherent to the lower margin of the internal ring was a large fold of omentum, above which lay the portion which had been protruded. The latter had, it appeared, never been reduced in the ordinary way on account of its adhesions to the neck of its sac; it had merely been doubled over upon itself, and thus pushed back into the abdomen. Its neck, however, was not in any way strangulated. Above the adherent omentum the finger could be easily passed into the peritoneal cavity. Mr. Cock now laid open the abdomen; the lower border of the omentum was found firmly united by old adhesions to the brim of the pelvis, and it was not until this layer had been cut through and reflected, that the seat of mischief was brought into view. A coil of the small intestine was seen to have passed between a portion of these adhesions, the omentum itself and the abdominal wall, and had there become strangulated. The constriction was not, however, extreme; it permitted air to pass through the intestinal canal and the bowel, which was of a deep purple colour and distended with gas, could without difficulty be drawn backwards and forwards. The evidences of recent peritonitis were but slight; there was a diffused pink congestion of the membrane, and in some parts a few flakes of soft lymph. Mr. Cock remarked, that from the way in which the bowel involved in the stricture had been concealed by the layer of omentum, it was very improbable that it would have been found had gastrotomy been performed during life. The obscurely marked character of the symptoms was explicable, partly by reference to the freedom with which the anodyne treatment had been pursued, and in part by the fact, that the stricture, although sufficiently close to prevent the bowel from carrying on its functions, was still not very tight. The manner in which, by the free use of opium, the symptoms of severe disease about to terminate fatally may sometimes be masked, and the danger to a great degree concealed until within a short period of its close, has of late repeatedly come under our observation, more especially in cases of peritonitis.

We may remind our readers that the above is the fifth example which we have recorded(a) within the last year of a coincidence of distinct lesions, which is scarcely mentioned in books, and is believed to be extremely rare. This coincidence is probably not so purely accidental as it may at first sight appear. In no less than

(a) Vide *Medical Times and Gazette* for July 31 and September 18, 1852, and for April 30, 1853. Cases under the care of Messrs. Paget, Adams, and Curling.

four out of the five cases alluded to, the intra-abdominal strangulation resulted from the intestine having passed through loops formed by adhesions between the omentum or mesentery and the abdominal wall. The whole of these patients had, for many years previous to the fatal occurrence, been liable to the frequent protrusion of ordinary herniæ. We are not aware that any pathological statistics have as yet been collected in proof; but it will probably be readily granted, that the subjects of rupture are, from that fact, much more likely than others to have adhesions form between the various viscera of the abdomen. More or less violence frequently attends the extrusion of a hernia; and, even if strangulation do not result, yet slight peritonitis is probably a not very infrequent consequence. If it be admitted, then, that the mechanism best suited for the production of internal strangulations is far more frequently existent in hernia patients than in others, the question as to why the two accidents should happen at the same time may easily be disposed of. The same compression, as in lifting, coughing, etc., which tends to force the bowel into the inguinal canal, will also, in an equal degree, tend to push it in an unnatural direction within the abdomen. Or, supposing the one lesion to be accomplished a little before the other, the tumultuous movements excited by the irritation of the first constriction in the rest of the intestines would be very likely to induce an irregular disposition of some part of their coils, and to cause them to pass in directions which they would have had no tendency to do when in a more quiet state. The fifth case (*Medical Times and Gazette*, Sept 18, 1853) is left to be accounted for solely in this way: The subject of it was under the care of Mr. Paget, and had been operated on for strangulated inguinal hernia. At the autopsy, a coil (about fourteen inches) of the ilium was found to have been tightly twisted over twice on itself, close to its mesenteric attachment. Such a malposition can only be explained by reference to the unnatural and disturbed movements caused by the strangulation of the external protrusion.

Medical Times & Gazette.

SATURDAY, JULY 9, 1853.

GOVERNMENT NEGLECT OF MEN OF SCIENCE.

When we remember that it is but six years since the discovery of a means of rendering surgical operations painless was made known, and witness the quiet scenes now presented in the theatres of our hospitals, both in London and the provinces, during the apparent mangling and torture of the human body by the knife of the surgeon, while the mind of the patient is either in a state of perfect unconsciousness or in the enjoyment of some happy dream, and compare this with the groans and shrieks which of old often unnerved the most experienced surgeon, we are naturally led to reflect upon all that humanity has gained, and to contrast this with the neglect of those by whose exertions the gain has been secured.

Let us consider for a moment what a debt the nation owes to the discoverer of the anæsthetic properties of chloroform. We must all remember the first hazardous experiments in Dr. Simpson's dining-room—the Professor prostrate on the floor—Dr. Duncan snoring beneath a chair, and Dr. Keith making valorous efforts with his feet and legs to overturn the supper-table. The story is immortalised by Mr. Miller's graphic pen. Most of us acknowledge the energy and perseverance with which Dr. Simpson strove to overcome all the opposition which timidity or prejudice raised against the adoption of his discovery,—still more admire the manner in which he proved that the amount of present good derived from anæsthetic agents was not counterbalanced by any equivalent amount of future evil; but that, on the contrary, the continuous good effects were proved by diminished mortality after operations when chloroform had been used. Then his admirable refutation of the miscalled religious arguments against the use of anæsthetic agents in midwifery, at once removed what was at the time one of the greatest barriers to its general use in assuaging the pains of labour, and forms a claim for gratitude only second to that of proving its utility and safety in allaying the intolerable, inexpressible suffering of the hour of childbirth so completely, that the question now is, Why should any woman undergo unnecessary and injurious suffering, which may be avoided, not only without danger, but with evident advantage?

Passing from the earlier period of the history of chloroform, and estimating the value of the agent by the experience of many thousands of operations or surgical cases during the past five years, all must acknowledge that the patient is not only saved from alarm previous to operation, from pain during its performance and the subsequent dressings, but that he loses less blood. The operation is better performed, because the surgeon has plenty of time for deliberate proceeding upon a body which, instead of starting at each touch of the knife, is as quiet and steady as a corpse. After-pain or uneasiness is lessened. Many operations before inexpedient or impracticable, from the extreme alarm of the patient, or his want of self-control, or from the prostrating effects of the injury on the nervous system, may now be performed with ease and propriety. A shrieking, terrified, unmanageable child is rendered passive, is taken quietly from bed, and restored to it without consciousness. Adults in hospital are spared the shock which the sight of an operating-theatre and its occupants adds to the shock of the operation itself. The dislocated or fractured limb is reduced without the frightful exertion of brute force formerly often required, muscular relaxation being produced by means of chloroform with certainty and safety, instead of using such dangerous and uncertain weapons as bleeding, emetic tartar, or powerful narcotics. Careful examination of injuries can be made without inflicting pain; a strangulated hernia may be reduced; and, lastly, in the female sex, other examinations and operations may be performed, which would otherwise be as shocking to delicacy as necessary for the preservation of life. All may be done in the presence of some female friend or relative, and the patient wakes from her sleep, her true condition discovered, without a blush having been raised, or a single feeling of delicacy offended.

Now, is it possible to know all this, and not at the same time confess, that the rewards conferred by Government on those who save and those who destroy human life are strangely disproportionate? Jenner, whose discovery of vaccination has reduced the mortality from small-pox in Great Britain from 30,000 annually, in a population of 11,000,000, to less than 10,000, in a population nearly three time as large,—who has saved in every European generation more lives than the whole population of England, more lives than were sacrificed by the sword of Napoleon,—was rewarded neither by peerage nor pension. A small Parliamentary grant, bestowed with an ill grace, stands in curious and shameful contrast with the titles and decorations, honours and pensions, of the successful soldier. The peaceful sage, whose discoveries add to the productions of the soil, or improve our manufactured products and processes, thus feeding and employing the people—extend our commerce and influence to the limits of the globe—enable us to convey our thoughts on the wings of lightning to each other, our neighbours, and our colonies—prevent disease, remove deformity, and abolish suffering,—who will perpetuate our moral empire over the great nations we have founded, when the dominion of our worldly power shall have passed away,—

these are the men who are left unrewarded, while all the favours of Government are lavished on the soldier who destroys the half-savage Indian or Caffre, or the sailor who tests his prowess on the ignorant Mussulman or the unresisting Chinese. The man whose rare talents, indefatigable zeal, careful research, and benevolent enthusiasm have enabled him to make known the powers of chloroform to the human race—whose name will be handed down to posterity on one of the brightest pages of the history of philanthropists—is left to seek his reward in an approving conscience, untitled, unpensioned, and without Parliamentary notice of a Nation's gratitude.

FARADAY ON TABLE-TURNING.

A month ago, when sober people were beginning to give some credence to the wonderful stories continually being repeated to them of tables whirling round so fast that those who had set them in motion were unable to follow, dashing through doors and windows, or up and down stairs,—when they even listened with some little fear and trembling to still more wonderful accounts of articles of furniture, which they had hitherto regarded as commonplace and respectable, suddenly acquiring intellectual faculties, and returning, by means of rappings, correct answers to any questions put to them,—when some members of the Profession laid aside common-sense for a time under the influence of the epidemic delusion; and when sundry ladies of susceptible temperaments hinted dark mysteries of supernatural or diabolical agency,—we attempted, even at the risk of ridicule for entering gravely upon a subject unworthy of serious investigation, to distinguish fact from fiction, and to show that the rotation of the table was solely due to the force exerted upon it by the experimenters, perhaps unconsciously. We pointed out what a small amount of force was required to move tables of considerable size when set on castors, and proved that the amount of muscular power necessary might really be the result of involuntary muscular action, or unconscious effort.

The extent to which the popular delusion was carried was so great that Professor Faraday has not thought it beneath him to attempt to correct the general error. The *Times* of June 29, and the *Athenæum* of the 2nd of this month, contain the results of his experiments. He carried on his investigations with parties, as he says, "very honourable, very clear in their intentions, successful table-movers, very desirous of succeeding in establishing the existence of a peculiar power, thoroughly candid, and very effectual." He could not obtain the slightest trace of electrical or magnetic effects, or the smallest indication of any peculiar natural force, nor anything more than mere mechanical pressure exerted inadvertently by the persons around the table. He therefore proceeded to analyse that part of the pressure exerted in a horizontal direction:—

"A soft cement, consisting of wax and turpentine, or wax and pomatum, was prepared. Four or five pieces of smooth slippery cardboard were attached one over the other by little pellets of the cement, and the lower of these to a piece of sand-paper resting on the table; the edges of these sheets overlapped slightly, and on the under surface a pencil-line was drawn over the laps, so as to indicate position. The upper cardboard was larger than the rest, so as to cover the whole from sight. Then, the table-turner placed the hands upon the upper card,—and we waited for the result. Now, the cement was strong enough to offer considerable resistance to mechanical motion, and also to retain the cards in any new position which they might acquire, and yet weak enough to give way slowly to a continued force. When, at last, the tables, cards, and hands all moved to the left together, and so a true result was obtained, I took up the pack. On examination, it was easy to see, by the displacement of the parts of the line, that the hand had moved further than the table, and that the latter had lagged behind;—that the hand, in fact, had pushed the upper card to the left, and that the under cards and the table had followed and been dragged by it. In other similar cases, when the table had not moved, still the upper card was found to have moved, showing that the hand had carried it in the expected direction. It was evident, therefore, that the table had not drawn the hand and person round, nor had it moved simultaneously with the hand. The hand had left all things under it behind, and the table evidently tended continually to keep the hand back.

"The next step was, to arrange an index which should show whether the table moved first, or the hand moved before the table, or both moved or remained at rest together. At first this was done by placing an upright pin fixed on a leaden foot upon the table, and using that as the fulcrum of a light lever. The latter was made of a slip of foolscap paper, and the short arm, about ¼ of an inch in length, was attached to a pin proceeding from the edge of a slipping card placed on the table, and prepared to receive the hands of the table-turner. The other arm, of 11½ inches long, served for the index of motion. A coin laid on the table marked the normal position of the card and index. At first the slipping card was attached to the table by the soft cement, and the index was either screened from the turner, or the latter looked away; then, before the table moved, the index showed, that the hand was giving a resultant pressure in the expected direction. The effect was never carried far enough to move the table, for the motion of the index corrected the judgment of the experimenter, who became aware that, inadvertently, a side force had been exerted. The card was now set free from the table, *i. e.*, the cement was removed. This, of course, could not interfere with any of the results expected by the table-turner,—for both the bundle of plates spoken of and single cards had been freely moved on the tables before; but now that the index was there, witnessing to the eye, and through it to the mind, of the table-turner, not the slightest tendency to motion either of the card or of the table occurred. Indeed, whether the card was left free, or attached to the table, all motion or tendency to motion was gone. In one particular case, there was relative motion between the table and the hands. I believe that the hands moved in one direction; the table-turner was persuaded that the table moved from under the hand in the other direction. A gauge, standing upon the floor, and pointing to the table, was therefore set up on that and some future occasions,—and then, neither motion of the hand nor of the table occurred.

When a more perfect lever apparatus was constructed and used,

"The result was, that when the parties saw the index it remained very steady; when it was hidden from them, or they looked away from it, it wavered about, though they believed that they always pressed directly downwards; and, when the table did not move, there was still a resultant of hand force in the direction in which it was wished the table should move, which, however, was exercised quite unwittingly by the party operating. This resultant it is which, in the course of the waiting time, while the fingers and hands become stiff, numb, and insensible by continued pressure, grows up to an amount sufficient to move the table or the substances pressed upon. But the most valuable effect of this test-apparatus (which was afterwards made more perfect and independent of the table) is the corrective power it possesses over the mind of the table-turner. As soon as the index is placed before the most earnest, and they perceive—as in my presence they have always done—that it tells truly whether they are pressing downwards only or obliquely, then all effects of table-turning cease, even though the parties persevere, earnestly desiring motion, till they become weary and worn out. No prompting or checking of the hands is needed—*the power is gone;* and this only because the parties are made conscious of what they are really doing mechanically, and so are unable unwittingly to deceive themselves. I know that some may say, that it is the cardboard next the fingers which moves first, and that *it* both drags the table and also the table-turner with it. All I have to reply is, that the cardboard may in practice be reduced to a thin sheet of paper weighing only a few grains,

or to a piece of goldbeaters' skin, or even the end of the lever, and (in principle) to the very cuticle of the fingers itself. Then the results that follow are too absurd to be admitted: the table becomes an incumbrance, and a person holding out the fingers in the air, either naked or tipped with goldbeaters' skin or cardboard, ought to be drawn about the room, &c.; but I refrain from considering imaginary yet consequent results, which have nothing philosophical or real in them."

We have given Professor Faraday's account of these experiments at some length, as it will serve to put a final close to one of the most singular chapters in the history of popular delusions. The philosopher may well be ashamed, that in the present age, and in this part of the world, such a series of experiments should ever have been required. It shows a wide-spread disease of the public mind. Well may Mr. Faraday exclaim, that the system of education "that could leave the mental condition of the public body in the state in which this subject has found it, must have been greatly deficient in some very important principle." We must all bestir ourselves in the cause of national education, if we ever wish to see the follies of Mesmerism, Homœopathy, Table-turning, or Spirit-rappings, received by the people with anything like cautious reflection or sound judgment.

THE LATE SLANDER-CASE AT WIMBLEDON.

We lately reported a case which occupied the Court of Queen's Bench for an entire day, and which suggests several points of interest to the Profession. The plaintiff was Mr. Edwin Fennell, a gentleman of high respectability, practising at Wimbledon; and the defendant was Mr. Adams, the Perpetual Curate of that parish.

It appears, from the evidence given at the trial, and from circumstances which have come to our knowledge, that Mr. Fennell's practice has been seriously injured, and his character considerably jeopardised, by a systematic series of attacks made upon his professional reputation on the part of certain ladies residing in his parish. As it is Mr. Fennell's good or ill fortune to be the medical officer to the Wimbledon District of the Kingston Union, and to be, moreover, the Surgeon to a Maternal Charity established there for the delivery of women at their own residences, it is easy to conceive that charges against him could be trumped up with great facility, and refuted with extreme difficulty. The process of parturition is, of course, so little understood by those who suffer most under its pangs, that neglect may easily be attributed by the patient in cases where none has really existed, and danger apprehended where none was actually to be dreaded. It is, moreover, to be remarked, that, in Mr. Fennell's case, and in that of many gentlemen similarly situated with himself, it is quite impossible to devote that special attention to a great number of cases scattered over a wide area, as it is to attend to a smaller number in a populous district. Hence, however much we, as professional men, may inculcate and practice the rule of waiting with our patients for many weary hours, in expectation of the birth of the child, it is quite plain that where the cases are numerous and widely-dispersed, and the medical men are very few and very badly paid, the mere necessity of the case involves an apparent neglect of some individual patients. Now, it was proved beyond all doubt, that a small number of such accidental and unavoidable occurrences were tortured into a handle for attacking the professional reputation of Mr. Fennell, although he had practised successfully in the district for many years, and had attended between four and five hundred cases of midwifery without a single untoward accident.

The gossiping of some of these women, which ought to have been disregarded by a candid and generous mind, seems to have found a willing listener in the wife of the Perpetual Curate of Wimbledon, who, being the Treasurer of the Maternal Society alluded to, refused to pay to Mr. Fennell his usual fee of half-a-guinea in one of the cases, on the plea that he was not actually present at the birth of the child. As Mr. Fennell, however, had attended the woman diligently, both before and after that event, he very properly insisted, upon principle, that the fee should be paid; and this transaction evidently laid the train for the subsequent proceedings, which, we regret to say, reflected but little credit upon Mr. Fennell's opponents. Instead of openly meeting him face to face—instead of judging him, even if he were in error, upon the principles of Christian charity—instead of making allowances for the fatigue and the labour of a medical man attending day and night to the necessities of the poor—the course taken by the Curate and his wife was, to meet in secret coteries of ladies assembled from the surrounding neighbourhood, and there to make what are called "privileged communications," imputing the most gross inhumanity and the most culpable ignorance to the medical practitioner. As all attempts on Mr. Fennell's part to obtain an explanation were entirely unavailing, the only course left to him was to risk the expense and the uncertainty of an action at law to vindicate his professional reputation, and to protect his interests.

The result of the trial has been so far satisfactory to Mr. Fennell, that he has completely cleared his character in the eyes of the public and of the Profession; but still he has incurred a large amount of pecuniary loss in these proceedings, besides the distress of mind which his persecution (for we can use no other term) has occasioned him.

In our own Metropolis, or in the large provincial towns, the peculiar system of oppression resorted to in this case against Mr. Fennell would fall harmless upon a medical practitioner; but in a small place like Wimbledon, where there are only two medical men, where each has his female partisans, and where probably one practitioner is the rival of the other, a charge of ignorance or neglect emanating from the minister of the parish and his wife must inflict the most signal injury upon the prospects of the person so charged; and very few persons would exhibit the moral courage shown by Mr. Fennell in boldly challenging his assailants to a Court of Justice, to prove the truth of their charges.

We agree with the Lord Chief Justice Campbell in his regret that this action should ever have been brought; but to Mr. Fennell no other course was open. It does not appear that the slightest charge of moral delinquency has ever been urged against him, or that he has ever behaved in a manner derogatory to the dignity of the Profession; and we feel for him in his necessity of thus bringing his accusers before a public tribunal. On the other hand, we are bound to admit that the defendant, Mr. Adams, is only culpable so far as he has been guilty of giving credence and currency to female gossip, which a judicious man and a Christian minister should have exerted his authority to suppress. We still hope that both parties will now see things in a proper light, and, after the deliberate opinion of the judge and the verdict of the jury, that they may be induced to shake hands with one another, and forget this unfortunate transaction.

THE AZTECS.

We have been lately favoured with an opportunity of seeing and examining two of the most extraordinary specimens of the human race which have ever been brought to this country; and as they have excited great interest in

the scientific circles of the Metropolis, some account of them may prove interesting.

The male child is 33¾ inches in height; the female, 32 inches. The male weighs 23 lbs., having gained 1⅝ lbs. in the last three years. The girl weighs 21½ lbs., while she only weighed 17 lbs. three years ago. Their appearance is very peculiar,—the forehead retreating, the nose and upper jaw projecting, and the lower jaw retreating. The hair is black, long, coarse, and curls naturally. The complexion is a dark clear olive, and the skin of the parts covered by the clothes is lighter than that of those exposed to the sun. The spine of the boy is slightly curved. His legs are weak. He cannot extend his arms completely, from some malformation of the elbow-joint; and there is also a defect in the articulation of the little finger. The girl is well formed. The expression of countenance is decidedly idiotic, although a bright, restless curiosity gleams from the eyes.

The story told of them is highly calculated to excite interest. They are said to be the representatives of an almost extinct race of beings like themselves,—degenerated descendants of the Aztecs, who were expelled from Mexico by Cortes. Stevens, in his work on Central America, gives an account he received from a priest, residing at Santa Cruz del Quiche, a city beyond the Great Sierra Range, which no modern traveller had explored, but which was said to be inhabited by a peculiar race. Excited by this account, a Mr. Huertis, of Baltimore, and a Canadian, named Hammond, determined to search for the mysterious city. They were joined by a Spanish priest, named Velasquez, who alone returned to tell the story of the death of his companions and his own escape. He gave an account of the domes, minarets, temples, statues, and battlements, he had seen, marvellously like some vision of the "Arabian Nights." The people were said, in manners and customs, to resemble what is known of the Mexicans in the days of Montezuma. The name of the city, he said, was Iximaya, situated in lat. 15° 48′ N., at a level of 9,500 feet above that of the sea, upon the River Lugartos. The people kept themselves entirely separated from all others; and Velasquez stated, that although he was told that white men had previously entered it, no one but himself had ever returned. Among these people were a family said to be direct descendants of noble Aztecs, who had not been allowed to intermarry with those of any other family, and consequently, while degeneration had preserved and exaggerated certain peculiarities of race to such an extent that they presented the marks of a distinct people, they were said at first to have been priests, and afterwards to have been deified and worshipped as idols, and kept apart by the priests as objects of worship. They certainly resemble some sculptured figures of ancient Mexican idols; and, when they sit on the floor, do so with the legs extended laterally, exactly like those figures, in a mode which could only have been acquired in early youth, and which has left the legs so weak and undeveloped, that their gait in walking is tottering.

Thus far Velasquez. Then comes the story of the exhibitors,—that Velasquez brought the two children with him when he escaped, and made them over to the persons who exhibited them in America. It appears that they were afterwards claimed in Philadelphia by a Mexican, who said he was their father, but his claim was rejected by the legal courts; the defence being, not that the children were Aztecs, but that they had been bought of full-grown Indians in Central America. This part of the story requires further examination.

On Wednesday night, they were exhibited at the Ethnological Society, and Professor Owen read a Paper about them, which will appear in due time among our Reports of Societies. His opinion is, that they are not of a peculiar race, but are dwarfish children of some Spanish inhabitants of Mexico, with probably some slight admixture of Indian blood; the hair and complexion associating them with the darker European families of southern Europe.

Considerable discussion will doubtless be raised as to these singular creatures, and the impression produced on first seeing them is so powerful, that we cannot be surprised at many believing the tale told by the exhibitors, and acknowledging them as the representatives of a previously unknown race of the human family. Our own belief is, that it is extremely improbable,—not to say impossible,—that there can exist a *race*, even a limited race, of such beings, and that they must be mere dwarfish idiots of mixed Spanish and Indian blood, of some individual family in Mexico.

MEDICAL BENEVOLENT COLLEGE.

The Right Hon. the Earl Manvers laid the first stone of this College, on Wednesday last, Prince Albert being prevented from being present by indisposition. Large numbers of the Profession attended from London, as well as many provincial surgeons. The site of the proposed new College is finely chosen on a hill side, in the immediate vicinity of the Downs at Epsom—within a very short distance, in fact, of the Grand Stand; and yesterday the locality became almost the scene of an extra Derby-day, in consequence of the announcement, that the first stone was to be laid by Prince Albert. Triumphal arches were erected, and various attempts at floral decoration were made. About four o'clock, however, a rumour began to be circulated that His Royal Highness would not come; and, in a few minutes later Mr. Propert, in a voice broken with emotion, confirmed the intelligence, for he had just received an intimation from Buckingham Palace, to the effect that His Royal Highness was indisposed. In this crisis the noble President of the Institution, the Earl Manvers, consented to act as the Prince's proxy, and so, after a short delay, the ceremonies commenced. The Bishop of Winchester proceeded with the Office which had been compiled for the occasion. The coins and a scroll, illuminated with the following inscription, were then secured in a glass vase, and deposited in a cavity in the larger stone:—

"Hvnc . Lapidem . Primvm .
Edificii . Benevolentiæ . Dicati .
Cvrâ . Stvdioqve . Johannis . Propert . Armigeri . et .
Medici .
Vbi . Medicorvm . Levanda . Svnt . Infortvnia .
Amoris Avxilio . Christiani .
Posvit . Illvstrissimvs .
Albertvs . Princeps . Reginæ . Consors .
Die . Jvlii vi . A.D. MDCCCLIII.
Gloria . Deo."

"On this 6th day of July, 1853, H.R.H. Prince Albert laid this first stone of the Medical Benevolent College; projected, under Providence, by John Propert, Esq., himself a Medical man, in aid of those his fellow-practitioners who, having long alleviated the sufferings of others, need at last the soothing hand of friendship themselves."

This inscription was also engraven on a brass plate, and placed over the cavity. The upper stone was then lowered into its place, and, after certain mystic ceremonies, was pronounced by the noble Earl to have been "well and properly laid." Three hearty cheers for the prosperity of the institution were given; and then perhaps the most interesting part of the proceedings commenced, namely, a procession of ladies who deposited purses upon the newly-laid stone. Nearly 1,600*l.* was thus collected. Finally, the Bishop dismissed the assembly with the blessing, and the proceedings terminated by the children singing the Hundredth Psalm.

About 300 persons sat down to a *déjeûner* in a large tent, and afterwards,

The noble Chairman gave the loyal toasts, including a special wish for the speedy recovery of His Royal Highness, and then proposed "Prosperity to the Medical Benevolent College."

The healths of Mr. Propert, the Chairman, and other gentlemen, were also drunk with much enthusiasm, and the company retired.

It only remains to add a few words respecting the new edifice. The entire design comprises the three sides of a quadrangle, with a detached chapel, occupying a portion of the fourth. The principal facade will be no less than nearly a thousand feet long. The entrance is under a tower, and leads into a spacious hall, round which are disposed the buildings appertaining to the school. On the right will be the schoolmaster's house and the school-room, and on the left will be the warden's residence and the great dining-hall. Each wing will consist of a vast number of rooms for the pensioners, in two storeys, each set comprising three apartments and every convenience. The contract, which has been let to Messrs. Glenn and Co., of Islington, is for 22,000*l.* and will complete only about two-thirds of the principal side of the building.

The list of subscriptions yesterday was headed by Earl Manvers with 52*l.* 10s., Sir R. H. Hoare with 100*l.*, Mr. Winthorpe with 525*l.*, the Brighton Railway Company with 100*l.*, and Dr. Forbes with 100*l.* The total sum realised, including the purses deposited on the stone, was about 3000*l.*, the amount previously raised being over 18,000*l.* We must congratulate Mr. Propert on the great success which has, so far, attended his benevolent exertions.

REVIEWS.

On the Use of an Artificial Membrana Tympani in Cases of Deafness, Dependent upon Perforation or Destruction of the Natural Organ. To which is added, a Paper, entitled, Ought the Tonsils or Uvula to be Excised in the Treatment of Deafness? By Joseph Toynbee, F.R.S., Fellow of the Royal College of Surgeons of England, Aural Surgeon to St. Mary's Hospital, Consulting Aural Surgeon to the Asylum for the Deaf and Dumb, and Consulting Surgeon to the St. George's and St. James's General Dispensary, London. London: Churchill. 1853.

This is a short but valuable paper on the structure of the healthy membrana tympani, on its functions, and on those of the tympanum and Eustachian tube, and on the formation and use of an artificial membrana tympani. Mr. Toynbee has received the medal of the Society of Arts for this excellent contrivance, which he describes as follows:—

"The artificial membrana tympani made by Messrs. Weiss, from these directions, has hitherto been perfectly successful. As supplied by them, the portion of vulcanised India rubber or gutta percha is about three-quarters of an inch in diameter, which leaves sufficient margin for the surgeon to cut out a membrane of any shape that may seem to him desirable, and to leave the silver plate either in the centre or towards the circumference, at his discretion.(a) The silver wire is of sufficient length to admit of the membrane being introduced or withdrawn by the patient, but is not perceived externally, except upon especial observation. A second kind of artificial membrane is made, by fixing the layer of gutta percha or vulcanised India rubber between two very delicate silver rings, from the eighth to the sixth of an inch in diameter; these rings are rivetted together, leaving a portion of the membrane drawn moderately tense in their centre; a margin of the membrane is also left beyond the circumference of the rings, so as to prevent the latter being in contact with and irritating the tube of the ear. To the surface of one of these rings the silver wire is fixed by two branches, and they should be joined, so that the outer surface of the rings should look obliquely outwards and forwards instead of directly outwards, thus imitating the direction of the natural membrana tympani. This kind of membrane is often preferable to that previously described, if the meatus is sufficiently large to admit of its passage.(b) A pair of forceps is made, whereby the artificial membrane can be more easily introduced and withdrawn."

(a) The surgeon can bend the wire, so as to make the outer surface of the membrane face obliquely outwards and forwards, like the natural organ.

(b) In some cases, however, it produces a loud noise, as if it were too tense; it would, perhaps, be desirable to have it made with only one branch, so that the surgeon may be able to alter the angle of the membrane with the stem, according to the case.

The following remarks are very interesting:—

"The cases in which the artificial membrana tympani is of the greatest benefit are those where there is a well-defined aperture in the natural membrane; or, if it be entirely absent, where there is simple hypertrophy of the mucous membrane of the tympanum, with or without discharge from its surface. In these cases, it will be found that the organ has by no means entirely lost its power of discerning sounds; as a general rule, the human voice is heard when the mouth of the speaker is situated within about a foot of the patient's ear, and when the words are spoken slowly and distinctly. The diminished power of hearing just noticed, while it entirely excludes the sufferer from the advantages of general conversation, is, however, greatly aggravated when, to the affection of the membrana tympani and mucous membrane of the tympanum, the stapes has become ankylosed to the fenestra ovalis, or the nervous expansions have been injured. In such cases where the patients require to be shouted to close to the ear, the artificial membrane will not prove of any service.

"*The Mode of Applying the Artificial Membrana Tympani.*—As in cases of perforation or destruction of the membrana tympani there is so frequently catarrhal inflammation of the mucous membrane of the tympanum, it is obviously important that no foreign substance should be placed in contact with that membrane; and, as there is always a margin of the membrana tympani remaining, the object of the surgeon should be to keep the artificial membrane external to the latter. After carefully noting the size of the inner extremity of the meatus to which the natural membrana tympani was attached, the operator should then cut the artificial membrane as nearly of the size and shape of the natural one as possible, taking care at the same time to keep the margin quite smooth and regular.(a) The patient must then be placed with the head inclined to the opposite shoulder, while a strong light is thrown into the meatus, which, if liable to discharge, should have been previously syringed. The operator will now take the artificial membrane, and, having moistened it with water, pass it, by means of the silver wire, gently inwards, until it has reached what he considers the natural position. This he will ascertain by the occurrence of a faint bubbling sound, caused by the escape of the slightly compressed air beyond it; he will also feel a slight obstruction offered to its further passage by the remnant of the natural membrane. Should he attempt to pass the artificial membrane beyond this point, the patient will complain of pain, which until then had not been felt. The most certain test, however, of the artificial membrane having been properly placed, is the sensation of the patient, who discovers, by the sound of his own voice, or that of the surgeon, or by the movement of his tongue and lips, that his hearing has been suddenly much improved.

"It will be imagined, that great care must be taken to cut the membrane so that it shall fit the inner extremity of the meatus with exactness, since, if too large, it would cause discomfort; and, if too small, it would not fulfil its purpose of rendering the tympanum an air-tight cavity. It is not easy, in all cases, to fit the artificial membrane exactly to the inner extremity of the meatus, so as not to allow of any communication between the air in the tympanum and that in the external meatus; this is, however, the object which should always be sought to be attained. At first, the patient should be instructed not to use the artificial membrane for more than two hours daily; and, if he complains of an uncomfortable feeling, one hour, or even half an hour, will be sufficient.

"It would, perhaps, be expected, that the contact of a foreign body, like the artificial membrana tympani, with the wall of the external meatus, would soon become intolerable; such, however, is not the case, and several patients have left my room without being able to say, from the sensation in the ear, whether any foreign body were there; many have now worn this apparatus daily, during several months, without having suffered the slightest pain. The explanation of this circumstance may be found in the fact, that the most sensitive part of the meatus externus is about its centre, the membrane in the immediate vicinity of the membrana tympani not being so abundantly supplied with nerves; another explanation is, that the circumference of the artificial membrane presses with extreme gentleness against the wall of the meatus.

"The results of the application of the artificial organ have

(a) In cases where only a small border of the natural membrane remains, it is often desirable to cut the artificial membrane of a size larger than the inner extremity of the tube, so that its edge may turn outwards.

been much more satisfactory than I had reason to anticipate. I have already used it beneficially in nearly fifty cases."

Such information as this leads us to hail with no little satisfaction the announcement, that Mr. Toynbee is preparing for publication a complete treatise on the diagnosis and treatment of diseases of the ear.

The Progress of Improvement in the Treatment of Consumption and other Pulmonary and Laryngeal Diseases, and on some new Remedial Means. By James Turnbull, M.D., Physician to the Liverpool Royal Infirmary, etc. 8vo. Pp. 74. London: Churchill. 1853.

In 1850, Dr. Turnbull published a short essay on the Curability of Consumption. The present pamphlet is intended, by the cases it contains, to add fresh evidence to that already adduced by him in favour of the opinion, that phthisis pulmonalis in all its phases and at every stage is curable. As we remarked when noticing Dr. Turnbull's previous treatise, no one now doubts the fact, that tubercles may experience obsolescence or cretefaction; but the facts brought forward by the author do not carry conviction to our mind in regard of the truth of the statement, that tubercles may be absorbed, or that tubercular cavities may heal. Dr. Turnbull appears to have overlooked one point, viz., that cretaceous masses found in the lung are by no means *per se* evidence of the pre-existence in the lung of tubercles. The remarks on the employment of cod-liver oil, the author's great remedial agent in the treatment of phthisis pulmonalis, contain nothing new.

Dr. Turnbull has employed pretty extensively several therapeutic substances, which, at various times, have enjoyed a reputation for their good effects in the treatment of consumption. The following are the chief results he has obtained:—

Tar-water is particularly useful in allaying "the sickness and vomiting, with irritability of the stomach, so common in this disease, and which causes the oil to rise or be rejected; also for the purpose of checking, in some degree, profuse expectoration and night perspiration."

Creosote, "in cases of consumption, relieves the cough, promotes easy expectoration, and lessens the quantity of this discharge." It is a useful remedy in conjunction with metallic astringents, "in the diarrhœa of consumption."

Medicinal Naphtha is a mixture of pyroxylic spirit, acetone, and acetate of oxide of methyle. This agent "is decidedly useful in relieving cough, checking profuse expectoration, and stopping sickness."

Dr. Turnbull tried these several agents separately; he found no difference in their effects.

Naphthaline, "in doses of from three to ten grains, relieves the cough, and causes easy expectoration; and, at the same time, it not unfrequently diminishes the quantity." It often relieves difficulty of breathing.

Pyroxanthine is a crystalline solid, obtained from crude pyroligneous acid. "It has a slightly bitter taste; but I have not," Dr. Turnbull says, "been able to discover that it exerts any decided action on the animal economy."

Alcoholic Extract, and the Tincture of the Seeds of the Œnanthe Phellandrium.—This drug was given only in ten cases, "where the cough was complained of as being troublesome." In all, the cough was more or less decidedly relieved; and, in some, more than by any medicine which had been previously given. In almost all, the expectoration was rendered easier; and the quantity was, in several, materially lessened." "In some instances, the patients, after using the phellandrium, slept better at night."

In regard of the topical application of solution of the nitrate of silver in laryngeal disease, Dr. Turnbull states, that he has employed it with advantage, and details two cases bearing on the subject.

The Sea-Weed Collector's Guide; containing Plain Instructions for Collecting and Preserving, and a List of all the Known Species and Localities in Great Britain. By J. Cocx, M.D., London. 1853. 12mo. Pp. 120.

Those who wish to study sea-weeds will find comprehensive and explicit instructions for collecting and preserving them in this little book, with practical directions for enabling them to exhibit the specimens they have collected. It will be a useful companion to those who reside near our sea-shores, or to those who visit them in search of health or recreation.

PERIODICALS.

HALF YEARLY.

Braithwaite's Retrospect for the past half-year hardly sustains its reputation. There is a want of arrangement, from the great length of the Appendix.

Ranking and Radcliffe's Half-yearly Abstract, for July, is an admirable Number, full of information, arranged with great care, in almost perfect order.

QUARTERLIES.

The British and Foreign Medico-Chirurgical Review contains a number of important Papers on the Nervous System, Uterine Disease, and Fatty Degeneration; with Analytical and Critical Reviews on many other subjects, of such excellence, as to sustain its well-earned reputation as the first Medical Review in the world.

Forbes Winslow's Journal of Psychological Medicine contains valuable Papers on our Pauper Lunatic Asylums, a long analysis of Guislain's Work on Insanity, some Statistics of Mental Diseases in Denmark, Critical Reviews on the Elements of Psychology, the Dietetics of the Soul, Insanity in India, and a number of other subjects interesting to those who attend to the disorders of the mind.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON COLLOID CANCER, WITH REMARKS UPON NON-MALIGNANT COLLOID GROWTHS.

By K. ROKITANSKY.

The Author describes three forms of colloid cancer, which he regards as species of the same genus. These growths consist of two elements, a fibrous network and a jelly-like substance filling up its interstices.

The fibrous network is formed of bands of areolar tissue, interlacing in various directions. It grows in a manner somewhat analogous to the so-called dendritic vegetations in the knee-joint. From the older portion proceed certain flask-shaped excrescences, consisting of a hyaline membrane, which contains numerous nuclei and nucleated cells. These develope into fibres of areolar tissue, so that the excrescence ultimately forms a solid membranous expansion. In this, according to the author, holes are formed, (by some process yet to be explained,) and the excrescences from other parts of the tumour growing through these holes, produce an inextricable interlacement. The older portion of this framework consists, naturally, of larger and more fully-developed bands of areolar tissue, and the spaces enclosed by them are larger than in the younger part.

These spaces, occupied by the jelly-like substance above-mentioned, are for the most part free, but in some instances enclosed, so as to form cysts. These, which are termed by Rokitansky, *cystoids*, are not, according to his view, true cysts, being merely accidentally shut in by the growth of the membranous framework.

Of course, from this point of view, the entire framework is to be regarded as a new formation.

The jelly contained in the interspaces or areolæ of the framework, is a transparent homogeneous substance, containing sometimes, and in variable proportion, the elements of areolar tissue,—viz., oblong nuclei, caudate or spindle-shaped cells, and delicate, roundish, nucleated fibres. These latter are identical with what Virchow has described as corpuscles of areolar tissue.

1. Such are the general characters common to all the three forms of colloid cancer. The first variety is distinguished by a peculiarity in the arrangement of the elements found in the jelly-like substance. The nuclei, cells, and fibres, have a *concentric* disposition, and the jelly itself appears streaked in the same manner. This appearance is accounted for by Rokitansky in the following manner:—A nucleus undergoes a process of abnormal development, and becomes a structureless vesicle of uncertain size. Around this vesicle are grouped the other elements, so as to enclose it in a kind of socket, or alveolus; and hence he has given to the growth in which this arrangement is found, the name of alveolar cancer. He appears to regard this as a less malignant form of the disease than the other two.

2. Rokitansky's second species is characterised by a

colossal framework, of which the interspaces are frequently closed, constituting spurious cysts,—*cystoids*. These cysts contain a jelly-like substance, differing from that of No. 1 only in wanting the concentric or alveolar disposition.

3. The third variety presents an overwhelming mass of the jelly, traversed by a microscopically minute framework.

The above three forms are regarded by Rokitansky as genuine cancer; he maintains, that they may even *pass into* true medullary cancer by an active cell-development in the jelly-like substance; and this statement we can confirm. The remaining portion of his paper is devoted to the consideration of certain other growths, which are also distinguished by the presence of a jelly-like substance within them, but which he regards as *non-malignant*. Such are the "collonema" of Müller, the so-called "cysti-sarcoma," etc. These he regards as the embryonic form of *fibrous* tumours. We regret that we cannot quit this subject with words of unmixed approbation. The science of pathology owes much to Professor Rokitansky; but this is not the first of his publications in which dogmatic assertion has taken the place of logical proof. We could wish to know *how* the Professor distinguishes a "structureless vesicle" under the microscope, or upon what evidence he assures us that it is a dilated cytoblast?

Again, he tells us, that the fibrous tissue and dendritic vegetations developed in certain non-malignant colloid growths, spring, *not from cells*, but by a process of splitting of the gelatinous mass.

Much as we respect the learned author, we must, nevertheless, protest against the promulgation of a theory so entirely unsupported by facts. The chemical composition of the supposed self-organising mass is unknown; the signification of its microscopic elements is most uncertain. The doctrine now prevalent in the better German schools, relative to the development of tumours, is, that they all proceed from cells endowed with morphological or with reproductive power; that while, in the former, the growth comes to an end by the transition of he cytoblasts into known forms, (such as areolar tissue, cartilage, bone, etc.,) in the latter they become cells, which, endowed with an endogenous power, speedily reproduce themselves, and so on, forming eventually a soft fungous mass, with partially disorganised surface, and rapidly-growing base.

Now, of this process of cell-growth, both in the vegetable and in the animal kingdom, we have ample proof; every stage may be demonstrated under the microscope. Of the splitting of a coagulated fluid into permanent fibres *we have no proof whatever*, save the assertion of Rokitansky, who, perhaps, has brought forward this view rather with the idea of having its probabilities tested, than with any very deep conviction of its truth. Still, the tendency is so great in this country to accept, without consideration, any dictum emanating from an honoured source, that we must warn our readers to beware of accepting this theory in its present form. Germany has other and better observers than Rokitansky, and more accurate schools of microscopic pathology than that of Vienna.—*Wien. Ztschr.*, 1853.

REPORT UPON A CASE OF DEATH FROM CHLOROFORM.

[Communicated to the Society of Surgery, by M. DE VALLET, Surgeon-in-Chief to the Hôtel-Dieu, d'Orleans.]

A soldier of the line, aged 25, apparently in good health, and of strong frame, consulted M. Vallet for a small tumour (encysted?) situated behind the right labial commissure. Before operating, M. Vallet proceeded to direct the inhalation of chloroform. The patient, fasting, being placed in the horizontal posture, the chloroform (about one gramme, or gr. xx.) was poured upon a hollow sponge and applied to the nose, the mouth being left free. At the expiration of a minute, no effect having been produced, four grammes (rather more than a drachm and a quarter) were poured on the sponge, and, at the expiration of four minutes, the patient, without having experienced any irritation of the larynx, without having manifested any resistance, without redness of the countenance, and after only a slight period of agitation, fell into a state of insensibility fit for the operation. Scarcely had the incision been made necessary to expose the cyst, when the patient became pale, respiration was suspended, and he sank into a state of extreme collapse. All the usual remedies were tried, and without avail. M. Vallet opened the trachea, and performed artificial respiration with an elastic tube; then an electric current was sent by needles through the region of the heart. The patient died without any sign of re-action.

Examination of the Body.—The vessels of the brain were empty: the lungs were congested with blood, which in some situations was extravasated: the heart was excessively flaccid; there were some soft clots in the right cavities; the left were empty. The stomach was full of gas; the liver, spleen, and kidneys were gorged with black blood. The blood from the subclavian veins was analysed by an experienced chemist, but no trace of chloroform was detected.

Death, according to the author, seems to ensue under two conditions:—

1. It is preceded by symptoms resembling those of asphyxia, when first respiration, and then circulation cease.

2. Life seems extinguished yet more quickly in profound syncope.

A case of death, occurring under the latter circumstances, was mentioned by M. Gorré, of Boulogne, and communicated to the Academy, 1848. A lady, aged 30, requiring a fistulous passage to be laid open, inhaled chloroform from a handkerchief, upon which about twenty drops had been poured. Scarcely had she inspired, when she exclaimed, "I am suffocated." The face became pale, the features changed, respiration was embarrassed, and froth came to the mouth. Less than a minute after the first administration of the chloroform, the handkerchief was withdrawn, and the surgeon proceeded with the operation, believing the symptoms were transitory, but life was soon found to be extinct.

In this case, as in the one already related, there were found, upon *post-mortem* examination, congestion of the lungs and excessive flaccidity of the heart. The cerebral vessels were empty.

M. Jobert (de Lamballe) has read before the Society a well-drawn-up *Mémoire* upon the subject of Anæsthetics. We think him rather unfair to our distinguished countryman, Dr. Simpson, to whom the merit of introducing chloroform in surgery most undoubtedly belongs, when he remarks:—"M. Fleurens in France, and M. Simpson in England, have introduced into science a most valuable anæsthetic, chloroform; the first, by his experiments upon animals; the second, by his administration of it to man." We cannot allow this "sharing of the honour;" and we are convinced M. Jobert will acknowledge it to be rather disingenuous. The greater part of his conclusions are not new; they are those generally adopted in this country. But, in comparing chloroform and ether, he remarks:—

"Ether irritates the passages which it traverses, is disagreeable to the patient, and excites cough. Chloroform produces no irritation, and is pleasant (?) to those who use it. Chloroform produces but feeble organic muscular irritation; ether excites it violently, since its inspiration causes agitation of the heart and other muscles. Ether provokes its anæsthetic effects slowly, and they are prolonged over some time, under the form of intoxication, pain in the head, small pulse, and coldness of the body. Chloroform, however, ceases acting after the removal of the apparatus. Ether changes the colour and consistence of the blood. Such is not the case with chloroform. Chloroform does not interfere with the cicatrization of the wound; ether renders it slow, by diminishing the consistence of the plastic lymph.

"Ether excites the organs of generation; chloroform does not. Ether can with difficulty produce death; such is not the case with chloroform, which can make life cease instantaneously when the patient is not very closely watched. He infers that ether is preferable to chloroform in cases where there is great depression of the nervous system from sudden injury, as after a gunshot wound; in cases where there has been a long and abundant suppuration, great loss of blood, or where the chlorotic condition is in an advanced state."

We understand that Mr. Stanley, of St. Bartholomew's Hospital, is now giving sulphuric ether a more extended trial, in producing insensibility upon patients about to undergo operations; and perhaps it may be found, that there are cases specially adapted to both preparations. Chloric ether, too,—at one time used as an anæsthetic extensively by Mr. Lawrence in private practice—should not be forgotten; it can be inhaled readily in cases where sulphuric ether excites the most uncontrollable cough.

LITHOTOMY.

The extraction of a urinary calculus from the bladder by the recto-urethral operation has been now successfully accom-

plished by Mr. Lloyd, in three instances, at St. Bartholomew's Hospital. The stone was removed quickly, and the patients have done well. It may, therefore, be interesting to state, that the proceeding resembles, in great measure, the operation performed by Vacca Berlinghieri, and described by Malgaigne. (*Manuel de Médicine Opératoire*, p. 686, 1843). The subject having been placed as in the lateral operation, a staff is introduced into the bladder, and given to an assistant, who is directed to hold it in a vertical direction, so that the groove should correspond exactly with the mesial line. The index finger of the left hand is introduced into the rectum, the palmar surface being turned forwards. Upon its flat surface a straight bistoury is inserted to a depth of eighteen millimetres (about nine lines) from the margin of the anus. The handle of the knife being then depressed, the point is thrust through the walls of the intestine, and the edge being also carried upwards, the sphincter ani, the inferior part of the rectum, the perinæum from the anus to the bulb, and the cellular interval which separates these parts, are divided together. The inferior region of the prostate can then be felt through the wound. In front is felt the membranous portion of the urethra containing the staff. The nail of the index finger is next used, as in the lateral operation, to discover the groove in the staff, and to conduct to it the point of the bistoury. The staff is then withdrawn, and the bistoury is thrust into the bladder; the edge is turned downwards, so as to divide partially, but not completely, the prostate in the mesial line, care being taken to avoid re-entering the incision of the rectum. Therefore, this operation effects the division of those parts which were torn in the old operation with which the "apparatus major" was associated. Mr. Lloyd introduces a speculum into the rectum; his incision is, perhaps, somewhat deeper than that of Vacca Berlinghieri; he *dilates*, but does not cut the prostate, unless the stone should be of very considerable size.

The incision appears remarkably small when the operation is concluded; and, as Malgaigne has observed, at each effort of excretion, the mucous membrane descends over the wound, which is thus placed under conditions most favourable to healing without leaving a fistula.

GENERAL CORRESPONDENCE.

MR. PRETTY'S CASE OF DETAINED COAGULUM.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is indeed with much regret that I find Dr. Murphy has taken umbrage with the communication of mine which appeared in the *Medical Times and Gazette* of the 25th of June ult. His letter, which appeared in your last Number, has very much surprised me in more respects than one. The tone is unfriendly, and the imputations cast upon me are both unjust and undeserved; but I am most willing to make every allowance for very sensitive feelings, and to express my sorrow, that what I had written should, unintentionally and most unexpectedly on my part, have given any uneasiness to Dr. Murphy. I have received acts of courtesy and kindness from him which I have been ever willing to return; I acknowledge his eminent ability, have esteemed him as a gentleman; and wilfully to attack, either directly or indirectly, his professional character, and to expose his blunders, is what I utterly disclaim as actuating me in the report of a case which presents itself to me as full of professional interest from beginning to end. The mistake it was necessary for me to relate in connexion with it (not to expose a blunder), as showing the rather more than ordinary peculiarity of the fact I wished to record. Your foot-note to Dr. Murphy's letter contains a remark which, I think, will be acquiesced in by all your readers,—"that no one could discover from Mr. Pretty's letter who was the physician-accoucheur consulted."

I have used certain designations only with the view of drawing greater attention to something uncommon in the case itself, and not to the individual who made the mistake. I have reason to believe that the Doctor, in his professional intercourse with his *confrères*, was not able to say with others, "I am not the person alluded to," and so could not escape detection; and yet this might precisely have happened had the word "Professor" been entirely omitted. Admitting that the Doctor alluded to thus became known to two or three professional friends, or even more, what does it all amount to? Simply to a mistake, which equally eminent men have made in some way or other, and here made from a careless investigation, and not from ignorance. How nearly did this occur in the case I have quoted, and reported by Dr. Ramsbotham himself. He might have acknowledged the mistake, which did no one any harm, and which would not have lowered him in the estimation of all right-judging and honourable-minded persons; and, further, he might have added, "I saved the patient's life by removing the offending cause, and by plugging the vagina." I consider the treatment of the case as highly creditable to the Doctor, and it deserves my praise. I must state, that it was only a short time since that I determined upon reporting the case, and that, had I met the Doctor, I should in all probability have informed him of my intention. I did not consider it really necessary to see him purposely about it, being at that time under the persuasion that he must have changed his opinion, from circumstances which I have to relate now, though some may think I ought to have done so. I would do so upon a future occasion, for my own sake, and for the sake of avoiding all possibility of being misunderstood, or of unintentionally exciting unkind feelings among one's professional friends.

I, of course, could not possibly tell the Doctor I intended to record the case at the time he gave his valuable assistance. The mistake was not then discovered, and, up to the time of the appearance of his letter, I did not know that he still held the same opinion. I must now advert to some of the Doctor's statements, which more especially call upon me for notice. I need not quote the Doctor's words, they can be referred to in his letter. I have stated that two mutual friends examined the removed substance, and now, further, that it was left with them, and each told me, after his private examination, that it was a coagulum. I have not stated that the microscope was used, certainly not in my presence. One of these two was scarcely to be called my friend, I knew so very little of him; but from his position as Curator of the University College Museum, I did consider him a friend of the Professor's. I left with this gentleman, whose name I do not now recollect, one-half of the substance now in dispute, requesting him to preserve it for Dr. Murphy's examination, as well as his own, as the Doctor would most probably visit the Museum the following day; that I was just too late to see him at the hospital, and that I would write immediately, informing him of the result of my investigation, and begging that he would, for my satisfaction, look at the coagulum as soon as possible. When I asked this gentleman afterwards for his opinion, I was also informed that the Doctor had not been with him. If my letter, of which there is no notice taken, miscarried, he probably did not know the result; and if it did not, he lost, or he rejected the opportunity of making any examination he might have thought necessary. With respect to the second friend, no one will venture to doubt his judgment, knowledge, or his honour, I doubt not the Doctor's full belief of the accuracy of his own opinion, yet, I own, it does surprise me somewhat that he still maintains it. There is the testimony of two friends and myself and son on one side, who have seen the incised substance, and his testimony alone on the other, who did not see the interior of it. If I am right, it is very convincing to my mind that the case is quite out of common experience, and that Dr. Murphy really knew no more about it than myself, though able to render the patient the most valuable aid; if I am wrong, the ascertaining of a true, but deceiving fact, is worth obstetric notice.

The description of the operation does not quite accord with what one would have expected, supposing that the substance lay with its length corresponding with the length of the uterus, or even the reverse. It was less than an inch and a-half long, half an inch thick, a portion projecting a little from the os uteri, most likely one end; the point of attachment the centre; the uterus only at the seventh month of gestation; and the time, fourteen days after delivery; and the part from which it was detached, whether pedicle or uterus, could not have been situated three quarters of an inch from the os uteri, are points to be borne in mind. Is it not, therefore, as likely that it was attached to the cervix uteri, as that it was to the fundus? I will, however, take the statement as I find it; though, from the length of time since the operation, some inaccuracy might well be overlooked. I will only add, that no substance was discharged after its removal.

My dissent was probably only an anxious doubt; but it was as strong as the circumstances would permit, and it may have been given in such a *sotto voce* manner, as to have conveyed the impression described. This, be it remarked, took place within the house of our patient, and in a room with other persons. Unfortunately, everything that was said and done had very little secrecy about it; the opinion was given while the operation was being performed, and repeated afterwards; and some words dropped unguardedly from the Doctor's lips at the bedside of the patient that did not make me quite comfortable, though I am sure that no intention existed to give us pain. I now only allude to them

because they were well calculated to excite in me the most careful research. I examined all the discharges, and inspected closely all the cloths; this I had done more or less from the beginning. It was satisfactory to my mind and feelings afterwards, to know that the patient had not suffered from any want of care or skill in removing the placenta by me, which would not have been my position, (perhaps blamelessly so,) had the substance turned out to have been a portion of retained placenta. I did never consider the placenta to have been adherent, and retained, but detached from its original place, and detained *in transitu:* this, I think, will appear from the first attempt which I made to remove it, having my hand only in the vagina. It is a common occurrence to find the placenta detached, and lying partly in the vagina, and partly in the uterus, and sometimes down upon the contracting cervix and os uteri, when the pressure of two fingers, without breaking into its texture, will easily remove it. This seventh-month placenta was tender, and easily perforated by the fingers.

I find it necessary also to express my non-acquiescence in Dr. Murphy's postulation, "that a retained portion of placenta would cause such symptoms, (a draining hæmorrhage and offensive discharges,) a coagulum would not." One incontrovertible fact is worth a hundred theories. That the above symptoms do generally follow a retention of a portion of placenta I am ready to admit; but that they do occur without it I can positively affirm. I do remember to have known them to follow difficult, protracted, or instrumental labours, where there existed not the shadow of a doubt about the delivery of the entire placental mass. Moreover, a grumous discharge generally attends the putrifying process of a retained portion of placenta; and I would ask those better acquainted with such cases than myself, if something like placental structure is not generally discoverable in the semi-solid masses, whether large or small, which are discharged under such circumstances? Something differing from a hæmorrhagic coagulum, though often in conjunction with it. But it may be said, You had abundant offensive discharges. I grant it; and would then ask, What is the cause of them? In a greater or less degree they occur after every labour, more particularly after tedious and exhausting ones; and also after a retained portion of placenta, and thus accompanying many diseases of the uterus; and, in this case, Mr. J. R. Pretty positively affirms the existence of inflammation both before and after delivery. Might not this coagulum have kept up, in fact, did it not keep up the continuance of the offensive discharges and the hæmorrhage? If a coagulum remained, it undoubtedly did so; for all ceased soon after its removal, aided by the sponge-plugging. The coagulum itself was not offensive, and was not undergoing decomposition; it seemed to have acquired something like a low adhesion, and but from the exhausting discharges accompanying its presence, it might have remained and become the nucleus of a future tumour, much in the same way as effused blood forms hæmorrhoidal tumours. One word about the medicine: all directions relative to it were probably considered superfluous. My son saw the patient some eight or ten hours after the operation, late in the evening, and did not see any necessity to interfere in the directions given for its administration. The whole of the medicine was given before the morning visit was made, the nurse not feeling so alarmed as might have been expected by the change, because our patient had experienced some attacks of faintness previously. I have omitted to advert to what passed between us in the street, on the Doctor's way homeward, in the presence of my son. I there asked him, half seriously and half jocosely, "If he could swear that he had removed a portion of placenta," to which he answered to this effect: "I will not do that, but I have no doubt;" and then followed his instruction, "to macerate it in water." Looking upon Dr. Murphy as a gentleman, has rendered this a very painful task to me, my sole object having been, to record the interesting and instructing facts of the case; and I, in conclusion, reiterate, that I have put down naught in malice, and that I hope Dr. Murphy will see that the appearing of his name in connexion with my case was uncalled for, unnecessary, and cannot fairly result from, or be ascribed to, any breach of professional etiquette, or justly blameable conduct on my part in the relation of the particulars which have excited so many ungenerous remarks from him. Dr. Murphy retains his first opinion, which I fully thought he must have given up, and, partly in its defence, has written his letter; but there is wanting a sufficient evidence of an earnest desire to ascertain the real fact, as declared to me by his own friends, whose names could easily have been had; and his object seems to be chiefly to refute and animadvert upon supposed reflections cast upon his professional character, my desire "to expose his supposed blunders, and an ill-disguised attack upon him without justification." A communication, having such objects, either directly or indirectly, in view, would not, I think, have been permitted to appear in the columns of the *Medical Times and Gazette.*

I am, &c.,

70, Mornington-road. WILLIAM PRETTY.

P.S. Since concluding my reply, I have received the following answer to my inquiries respecting the nature of the substance in question from Dr. Robert Barnes:—"Before replying to your inquiry, it has been my desire to peruse carefully the report of the case referred to. I have done so. Both the history of the case and the symptoms are quite compatible with the conclusion of Dr. Murphy, that the substance removed was a portion of placenta. They are no less compatible with your conclusion, that the substance was a coagulum. It often requires very minute inspection of a clot to distinguish it from placenta infiltrated with blood. My examination of the specimen you brought me leaves no doubt in my mind that it was a compressed clot. But do you not think you attach somewhat too great importance to the discrepancy between Dr. Murphy and yourself? In a practical point of view, it mattered little whether the substance was placenta or coagulum, —the plain indication was to remove it. It was removed, and the symptoms ceased. It is hardly worth while to insist upon the mistake of Dr. Murphy as to the nature of the offending substance —a mistake which he would assuredly have avoided had he seen the slightest occasion to determine precisely what the substance really was." I must here make one remark. To distinguish a clot from a portion of placenta has an important bearing upon the care, skill, and perhaps character of the accoucheur. That from both substances nearly similar symptoms can arise he has no doubt, and Dr. R. Barnes is of the same opinion.

[Any further correspondence on this case must be confined to the purely professional question at issue.—ED. *Med. Times and Gazette.*]

CHARING-CROSS HOSPITAL AND DR. EDWARD SMITH.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have hitherto refrained from making any remarks upon the painful subject, which, for some time past, has been agitating the minds of the Medical Committee and students of the Charing-cross Hospital; for, indeed, the whole subject has, from first to last, been veiled in so much mystery, that it requires no ordinary amount of penetration to see through it.

But, Sir, in my own behalf, as well as the majority of my brother students, I trust you will allow me to make a few remarks in relation to the affair, as far as we ourselves are connected with it.

At the close of the last Winter Session, the question of the appointment of a qualified Demonstrator of Anatomy was discussed among us, and a meeting was called, and the following Resolution passed:—

"That a Deputation wait upon Dr. Smith, requesting him to use his influence with the Medical Committee, so as to obtain a duly-appointed Demonstrator; inasmuch as it is the opinion of this meeting, that both duties of Lecturer and Demonstrator necessarily require more time and labour for their efficient performance than can consistently be expected from one person."

This, Sir, was the sum-total of our meeting. Not a single complaint was raised against Dr. Smith, but, on the contrary, we all concurred in rendering to Dr. Smith our acknowledgments of his labours among us during the course. Therefore, neither at that meeting, nor at any period of the whole six months' course, did I hear a single question raised as to Dr. Smith's competency as a teacher, or the least accusation of inefficiency in the discharge of his duties; he was ever courteous and gentlemanly toward us, and ever ready to impart instruction; and I conscientiously affirm it, as my sincere conviction, that he laboured hard for our welfare and that of our school.

And, Sir, the majority (indeed, all the men of our school with whom it is at all a credit to be associated,) naturally feel surprised at the misapplication of a simple and respectful request, intended by us, as from ourselves, to our lecturer, and obviously not from us to the Medical Committee; inasmuch as we had no charge to prefer—no just cause for complaint.

For the Medical Committee I trust I shall never fail to feel a due respect. I regard them with every sentiment of esteem, and have a proper appreciation of their position, both as teachers and directors. And, Sir, it is this very feeling which makes me sympathise with "one of themselves;" for I am indignant when I hear of their permitting "a certain half-fledged, if not half-brained, set to pass a condemnatory critique upon "a learned and accomplished professional brother."

Sir, from these unhappy circumstances, the peace of our school is broken up; there is no confidence now existing among us; and we, the students, are told, that if we cannot approve of all that

the Medical Committee are doing for our welfare,(?) we are quite at liberty to take ourselves off, and go to King's College, or to any other place, whichever suits our inclination. But, Sir, I earnestly hope that we shall not come to a regular turn-out; but that, after all, we shall have the pleasure of again meeting Dr. Smith as a lecturer at our school, and that peace, and confidence, and uninterrupted tranquillity may be restored to us; in which earnest desire, I presume, Sir, that even our "non-unanimous" young gentleman will unite. I am, &c.

EDMUND N. TAPERELL.

NEGLECT OF THE STUDY OF CLINICAL MEDICINE.

[To the Editor of the Medical Times and Gazette.]

SIR,—A notice has been posted in the school of the London Hospital, from Apothecaries' Hall, to this effect, that as considerable laxity has been evinced by students in their attendance on those branches of practical hospital instruction which are included under the term Clinical Medicine, it is hereby requested, that Physicians of hospitals will secure such attendance in whatever manner they may deem most expedient, and that they will not fill up that portion of the schedule appropriated to clinical lectures, except after a *bonâ-fide* attendance."

Now, Sir, at the London Hospital we have not the shadow of a clinical lecture, either in medicine or surgery. How, then, is "a *bonâ-fide* attendance" to be certified? This certainly does not arise from the want of subjects to lecture on; for what hospital in London can boast of a greater number of interesting cases than our own? Is it, then, from the inability of our teachers? I hope, and indeed I feel sure, that it is not. What, then, is the reason, that at (in other respects) the most practical school in London, there is no such thing as a clinical lecture? It is, Sir, I am sorry to say, because the Physicians and Surgeons attached to that school do not choose to take the trouble.

I am, etc. A STUDENT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have perused your remarks, in the last Number of the *Medical Times and Gazette*, upon the neglect of clinical medicine in this country, and the best means of securing its more efficient cultivation, with very great interest and satisfaction. As a third year's student, I feel sure, that, were clinical lectures substituted for a part of those on theoretical subjects, as suggested by you, so as not to increase the immense labour already imposed upon us by the Examining Boards, the plan would prove most effective in an educational point of view, and be highly popular with students.

Even under the present state of things, I am happy to say, that clinical instruction has not been disregarded, either by Professors or pupils, in Birmingham; in proof of which I may mention, that the lectures of the talented and late lamented Dr. Samuel Wright were attended by a very large and most attentive class; and, during the last winter session, a course of clinical ophthalmic lectures, delivered at the Birmingham Eye Infirmary, by Mr. J. V. Solomon, one of the surgeons of the Institution, was attended by many of the students, and excited considerable interest; for, at these meetings, living cases, illustrative of the subject of the lecture, were brought into the room, and the leading characteristics of their disease pointed out to the class; upon the retirement of the patients, the history and peculiarities of each case were gone into, and such practical observations made as related to the subject under discussion, thus rendering the discourses as strictly clinical as possible in this country.

Trusting that your efforts in the improvement of the education of the rising generation of medical practitioners may be rewarded with success, I am, &c. BETA.

Queen's College, Birmingham.

MEDICAL NEWS.

CAMBRIDGE UNIVERSITY.—At a Congregation held July 2, the degree of M.D. was conferred on Henry Thompson, of St. John's College.

COLLEGIATE ELECTION.—The annual election of Fellows into the Council of the Royal College of Surgeons took place yesterday in the library of the Institution. There were not more than sixty-two Fellows present, among whom we observed Messrs. Wilson, Barton, and Windsor, of Manchester; Teale and Nunneley, of Leeds; Harris, of Exeter, etc. Precisely at one o'clock, the President of the College, attended by Sir B. Brodie and Messrs. Luke, Green, Hodgson, etc., entered the library, and, on taking the chair, explained the objects of the meeting. Having called on the Secretary, that gentleman proceeded to read those portions of the bye-laws relating to the election, when the electors handed in their balloting papers to the President, by whom they were deposited in a box until the close of the voting. Messrs. Belfour, Quekett, and Stone were then called on to take the numbers. At the close, the election was declared to have fallen on Messrs. Skey, Wormald, and Luke, the retired members of the Council, who were declared to be re-elected. It appeared to be of some interest among the Fellows present to ascertain the number of votes given to each of the candidates, for several marked the numbers down, besides the gentlemen appointed by the President; and we have been informed by more than one, that the votes were:—For Mr. Luke, 62; Mr. Skey, 60; Mr. Wormald, 52; and Mr. Hilton, 13. It must be a gratifying circumstance to Mr. Luke, that every Fellow present voted for him.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 1st inst.:—

ARGENT, SAMUEL, Hinckley, Leicestershire.
CHAPLIN, THOMAS, Lowes, Sussex.
CLARK, PETER, Kirkconnell, Dumfries.
CRIDGE, EPHRAIM MATTHEWS, Stoke, Devonport.
GOULD, JOHN HENRY, Broad-street, Golden-square.
HALLILAY, JOHN, Wakefield, Yorkshire.
RYATT, WILLIAM HALL, Thirsk, Yorkshire.
SANKEY, ARTHUR HENRY, Dover.
SEARLE, RICHARD BURFORD, Bridport, Dorset.
SPICER, NORTHCOTE WILLIAM, Chard, Somerset.
TURNER, WILLIAM, Lancaster.

THE following gentlemen were admitted members on the 4th inst.:—

DUNN, CHARLES, Scarborough, Yorkshire.
FRASER, JAMES THOMAS, Southampton.
LEACH, HENRY, Trinity-square, Southwark.
LLEWELLYN, EVAN, Mount-place, Whitechapel-road.
MOORE, THOMAS ALEXANDER, Preston, Lancashire.
PHIPPS, JOHN BLAKEMORE, Ipswich, Suffolk.
SILVER, JOHN BYE, West Wratting, Cambridgeshire.
TOMKYNS, ALEXANDER P., Hon. East. India's Comp. Service.
WATTS, WILLIAM EDWARD MONCKTON, Battel, Sussex.

LICENTIATES IN MIDWIFERY.—At a meeting of the Board of Examiners in Midwifery of the Royal College of Surgeons, on the 6th inst., the following gentlemen passed examination:—

COOPER, CLARENCE, Brentford.
COGAN, CECIL CALVERT, Winsley, Wilts.
ELIN, GEORGE, Kent-terrace, Regent's-park.
EWART, JOSEPH, Holmshead, Cumberland.
GRIESBACH, HENRY JOSEPH HURSCHEL, Pocklington.
GWYNNE, DANIEL, Halsey-terrace, Sloane-street.
HOWARD, JOHN WILLIAM, Fenchurch-street.
JONES, JOHN, Swansea.
ROLSTON, PETER WILLIAM, Devonport.
RYATT, WILLIAM HALL, Thirsk, Yorkshire.
SMITH, WILLIAM BASS, Louth, Lincolnshire.
STILES, HENRY, Spalding, Lincolnshire.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, June 30, 1853:—

EDWARDS, ST. JOHN, London.
GILL, KENNEDY, Accrington.
HEIGHWAY, RICHARD CLEE, Shrewsbury.
HILLIER, THOMAS, Stroud, Gloucestershire.
HUNTER, GEORGE YEATES, jun., Margate.
KEMPSTER, WILLIAM NAYLOR, Whitchurch, Salop.
MANIFOLD, MICHAEL FENTON, Dublin.

APPOINTMENTS.

MILITARY.—54th Foot: Staff-Surgeon of the Second Class Eneas Mackintosh Macpherson, to be Surgeon, vice Webster, who exchanges.

NAVAL.—Acting Assistant-Surgeons Gilbert L. King (1853) to the Vesuvius; John C. Robertson (1853) to the Tribune; H. R. Ley, to the Victory flag-ship at Portsmouth.

DEATH.

JARROLD.—June 24, at Greenhill-street, Manchester, Thos. Jarrold, Esq., M.D., aged 84. M.D. Glasgow, 1802. Author of "Essay on the Lateral Curvature of the Spine," "Philosophical, Physiological, and Political Essay on Man, in reply to Mr. Mathews on Population," "Anthropologiæ, or Essay on the Form and Colour of the Person of Man," "Instinct and Reason Philosophically Investigated," "Education for the People," and "Paper on Diabetes Insipidus."

MEDICAL BENEVOLENT FUND.—At the last meeting of the Committee, held June 28, it was resolved, that every applicant for relief shall in future be recommended by two medical men, one of whom must be a subscriber to the fund, and of whom one at least must personally know the applicant. Letters of acknowledgment

were read from the recipients of grants voted at the previous meeting. *Cases.*—1. A very old and infirm practitioner in London, at present almost wholly incapacitated from the practice of his profession. Previously voted two grants of 10*l.* each. Voted 10*l.*; and it was resolved, that his name should be placed on the list of candidates for Annuities. 2. The orphan of a medical man who died abroad; has received several small grants to assist her during her education. Voted 5*l.* 3. The widow of a Surgeon, aged 60, who died in Jamaica in 1822; she has earned a living by means of her needle for many years; she has two grand-children dependent upon her. Voted 5*l.* to assist her to emigrate. 4. The widow of a practitioner, in Lincolnshire, who died last year, leaving nine children, seven of whom are dependent upon the mother. Voted 5*l.* 5. The daughters of a surgeon who practised in London forty-six years, and who died a few years since. One of the daughters is aged 42, and the other aged 47. They have hitherto earned their livelihood by teaching, but both are now suffering from chronic disease. Voted 10*l.* 6. The widow of a surgeon, who died in September last, leaving five children dependent upon her; has assisted in supporting them by means of a day-school; is now in great difficulty. Voted 10*l.* 7. A country surgeon, who has lately become paralytic. Has a wife and four children. Voted 10*l.* 8. A medical man, aged 70, practising in a remote part of the country; lately fallen into a state of poverty. Voted 5*l.*

Mr. Thomas Herbert Maguire, whose name is so well known to our Profession, as having executed the admirable series of Portraits of eminent Physicians and Surgeons, under the direction of Mr. Stone, of the College of Surgeons, has had the honour of being elected Lithographic Artist to the Queen. He has lately completed likenesses of Her Majesty and Prince Albert. His skill in lithographic portraiture has, however, been chiefly exhibited in connexion with members of our Profession.

Bequest.—A lady, lately deceased, has left 1500*l.* towards converting the Dispensary at Penzance into an Infirmary.

Dr. Wagner, whose book on the Excision of Bones and Joints we reviewed last week, has been appointed Director of the large hospital at Dantzig.

Health of the Troops at Chobham.—We are happy to be able to contradict a report, that the troops at this place were in an unhealthy state, which report was evidently made by a Contemporary in entire ignorance of the true facts of the case, since the troops have been in remarkably good health, and which may be chiefly attributed to the judicious arrangements made by the Army Medical Department. On the 2nd of July, we find, from official reports, that, of a total strength of 8940, there were only 122 in the regimental hospitals, and 54 in the general military hospitals,—only 2 of these being severe cases. The regimental hospitals are tents in the rear of the lines of each regiment. The general hospital is at Chobham. It is a building which has been hired for the purpose, and contains 70 beds. Great credit also appears to be due to those entrusted with the care of the camp equipage. We have heard, that the tents have been so well constructed, that, notwithstanding the very heavy rains, the soldiers, when within the tents, have been scarcely inconvenienced by wet.

House of Commons.—On Thursday, Mr. Foley presented a Petition from members of the Medical Profession residing at Stourbridge and the neighbourhood, praying for the better regulation of the Medical Profession.—On Monday, Colonel Dunne inquired what course the Government intended to take with respect to the introduction of a Bill for regulating the Medical Profession. He also wished to know whether certain regulations or bye-laws for the Pharmaceutical Society had been referred to the law officers of the Crown. Lord Palmerston hoped to be able to bring in a Bill, but probably not so much with the view of passing it this Session, as with the view of submitting its provisions to consideration. At the same time, he did not preclude himself from proposing it with the view of carrying it. With respect to the bye-laws of the Pharmaceutical Society, they were presented to him for approval. He sanctioned them, subject to any legal decision which might be come to on one of the articles to which objection had been made as not consistent with law. He would not take on himself to decide that point, neither did he think it expedient to refer it to the law officers of the Crown.—Petitions were presented by Mr. Bateson, from the Guardians of the Coleraine Union, praying that medical officers attached to the Poor-law department in Ireland may be remunerated in the same way as medical officers employed in a similar capacity in England are paid; by Mr. Craufurd, from members of the Medical Profession residing at Inverness, Elgin, Forres, Nairn, and Campbelton, praying for the immediate passing of a measure to regulate the Medical Profession; another, from the same, praying that the Vaccination Extension Bill should not be passed till time had been given for further inquiry.—On Tuesday, Mr. Heywood gave notice of his intention to move on Tuesday, the 2nd of August, for leave to bring in a bill to remove certain disabilities which prevent some classes of Her Majesty's subjects from resorting to the University of Oxford, and from proceeding to the first or bachelor's degrees in arts, law, and medicine in the Universities of Oxford and Cambridge.

Extramural Interment.—On Monday, the Committee of the House of Lords, Lord Kinnaird in the chair, threw out the Great Extramural Cemetery Interment Company's Bill, previously passed by the House of Commons, the object of which was to establish a general cemetery at Willesden for metropolitan interment by railway.

Yellow Fever.—West Indies.—On board the Magdalena, just arrived from St. Thomas, the mortality has been very great during the time the ship was lying at St. Thomas, and also on the voyage, 18 cases of yellow fever having occurred, of which 11 proved fatal. There have in all been 62 cases of fever and illness. The last death took place on the 29th ult. Notwithstanding this fearful mortality, pratique was granted to the ship, and the passengers and cargo have been landed, the directions from the Government authorities being, it is understood, not to inflict quarantine on vessels which have had no new cases within six days previous to arrival in port. In consequence of the raging of yellow fever in the West Indies, the officers of the Magdalena seem to dread the idea of returning there. "We are informed," says the *Times*, "that the Royal Mail Steam Company have recently allowed one of their most experienced medical officers to quit the service, rather than allow him the assistance of a sick nurse, and a pound or two extra pay per month. The Directors seem to think, that young and inexperienced surgeons are sufficient for the 'exigencies' of yellow fever; whereas it would appear they are in duty bound, not only to obtain the services of those who are in some measure habituated to the dread disease, but to provide assistants and capable persons as nurses, when necessary. To show the necessity of this, we may remark, that Mr. Symonds, the surgeon of the Magdalena, (who has been most indefatigable in his duties) has not had one night's rest since he left St. Thomas. The human constitution can hardly stand such a strain as this for any length of time, and the state of a crowded passenger steam-ship, smitten with yellow-fever, and without a medical officer, would be something frightful to contemplate. At Dr. Symonds' suggestion, the sick on board the Magdalena were placed in tents upon deck. Without this precaution many cases of indisposition would doubtless have become confirmed attacks of fever, and the fatality in all probability greatly augmented." The *Morning Herald* of Thursday, in commenting upon the remarks of the *Times'* correspondent, makes a most insulting attack upon the Medical Profession, in order to defend the West India Mail Packet Company. Mr. Barton who left the service is said to have done so, because his "wages were not to his liking." These wages being 8*l.* a month, which the *Herald* falsely states is larger than the pay of a Naval Surgeon, whose smallest pay is 12s. a day, or 18*l.* a month; and concludes by observing, that this is the first instance of a strike among the medical officers of the Company. It is disgraceful to the Company to pay medical men so badly, still more so to have only one in ships where numerous cases of yellow fever may be constantly expected to occur. What would happen if the solitary surgeon fell a victim to the disease? Some of the Company's ships in the West Indies have suffered severely from yellow fever. The Captain of the Medway reports, that from the 10th of May to the 5th of June, seventeen persons had died on board his ship. The Trent had lost two officers, and seven of the crew by yellow-fever. The yellow fever was raging at Kingston; it had also appeared at Port Royal, and a rumour prevailed that it had reached Uppark Camp. At St. Vincent there had been no increase of fever, and the military were convalescent; it still lingered, however, in the island of Dominica, and had made its appearance in Antigua.

Important Practice for Medical Men before Law Courts.—Brompton County Court (Friday).—Tate v. Webb.—This was an action to recover 5*l.* 6s. 6d. for medicine and attendance, and afforded some practical information to medical men suing their patients in the County Courts. Mr. Roberts, solicitor, appeared for the defendant, and Mr. Tate was assisted by Mr. Franklin, the Manager to the Medical Protection Society. Mr. Roberts said he did not deny that plaintiff had attended his client, but he would at once object to the plaintiff's bill of particulars, which did not contain any dates, and visits and medicines were lumped together. They had a right to know the charge for visits on each day, and for medicine each day. The plaintiff might as well have charged 10*l.* in a lump as 5*l.*; and, if the Court held that the particulars were sufficient, he should call upon Mr. Tate to prove the delivery of the medicine. The plaintiff said the bill had been standing six years, and the young man who made up, and the boy who delivered the medicine, were not now in his service, and, consequently, he was not in a position to prove the delivery. With respect to the dates and dividing the visits from the medicine, his ledger did not show. The day-book would, but he had not brought it with him. There were twenty-seven visits in all, which, at 2s. 6d. a visit, would amount to 3*l.* 17s. 6d., and the remainder would be for medicine. Mr. Franklin said he had called several times for the account, and Mr. Webb never denied the debt. The Judge said he considered, that in a case like this, which was got up by a Protection Society, they should have come better prepared, and he had a right to expect more accuracy than from a private individual. He

would nonsuit the plaintiff, to afford him an opportunity to furnish full particulars; but he would have to pay defendant's costs of the day, or he would give a judgment for the twenty-seven visits which plaintiff could swear to Mr. Tate said he would prefer a judgment for the visits, at 2s. 6d. each. Mr. Roberts said this sum was too much. What use were visits; feeling a pulse would not heal a wound. The Judge said he should only allow 1s. 6d. a visit. Judgment for 2*l.* 0s. 6d.——Tate v. Blyth.—This was brought to recover 9*l.* 5s. 6d. Mr. Roberts took a similar objection to the preceding, and very coolly said it looked very suspicious for the plaintiff to let his accounts run for six years. Mr. Tate said that was small thanks for his lenity, and he was afraid some few on his books would not have to thank Mr. Roberts for the defence. He was, however, in no better position than in the other case. Mr. Roberts said, without prejudice, he would offer plaintiff 3*l.* in full of all demands. The Judge said he must nonsuit the plaintiff unless he could agree with defendant. The whole of his cases fell short of proof, and did no credit to the Society getting them up. Mr. Tate said he could not take 3*l.*, but would strike off such medicine as he could not prove. Ultimately, judgment was given for 5*l.* 10s. 6d. only. In another case Mr. Tate accepted a nonsuit in preference to a verdict of 12s. 6d., he having, however, to pay the defendant's expenses. From the above it is clear, medical men must divide visits from medicine, give dates and prices in their bills, and be prepared to prove the delivery of each bottle, etc. If this be good law, it must put an end to giving long credit.

The Clapham Abortion Case.—The prisoner Cunningham has been found guilty, on the above charge, and sentenced to fifteen years' transportation. The other prisoners (Currie and Thomas) were acquitted. It affords us gratification to add, that we are informed that Cunningham is not a legally qualified medical man.

Mortality Notabilia.—The number of deaths registered in the metropolitan districts, in the week that ended last Saturday, was 1103. The advance which it shows on previous returns arises from Coroners' cases, many of which were not duly registered till the end of the quarter, though the deaths occurred, and the inquests were held, at dates antecedent to last week. In the ten corresponding weeks of the years 1843-52, the average number of deaths was 922, which, if raised in proportion to increase of population during these years, and up to the present time, becomes 1014. The actual mortality of last week, therefore, exhibits an excess on the estimated amount of 89.

Mortality in Public Institutions for the week ending July 2:—

	Males.	Females.	Total.
Workhouses	55	49	104
Military and Naval Asylums.. ...	10	...	10
General Hospitals	52	30	82
Hospitals for Special Diseases ...	4	2	6
Lying-in Hospitals	...	...	...
Lunatic Asylums	5	...	5
Military and Naval Hospitals ...	14	...	14
Hospitals for Foreigners, &c.		1	1
Prisons	...	...	...
	140	82	222

DEATHS *in the Metropolis for the week ending Saturday, July 2*, 1853.

Causes of Death.	July 2. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	477	389	221	1103	9216
Specified Causes	477	389	221	1091	9184
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	154	33	16	203	2215
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	3	29	17	49	455
3. Tubercular Diseases	76	130	10	217	1856
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	46	29	25	101	1129
5. Diseases of the Heart and Blood-vessels	3	27	22	52	321
6. Diseases of the Lungs and of the other Organs of Respiration ...	55	28	38	121	887
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	24	14	60	659
8. Diseases of the Kidneys, etc. ...	3	8	7	18	88
9. Childbirth, Diseases of the Uterus	...	7	...	8	83
10. Rheumatism, Diseases of the Bones, Joints, etc.	1	3	2	6	62
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	1	2	21
12. Malformations	4	...	...	4	22
13. Premature Birth and Debility ...	36	3	...	39	200
14. Atrophy	28	1	11	40	207
15. Age	...	...	33	33	374
16. Sudden	7	9	4	22	134
17. Violence, Privation, Cold, and Intemperance	39	57	20	116	471
Causes not Specified	...	...	...	12	32

BOOKS RECEIVED.

Journal of Psychological Medicine. July. 1853.

British and Foreign Medico-Chirurgical Review. July. 1853.

Ranking and Radcliffe's Half-yearly Abstract of the Medical Sciences. Vol. XVII.

Band of Hope Review.

The Pathology of the Bronchio-Pulmonary Mucous Membrane. Part I. By C. Black, M.D.

India Reform. No. IX.

De Contracturâ et Ancylosi Articulationis Genu et Coxæ. Auctor Philippus Frank.

Report on the Cholera in Jamaica.

Second Annual Report of the Wilts County Asylum. 1852.

Pharmaceutical Journal. July.

Monthly Journal of Medical Science. July.

Remarks on the Operation of Bronchotomy. By Wm. Martin, Esq.

Statistical Reports on the Sickness, Mortality, and Invaliding among the Troops in the United Kingdom, the Mediterranean, and British America.

Table-turning and Table-talking.

The Illustrated London Astronomy. By J. R. Hind. London: Ingram, Cooke, and Co.

An admirable elementary text-book.

Elements of Experimental and Natural Philosophy. By Jabez Hogg. Surgeon.

Electric Science. By F. C. Bakewell.

Mechanics and Mechanism. Edited by R. S. Burn, M.E., M.S.A. London: Ingram, Cooke, and Co.

A most useful series of elementary essays on the subjects, for schools, students, and artisans, profusely illustrated by capital woodcuts.

The Illustrated London Practical Geometry, and its Application to Architectural Drawing. By R. S. Burn.

One of the best of the admirable series of illustrated educational works brought out by Messrs. Ingram and Co.

TO CORRESPONDENTS.

Mr. E. L. Jacob.—Many thanks.

T. P., Birmingham.—We know of no medical schools either in Van Diemen's Land or New Zealand, or of any examining body in either place.

Dr. Bettleheim's interesting paper on Medicine in Loochoo shall have early insertion.

J. B.—We are sorry the first letter was mislaid. We have never tasted water conveyed by gutta percha tubing, and can therefore give no opinion as to the cause of the flavour complained of by our Correspondent. Perhaps some of our readers will inform him if the use of this tubing imparts any flavour to water generally, or if particular qualities of water are likely to be injured by it.

What is the objection of *J. B.* to append his name to the paper on the Use of Stramonium in Asthma and Bronchitis?

Dr. Franks' valuable paper on the Treatment of Anchylosis shall appear very soon.

Mr. Palmer, Melbourne, Australia.—The Journal in question still exists.

M.R.C.S.—We have not yet had time to read the book in question, but will attend to our Correspondent's request.

Mr. Greenway's woodcut shall be executed.

A Subscriber, Torquay.—1. For the stockings, Bigg, in Leicester-square. Why not try Mr. Nunn's plan of pressure by India-rubber bands? 2. For Practical Surgery, Fergusson's work; for the Principles, Miller's.

Dr. Kennion's letter was received too late for insertion this week.

Mr. Skey's lecture shall appear as soon as possible.

Kappa shall receive a private communication next week.

[To the Editor of the Medical Times and Gazette.]

Sir,—I am in the habit of using the preparation of iron made according to the following formula, and much employed by Practitioners in Derbyshire:—℞ Ferri sulphatis ʒiij., acidi nitrici ʒjss., aquæ ʒjss.,M.

Can you, or any of your readers, inform me why this should remain of a dark green (almost black) colour for about a week, and then suddenly, not gradually, become of very pale sherry hue?

I am, &c., Inquirens.

[On the addition of nitric acid, protoxide of iron is formed. This is of a dark colour. It subsequently acquires another equivalent of oxygen, and becomes peroxide, which is reddish in colour.]

COMMUNICATIONS have been received from—

Beta; Charles Kidd, Esq., M.D.; C. J. Gibb, Esq., and C. Brown, Esq., Newcastle-on-Tyne; Dr. Borrett; Wm. Pretty, Esq.; Dr. T. S. Holland; Dr. Peacock; John Propert, Esq.; Dr. Corfe; J. Toynbee, Esq.; Henry Smith, Esq.; R. L. Couch, Esq.; Dr. Kennion; E. Crossman, Esq.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES ON THE RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE

The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture II.

In conducting the treatment of most of the diseases and injuries to which the human body is liable, it is a rule of great importance to ascertain first, by a consideration of the nature of the malady with which we have to deal, what is the object to be effected by our remedial measures, and then to keep this object steadily in view while we are employing the means for its accomplishment.

The surgeon who has the charge of a fractured leg is careful to bring the broken ends of the bones into contact, and to keep the limb steadily in a good position. No degree of attention to other matters connected with the management of the case would compensate for the neglect of this first object of the surgeon's care. In the management of wounds, whether they have been designedly produced during the performance of operations, or whether they are the result of accident, the main object, in most cases, is to keep the cut surfaces in contact, and then to interfere as little as may be with the reparative processes of nature. Again, if the case be one of acute inflammation of a joint, the surgeon is well aware, that to insure rest and an easy position for the diseased part is the first and indispensable point of treatment, without which all other means of cure would often be entirely fruitless. And so with reference to the treatment of internal disorders,—it is usually an object of the first importance to ascertain so much of the nature and the cause of a disease as will serve to give us a fixed purpose in the selection of our remedial measures. Take, for instance, a case of dyspepsia. A patient may swallow in succession every remedy which has ever been suggested for "the stomach and its difficulties;" and he may experience no relief until attention has been directed to the regulation of his diet, as to quantity, quality, and all other necessary details; then at once the cause of the disease being removed, the dyspeptic consequences often cease without any help from drugs.

An instance of another kind will serve to illustrate the importance of attending to the early history and the probable cause of a disease. Four years since, in April, 1849, I saw a lady, about 40 years of age, who had suffered for two years from what was supposed to be chronic rheumatism. Her limbs were weak, and her joints painful; the knee-joints, which were rather swollen, were especially the seat of pain and tenderness. She had formerly been accustomed to take active exercise, both on foot and on horseback; but for this she had long been quite incapacitated. She had taken the usual anti-rheumatic remedies without relief, and she was beginning to despair of recovery. The early history of the attack was this:—Two years before I saw her, she had a miscarriage, and was much exhausted by hæmorrhage. Soon after this she began to drink porter, as a means of restoring her lost strength; her appetite remained very bad, and she continued to take the porter as often as three or four times a-day. The rheumatic pains and the weakness of the joints followed quickly upon the miscarriage. I had no opportunity to examine the urine. I told the patient, that I attributed her illness to the porter which she had been in the daily habit of taking. I thought that she had commenced taking this beverage before she had power to digest it; the consequences had been, continued loss of appetite, imperfect nutrition of the body, rheumatic pains, and general weakness. I explained to her, that I had frequently observed somewhat similar effects from the drinking of porter by poor women who have been much exhausted by lactation or by hæmorrhage. I advised the immediate discontinuance of the porter; in place of it, two or three glasses of sherry to be taken daily; and, since I anticipated a speedy disappearance of the symptoms after the removal of their cause, I desired that no medicine might be taken. The benefit of this change of regimen was soon apparent; the appetite returned, the strength increased, and, within about six weeks, the rheumatic symptoms had entirely disappeared. She has continued well until the present time, and is as active and energetic as before the attack.

This case in other hands might well have served the purposes of systematic quackery. A strict attention to the patient's diet, and the simultaneous exhibition of globules, might have helped to establish a belief in the marvellous curative powers of infinitesimal doses of charcoal or of some other equally efficient agent. To us the case affords an illustration of the fact, that a serious chronic disease may be cured by *less* than an infinitesimal dose of medicine; in other words, that a disease will often cease with the removal of its cause.

Diseases of the Kidney.—And now, with regard to *renal diseases*, which I purpose to make the chief subject of the present lecture;—without some knowledge of their pathology it is, I think, scarcely possible to conduct their treatment with that steadiness of purpose which is essential for their successful management. It is not that the knowledge which we have acquired of the pathology of these diseases has been the means of suggesting any new remedies or new modes of treatment; but it is because it appears to give a reasonable explanation of those methods of cure which experience has sanctioned; it is because, by an examination of the urine, we have the means of distinguishing during the patient's life-time those conditions of the kidney, which are remediable from others which are incurable:—it is for these reasons that the practitioner is interested to acquire such a knowledge of the pathology and diagnosis of renal diseases as will assist and encourage him in his efforts to cure them.

Among our poorer and uneducated patients the belief is very general, that what they call "the dropsy" is a disease rarely curable. When patients of this class ask, "Is it the dropsy, Sir?" an affirmative answer, without explanation, will almost invariably convey to them the idea of an incurable malady. They know nothing of the various causes of dropsy; they cannot distinguish one form of the disease from another; they have heard of some of their friends or acquaintance dying with dropsy; and they consequently fear the worst in every case. A gloomy prognosis, somewhat analogous to this, is often formed by those practitioners who apply to all cases of renal disease, with albuminous urine, the comprehensive term "Bright's disease," or "Albuminuria," and who doubt the utility, or even the possibility, of a more exact diagnosis. The natural result of thus confounding, under one general name, the various conditions of the kidney which may be associated with albuminous urine, is to give to the incurable cases an undue preponderance in the mind, and the entire class of diseases comes to be considered as more intractable than it actually is. It is clearly the duty, as it is the interest, of the practitioner, to avail himself of all the means within his power, not merely to cure his patient, but also to foretell the probable results of a disease. The sick man will derive small comfort from hearing that the disease with which he is suffering is fatal in only a certain proportion of cases, unless he can receive some well-grounded assurance that his own case may be included in the list of those which are curable. A careful microscopical and chemical examination of the urine is essential for the attainment of accuracy, both in the diagnosis and prognosis of renal diseases.

In conducting the treatment of acute renal disease, with dropsy, and albuminous urine, it is very important to bear in mind, that, in a large proportion of cases, exposure to cold, a chill of the cutaneous surface, is the exciting cause of the attack. It is remarkable in how many instances, among hospital patients, the disease is attributed to working or standing in wet clothes. The cases which occur in connexion with scarlatina, although not invariably attributable to cold during, or even before,

the convalescence, certainly are so in a large proportion of cases. The means of *preventing* renal disease and dropsy after scarlatina, are proper ventilation and dieting, and protection from cold until the cutaneous desquamation has ceased.

A consideration of the circumstances under which these attacks of acute renal disease occur, and of the appearances observable in the urine and in the kidneys, warrants the inference, that the renal changes are the result of an effort to eliminate some abnormal products, which have been conveyed to the kidneys by the blood. In cases of scarlatina, for instance, it is probable that exposure to cold has the effect of checking the process by which the fever-poison, or ferment, or the product of fermentation, is eliminated from the skin, and that the morbid materials are then transferred to the kidney, in accordance with the well-known tendency to vicarious action of the skin and kidneys. An instructive illustration of this principle is afforded by the fact of several medicines, such as, for instance, the acetate or citrate of ammonia, acting either as diaphoretics or diuretics, according as the tendency is imparted to them by the skin being kept warm, or the contrary. These facts may assist our comprehension of what probably happens when a patient is exposed to cold too early after the onset of scarlatina. The work of elimination is then transferred from the skin to the kidney; and, as a result of this, there is, in most instances, a free desquamation of the renal epithelium, analogous, as it appears, to the cutaneous desquamation which follows the eruption of scarlatina. That the cells of renal epithelium which are thus freely shed do actually carry with them a portion of the abnormal material with which the blood is infected, is, I think, as nearly certain as any position which is chiefly based upon probable evidence can be. In the urine of a girl named Robinson, who died in King's College Hospital, in the year 1847, there were numerous cells of renal epithelium completely filled with crystals of oxalate of lime, while other cells contained oil; the urine was highly albuminous, and had in it many tube-casts. In this case, it is evident that the renal cells were conveying away abnormal products. The hypothesis which assumes, that the free shedding of epithelium from the uriniferous tubes is a means of eliminating morbid materials, is quite consistent with all the facts of the case, which cannot, I think, be said of any other explanation of the phenomena which has been suggested.

The process of renal desquamation, although primarily and essentially beneficial in its tendency, is not unproductive of mischief; for the secreting structures of the kidney being arranged in the form of minute tubes, which are of great length, and very tortuous, it is evident that the epithelial cells which are thrown off cannot escape with that rapidity with which the epidermic scales are cast off from the cutaneous surface; the consequence is, that the cells, and the fibrinous materials which accompany them, frequently fill, distend, and obstruct the tubes, and thus greatly impede, if they do not entirely arrest, the secretory process. And thus it happens, that many tubes being rendered inefficient, either for the further elimination of the morbid products, or for the discharge of their normal excretory functions, the urine is greatly diminished in quantity, and the patient may die from some of the secondary consequences of an accumulation of poisonous excrement in the blood.

To illustrate these phenomena by an analogy, I would remark, that the relief from urgent symptoms which is afforded by the appearance of the small-pox eruption, is evidence, as we suppose, that some mysterious poison has been thrown from the blood into the skin. The non-appearance of the eruption is often associated with the most rapidly-fatal symptoms; and, on the other hand, the patient may be killed by the very abundance of that eruptive process which nature intended, and which was, indeed, essential for his preservation.

In like manner, it is a matter of almost daily observation, that those cases of acute dropsy with albuminous urine are, in general, most certainly and easily cured, in which there is a copious renal desquamation; while the most rapidly-fatal case which I have met with, was one in which there was neither desquamation nor fibrinous effusion into the kidney-tubes.

It must be remembered, that, as the eruption of small-pox may be scanty, in consequence of the blood being infected, as we suppose, by only a small amount of the specific poison, or in consequence of the blood being changed by the same poison in a less degree than ordinary, so the degree of renal desquamation may be slight from an analogous cause. In both cases, we draw this conclusion from the observation of similar facts,—namely, the comparative mildness of the general symptoms. These doctrines are obviously, in a certain degree, hypothetical; but any one who rejects them merely because they are hypothetical, and not because they are inconsistent with established facts, can scarcely have reflected as he ought to do upon the fact, that it is upon probable and not upon demonstrative evidence that we are often bound to act,—if we will act at all,—not merely in the practice of medicine, but in the most important concerns of our daily life.

With regard to the duration of an acute renal attack, it is to be observed, that very much depends on the nature of the cause. As an illustration of this, I may mention, that the renal disease which occurs in connexion with cholera, often terminates within two or three days from its commencement; while the duration of that which results from scarlatina is rarely less than the same number of weeks. Yet, in both instances, the local phenomena are precisely similar. The prognosis, therefore, is not to be based exclusively upon the condition of the urine.

In thus briefly passing in review the leading facts in the pathological history of that form of acute renal disease which is always associated with albuminous urine, and in most cases with dropsy, my purpose has been to indicate the primary object of treatment, which is, *to guard against exposure to cold*. As exposure to cold, whether acting alone, or in conjunction with other influences, is among the most frequent *exciting causes* of inflammation of the kidney, so there is nothing which has a greater tendency to perpetuate the disease, and to render it incurable. Attention to this point of treatment is as indispensable for the patient's welfare as a steady position for a broken bone, or rest for an inflamed knee-joint. I am confident that the neglect of this precaution has been the means of converting more acute and curable attacks of renal disease into a chronic and incurable malady than all other causes combined. Within the last few months several instances have come to my knowledge, in which the life of a patient suffering from acute renal dropsy has been sacrificed, by his being permitted to go out, day after day, to visit his medical attendant.

In a cold season, confinement to the bed is absolutely necessary for the patient's well-being and safety; and, even in warm weather, it appears to favour and hasten the recovery. Rest in the horizontal posture tends to quiet and equalise the circulation; and the uniform warm temperature of the bed favours the action of the skin, and prevents the risk of a check to the perspiration. The result is, that the dropsy quickly subsides, and the urine becomes more copious and less albuminous.

The diet should be scanty; for the patient has little desire for food, and the digestive powers are much impaired. The passage into the blood of imperfectly-digested food will surely irritate the kidneys; the urine is often more albuminous after meals, and I once saw a return of hæmaturia follow a meal of potatoes. Alcoholic drinks should be prohibited, unless required for some special purpose.

Having secured the two primary objects of treatment—a moderate uniform temperature, and a scanty diet—we must be guided by the nature and urgency of the symptoms in the choice of additional remedies. In every case it is desirable to promote the action of the skin and bowels; the first by diaphoretic medicines and the hot air bath, and the latter by saline aperients, or by the compound jalap powder. The free action of these great excretory surfaces is a very efficient means by which to lessen the injurious over-work of the kidneys. It scarcely need be said, that however scanty may be the urine, no stimulating diuretic is to be given; indeed, the more scanty the secretion, the more injurious would be the effect of any irritating drug. This is so obvious, from a consideration of the pathology of the disease, as to require not a word of comment or explanation. During the convalescence the urine is usually twice as abundant as in health, in consequence, probably, of the naturally diuretic influence of the urea and other urinary products which, having accumulated in the blood during the acute stage of the disease, find a free outlet when that stage is passed. A practitioner who has been perseveringly giving diuretics, and who is ignorant of this pathological fact, will be likely

to attribute, to the influence of his drugs, this abundant flow of urine, which is, in fact, only a natural and a spontaneous diuresis. It will be understood, that, in deprecating the use of diuretics, I am speaking only with reference to cases of *acute* renal disease. When the disease has become chronic, and when an excessive dropsical accumulation constitutes the most distressing and dangerous symptom which other means have failed to remove, "we must incur the risk of one possible and contingent evil for the chance of obtaining what, if obtained, is a certain and positive benefit; we must endeavour to remove the dropsical accumulation by means of diuretics, whether these accelerate the progress of the disease in the kidney or not." (a) In such circumstances the hope of entirely removing the renal disease has been abandoned, and the chief object of treatment is to relieve the most urgent symptoms, and to prolong life to the utmost.

When the progress of acute nephritis has been favourable, when no serious secondary complications have arisen, or when these have subsided, and when the urine is becoming more abundant, and of a better quality, there will be no further necessity for active treatment; the patient may gradually return to his ordinary diet, and the lost colour may be more quickly restored to his blood by the use of some of the preparations of iron, either the citrate, or the sulphate, or the muriated tincture, with the infusion of calumba. At this period of the case, that is, during the convalescence, there will be great need for care and firmness on the part of the Medical attendant, to guard his patient against the consequences of any imprudent steps which he may be inclined to take, under the belief that the disease is at an end before it is really so. When the dropsy and the other distressing symptoms have disappeared, and when the appetite returns, it is sometimes very difficult to convince a patient, that there exists any valid reason for confining him to the house; and yet, upon the rigid enforcement of this necessary piece of discipline will often hang the decision of the momentous question,—whether there is to be a speedy and complete recovery, or whether a protracted convalescence, or, perhaps, a fatal disorganisation of the kidney. The simplest and safest rule is, to confine the patient within doors until the urine is free from albumen. In the winter season this rule should be made absolute. In warm weather it may sometimes be cautiously relaxed with advantage, but always under strict observation of its effects upon the urine.

A patient, who rebels against the restrictions upon the time for his first going out and returning to his ordinary diet, will almost certainly bring on a relapse, with a diminished secretion of urine, an increased proportion of albumen, and a return of dropsy. Such rebellion is not uncommon, and especially among our poorer patients; but we must at any rate discharge our own duty by such words of warning and remonstrance as may seem best adapted to the circumstances of each case. That the skin should be protected by flannel, and that the clothing in general should be warm when the patient first exposes himself to the air, are points so obvious as to require no comment.

Suppose, now that the patient has acted upon our advice in every minute particular,—we have kept him within doors for a period of perhaps two months; every other symptom has disappeared; but the urine, although natural in colour, density, and quantity, is still albuminous. We may try the effect of gallic acid, and this may diminish the amount of albumen; but still the urine may continue to be albuminous in a very considerable degree. We shall now feel some anxiety as to the results of a microscopical examination of the urine, for the risk of serious structural change in the kidney is in proportion to the duration of the albuminuria. In these circumstances, the most favourable appearances in the urine are the natural colour and clearness, and freedom from sediment, or perhaps a slight cloudy deposit, in which are found some small, transparent casts. (b) The appearances which are of unfavourable import are, first, a cloudy sediment as before, but composed of fibrinous casts, many of which contain oil, either in the form of scattered globules, or in epithelial cells, some oil-containing cells being also scattered over the field; second, the sediment may be more abundant and heavier, and, when examined microscopically, it is found to consist partly of renal epithelium in a more or less disintegrated state, partly of large wax-like casts, with very sharp, well-defined outlines, and partly of small cells, which show compound nuclei on the addition of acetic acid,—in short, having the microscopical characters of pus-cells; many of these cells may be scattered, while others are entangled in the larger fibrinous coats before mentioned. The aspect of the case will be more serious in proportion to the abundance of either of the two last-mentioned forms of deposit, viz., the oily and the large fibrinous or wax-like casts with epithelial *débris* and puriform cells. Even when these more formidable appearances are absent, the persistence of a large quantity of albumen in the urine beyond a period of three months from the commencement of the disease is a sufficient reason for anxiety.

At this period of the disease it may be well to remove the patient into the country and to the sea-side, if he has been resident in a town, and to allow him to take a daily airing if the season will permit. So long as the albumen continues to diminish, we may rest satisfied that the case is going on favourably; but if, on the contrary, the albumen does not decrease, and if some of those unfavourable microscopical appearances which I have just now mentioned present themselves, it may be well to urge upon those who have the means of taking a sea voyage to do so as early as possible. There is probably no remedial measure which is more efficient than this when an attack of renal disease, which has been acute, threatens to become a permanent chronic malady. The length and the direction of the voyage must be influenced in a great degree by the circumstances of the patient. It will not at any time be desirable that he should go far northward, and in the winter season it will obviously be preferable for him to proceed in a southerly direction. Dr. Christison (a) has published the case of a medical practitioner, who, after having had albuminous urine for a period of four months, sailed for the Cape of Good Hope in October, 1845. He afterwards returned to this country, and wrote to Dr. Christison thus: "As soon as I got into warm weather, and out of the turmoil of professional business, I began to improve in health and strength, gathered flesh, got colour, and ere arriving at the Cape was stouter than I had been for years. After using the gallic acid for a few days at sea, I had no appearance of albuminuria, nor has there been any return of it since. I travelled about 1500 miles on horseback through the Cape colony, and had several long journeys, one of them to the extent of eighty-eight miles in one day, without suffering any ill consequences." Dr. Christison adds, that, on returning to this country, he resumed his practice, and he continues at this time (March, 1851, six years after his illness) an active, vigorous, healthy, country practitioner.

I must not omit to state, that he had taken gallic acid for some weeks before he sailed, and the albumen had diminished under its use; but the acid probably contributed little to the rapid improvement which he experienced during the first few days of his being at sea.

I have met with another case in which a long sea-voyage entirely removed an excessive dropsical accumulation after it had existed for nearly a year. The patient was the wife of a soldier stationed at Ceylon. Dropsy, with high-coloured and scanty urine, came on in September, 1845; the swelling gradually increased, and the integuments of the legs became so much distended that she had them scarified, and they discharged copiously. She appeared to grow worse in every respect until the month of August in the following year,—that is, about eleven months after the commencement of her illness; when, her husband's regiment having been ordered home, she was compelled to embark. The vessel in which she sailed had no surgeon on board, and she took no medicine. After she had recovered from the sea-sickness, she found that her health was improving. When they reached the Cape, the dropsy was sensibly less. The improvement continued; and when she arrived in England, after a voyage of four months and a-half, the dropsy had entirely disappeared, and she felt perfectly well. She continued in the enjoyment of good health, working as a washerwoman, until the month of October, 1847, when she was again seized with dropsy, occasioned, as she believed, by exposure to cold after being heated at her work. She was admitted into King's College Hospital on the 28th of October; and it was

(a) Dr. Watson's "Lectures on the Practice of Physic."

(b) These and other forms of tube-casts referred to in this lecture are represented by wood-cut illustrations in the Author's treatise "On the Diseases of the Kidney."

(a) *Edinburgh Monthly Journal*, June, 1851.

during her stay there that I obtained from her the particulars of the previous history. At the time of her admission, she had general anasarca and ascites; and the urine was scanty, high-coloured, and very albuminous. The urine afterwards became pale, but the albumen did not diminish. She continued to grow worse, left the hospital at the end of January, 1848, and died at her own home two months afterwards.

The doubt which must ever exist, as to whether the renal disease had been entirely removed when she arrived in England, scarcely lessens the evidence which the history of the case affords, as to the surprisingly beneficial influence of the voyage, both upon the dropsy and upon the general health of the patient; and this, too, under circumstances apparently the most unfavourable.

In another case—that of a late distinguished medical student of King's College—the urine had been albuminous for a period of several months when I first examined it, in March, 1852. It was then very albuminous, sp. gr. 1015, of the natural colour, and deposited a slight cloud, which contained a few small waxy casts, on one of which were some cells, containing oil. There was sufficient indication that the renal disease was not in a very advanced stage. He was suffering chiefly from debility, with emaciation; he had the general aspect of a tubercular tendency, but there were no signs of disease within the chest. He was advised by Dr. Todd and myself to take a voyage; and, accordingly, he obtained an appointment as surgeon to a sailing vessel, which was bound for Canada. He sailed from Gravesend on the 10th of June, at which time, as he afterwards reported to me, the state of his urine was much the same as when I examined it in March. At first, he suffered much from seasickness; but, after he had recovered from this, about the 5th of July, he tested his urine for the first time since he went on board, and found it quite free from albumen. It continued so during the rest of the voyage. He improved considerably in health and strength, and gained flesh until he and all on board were subjected to great privation from the failure of provisions and water. For about twenty days he had no fresh meat, but subsisted chiefly on bread, salt-butter, rice, preserved fish, peas, and bad potatoes, with only three pints of dirty water per day, two of which went to the cook, so that he had only one pint for drinking. The consequences of this diet were very disastrous to our poor patient; diarrhœa and sickness came on, and from that time he gradually declined. He returned to England in a steamer; and, on his passage home, he found that his urine was again slightly coagulable. On the 12th of October, he sent me a specimen, which was of low density, 1010, but only cloudy with heat and nitric acid; and I could detect nothing with the microscope. He continued to suffer from diarrhœa and emaciation, until he became a mere skeleton; and he died in November of last year. He remained in the country after his return from Canada, and I did not see him; but it was the opinion of those who did, that tubercular mesenteric disease was the cause of his death.

The fact in this sad history which is to my present purpose is, that the urine which had been constantly and highly albuminous for a period of many months, ceased to be so after the patient had been only three weeks at sea, a result which it is improbable that any other means could have accomplished; and, although at a later period, the urine again became slightly coagulable, there was no reason to suppose that disease of the kidney had any important share in bringing about the fatal termination. The severe privation appears rather to have developed that tubercular disease, the seeds of which very probably existed before he left England. His own words, in writing to me after his return, were, "I certainly improved at sea, and I have myself no doubt, that but for the untoward events of the latter part of the voyage, I should have returned very much benefited."

Before concluding this sketch of the treatment of renal diseases, I am desirous to say a few words with reference to one class of those secondary diseases which not unfrequently occur during the progress of the primary malady. Among the most frequent and formidable of these secondary affections, are those which are referrible to the nervous centres—headache, delirium, convulsions, or drowsiness in a greater or less degree, and not unfrequently passing into coma. These alarming symptoms are, doubtless, occasioned, either directly or indirectly, by the accumulation in the blood of some one or more of the constituents of the urine. It is probable that the retention in the blood of any one of the constituents of the urine would be attended with injurious consequences. Urea being the most abundant of the urinary solids, and having been detected in large quantities, both in the blood and in the effused liquids of patients whose urine is scanty from renal disease, it has very commonly been assumed, that this is the noxious agent; but a doubt has been thrown upon this, by the fact frequently observed, that there appears to be no proportion between the severity of the nervous symptoms, and the amount of urea in the blood. Hence it has been inferred, that something more than an accumulation of urea must be required for the production of these nervous symptoms; and Frerichs(a) has attempted to prove, that the carbonate of ammonia which results from the decomposition of urea is the immediate cause of the convulsions and the coma. The experiments of Frerichs show that the injection of carbonate of ammonia into the veins of a dog is followed by convulsions and insensibility, the latter continuing until the ammonia has escaped from the blood, chiefly, as he believes, by pulmonary exhalation. He states, too, that he has detected ammonia in the air expired by his patients during the continuance of uræmic symptoms; but it can scarcely, I think, be admitted, that his observations warrant the conclusion, that ammonia in the blood is either the sole or the chief cause of those symptoms which have been commonly observed in connexion with an imperfect excretion of urine.

The *post-mortem* appearances in the brain are rarely such as tend to throw any light upon the symptoms. In a small proportion of cases, actual hæmorrhage is found to have occurred either in the substance or on the surface of the brain, but in most instances a doubtful congestion, or an equally doubtful increase of serosity, is the only appearance to be noted. Unequivocal traces of inflammation are rarely found. When the cerebral symptoms have supervened upon a long-continued chronic form of renal disease, an appearance of less than the usual amount of blood in the brain, and of a lighter hue of the grey matter, is quite as common as the opposite condition. In such cases, Dr. Watson has suggested, that "the pale and watery condition to which the blood is at last reduced may have something to do with the stupor and coma;" and he compares these symptoms with those of spurious hydrocephalus, which occur in conjunction with a similar defect of hæmatosin. The occurrence of convulsions or coma in connexion with disease of the kidney is always sufficiently alarming; but the prognosis will be greatly influenced by the information which we can obtain from the history of the case, and particularly from the examination of the urine, as to the nature and the stage of the renal disease. If we can ascertain that the cerebral symptoms are connected with a simple acute inflammatory form of renal disease, we may entertain a reasonable hope that prompt treatment will entirely remove these formidable symptoms; but if the evidence tend to show that the renal disease is of long standing, whether it be of the nature of fatty degeneration or an advanced stage of some inflammatory condition of the kidney, there will be too much reason to fear, that in spite of all our efforts drowsiness or convulsions will speedily pass into fatal coma. An accurate diagnosis is of importance, since the active treatment which is essential for the safety of a patient in the first-mentioned circumstances, if applied without discrimination in cases of chronic renal disease, and when the blood is thin and impoverished, might rather hasten than retard the fatal result.

When the cerebral symptoms, to which I have alluded—headache, drowsiness, coma, or convulsions—are consequent upon an acute inflammation of the kidneys, such as occurs in connexion with scarlatina, or after exposure to cold, it will generally be found that the urine is extremely scanty; and if the patient be conscious, he will sometimes complain of severe pain in the region of the kidneys. The first object of treatment is to relieve the extreme congestion of the kidneys, which, being done, their secretion will become more abundant, and the cerebral symptoms will cease with the removal of their cause. I believe that no method of treatment is so efficient for the attainment of this object as the abstraction of a moderate quantity of blood by cupping over each kidney. In three cases of the kind which have occurred to myself, cases in which convulsions were succeeded by insensibility, the operation of cupping was quickly followed by an increased secretion of urine, the speedy cessation of all serious cerebral symptoms,

(a) "Die Bright'sche Nierenkrankheit."

and, ultimately, complete recovery. It will always be desirable to assist the process of purifying the blood by exciting free action of the bowels, either by means of elaterium, or by the compound jalap powder, with which, perhaps, a few grains of calomel may sometimes be combined. At the same time, too, it will be well to keep the head cool, and, if the symptoms are urgent and persistent, to apply a cold lotion, or iced water, to the shaved scalp. The error into which any one is most likely to fall is that of directing his attention and his remedial measures too exclusively to the head, without reference to the distant origin and cause of the symptoms. A better instance could scarcely be adduced in illustration of the importance and the intimacy of the relationship between therapeutics and pathology. If the patient be in a state of stupor when he first comes under our observation, if dropsy be not present, and if we have no accurate history of the case, the diagnosis may be attended with considerable difficulty. In such circumstances, it is a very safe rule not to prescribe for the patient until the urine has been examined. I once had a case of the kind in my dispensary practice. The patient was a woman, 54 years of age. At my first visit, I found her in a state of semi-stupor, with a wild distracted look, and a brown, dry tongue. The case had very much the aspect of continued fever; but I learned that she had been seized with a convulsive fit a few hours before I saw her; that there had been slight dropsical swelling during the previous fortnight, and that the urine had been scanty and high-coloured. On examination of the urine, I ascertained, not only that it was highly albuminous, but also that it contained numerous epithelial casts, as well as scattered entire cells of renal epithelium. From these appearances, I inferred that the disease was acute, and of recent origin. The operation of cupping on the loins was quickly followed by an increased secretion of urine and by the disappearance of the cerebral symptoms. She ultimately lost every trace of her renal disease, and the urine became quite normal.

I have already intimated, that the occurrence of coma, or convulsions, in the advanced stages of *chronic* disease of the kidney, is a sign of fearful import. When drowsiness has gradually passed into complete coma, it is seldom that a patient can be brought out of it; for a large proportion of the secreting tissue of the kidney is now permanently disorganized, and we can do little to remedy so desperate a condition.

If we can excite copious discharges from the mucous membrane of the bowels, we shall, by that means, eliminate some of the excreta which are poisoning the blood, for urea has been detected in the watery stools produced by elaterium. There is not much to be hoped for from cupping over the kidneys, but dry cupping can certainly do no harm; and, if the patient's appearance be not decidedly anæmic, we may venture to abstract a small quantity of blood; but we shall do this with much caution, if we bear in mind Dr. Watson's suggestion,—sanctioned, too, by the high authority of Dr. Todd,—that an impoverished condition of the blood may favour the tendency to coma and the poisonous action of urea. Cold lotions may be applied to the head when the scalp is hot, and blisters when the skin is cool. Since, in any case, it is a more hopeful task to prevent drowsiness from passing into coma, than to bring a patient out of a comatose condition when once he has fallen into it, it is important to keep a watchful eye upon the premonitory symptoms. In some cases, it appears that the most successful mode of keeping them in check is to give a nutritious but unstimulating diet, with moderate doses of steel, and, at the same time, to keep up a free action of the bowels.

There is yet one point upon which I will say a few words. It has frequently been asked, whether it is possible that the kidney can completely recover from an acute inflammatory attack? The most reasonable reply to this question is, that, if the disease comes early under treatment and yields to the means employed within a moderate time, there is reason to believe that the recovery may be complete and permanent. It is likely that, here and there, a tube or a Malpighian body has been spoiled, the first by the destruction of its epithelial lining, and the second by the rupture of its vessels; but no mischief will probably result from these changes, beyond the wasting of the parts immediately affected. An attack of desquamative inflammation leaves no morbid condition of the kidney which will be permanent, or productive of further mischief, unless the disease has been so long continued as to have reduced the tubes, by the destruction of their epithelial lining, to that denuded condition which favours their growth into cysts. In one case, which terminated fatally by cerebral hæmorrhage, after the renal disease had existed for a period of at least six months, the cystic growth was commencing in the kidney. The possibility of such an occurrence is one among many reasons for the careful management of renal diseases at their very commencement.

It is obvious, that, although the kidney may have recovered from an attack of inflammation, it will, like any other organ, be liable to a recurrence of the disease from a repetition of its exciting case. A patient, therefore, who has suffered from such an attack should be cautioned to avoid all those influences which have a known tendency to act injuriously upon the kidney.

I think, Sir, that, with reference to diseases of the kidney, it can scarcely be denied, that pathological considerations are essential, as well for their successful therapeutical management, as for enabling the physician to predict with probability the consequences of the disease and of his treatment.

NOTES OF LECTURES ON SURGERY,

DELIVERED IN

The Theatre of the Royal College of Surgeons of England.

BY FREDERIC CARPENTER SKEY, ESQ., F.R.S.

Professor of Anatomy and Surgery, one of the Surgeons of St. Bartholomew's Hospital, etc. etc.

MR. PRESIDENT,—My first duty is, to thank the Council for the honourable appointment of Professor to this Royal College. I owe it to myself to say, that its acceptance was the result of much deliberation; for I do not aspire to offices of public notoriety and distinction, greatly preferring a career of privacy, with which my sentiments more thoroughly harmonize. The title of this office has always appeared to me a somewhat objectionable one. The relations between "anatomy and surgery" are not so immediate; while, in another sense, the two branches of science are too essentially distinct to justify their being united under the same professorship. The reason, however, of the union, is founded on the fact of certain bequests to the College at a time when the distinctions between these now perfectly separate branches of science were scarcely recognised. In reference to the subject of the ensuing course of six lectures, you will observe, that I have not followed the usual precedent of making them continuous and connected; indeed, I candidly confess, that I found it difficult to select a subject on which, at the present period of surgical knowledge, I could profitably occupy the attention of a College audience during six continuous lectures, without having recourse either to material already known, or adopting the process of attenuation, which is called "spinning out" the course. I purpose, however, to devote one or two lectures to the subject of muscular action, on which I think something is yet to be said, and not unprofitably.

We are liable to under-estimate the force of muscular contraction. We rather guage its power by the daily action of the muscles, without recollecting its immense dormant force employed on occasion. Conclusive evidence of the contractile power with which Nature has endowed muscular fibre may be obtained from the contemplation of the varieties of the lever adopted, and in which that of the third class largely predominates; while the close proximity of the power to the fulcrum in every example is indispensable to the form and outline of the extremities while in motion. By the third lever, power is sacrificed to velocity. By such adaptation, the contraction of the biceps to the extent of two inches will bring the hand up to the face; the rectus femoris contracting four inches will extend the leg from the bent to

the straight position. If so, surely muscles possess enormous power beyond their apparent requisitions.

The opinion generally prevails among physiologists, that the muscles, in order to accomplish their purposes in the economy, contract to one-third of their length. I believe this opinion to be an erroneous one, in evidence of which I will take examples of the muscles acting as levers of each class. Of the first I select four,—the complexus, the sterno-mastoid, the triceps extensor cubiti, and the semi-tendinosus. If we compare the length of these muscles with their capacity for contraction, we shall find them, when in full action, to be shortened only to about one-sixth or one-seventh. The two sterno-mastoid muscles act in unison only when raising the head from the horizontal position. When in the upright posture, they always act in conjunction with the opposite splenius in rotating the head on the spinal column. The length of this muscle is ten inches. It contracts about one inch and a-half. The triceps is eleven inches in length. It contracts one inch and a-half. The semi-tendinosus, semi-membranosus, and biceps, are eighteen inches in length. They contract, while employed as levers of the first class, about two inches. The gastrocnemius and soleus, as levers of the second class, contract to about one-fifth. Among levers of the third kind, there are very few that contract to one-third, the majority to one-fourth only. The fact is illustrated strongly by the flexors of the leg, as they are called, which, embracing two articulations, act as levers both of the first and third class. As levers of the first class, they contract about one-eighth only; while, in the other capacity, they contract to one-fourth. I should say that, according to the leverage, the muscles contract one-seventh, one-fifth, and one-fourth.

Much has been written on the subject of the power exercised by individual muscles. It is a question of more difficulty than appears at first sight. In the case of the biceps cubiti, for example, it is exceedingly difficult to guage the exact conditions of the lever. The fulcrum is in the elbow-joint, but is diffused over a surface—as is also the power—at the tubercle of the radius, which occupies half an inch of the length of the bone. Again, we have the uncertain contribution of the brachialis muscle, which, in flexion of the arm, is very large, on account of its diffused insertion; and, lastly, the fibrous expansion produced from the tendon of the biceps forms another element of difficulty and uncertainty in calculating the respective forces of these muscles. The first element in any calculation is a thorough knowledge of the muscles under inquiry. Borelli calculated the power of the biceps and brachialis muscles, supporting a weight placed in the hand of 28lbs., at 560lbs. Now, the force of these two muscles is brought into operation most efficiently when the arm is bent at a right angle. A strong man will support a weight of 56lbs.; and, calculating the relative distances between the power and the fulcrum—*i. e.*, the tubercle of the radius to the elbow-joint, and the tubercle, and the roots of the fingers, or the weight—the power of these conjoint muscles in supporting a half-hundredweight is about 5½ cwt., or from 550 to 600 lbs. But Borelli asserts it to be 1120 lbs. The fallacy is based on a complete misappreciation of the action of the muscle. [The Professor exhibited by a diagram the train of reasoning adopted by Borelli in calculating the force of this particular muscle, which, though true mathematically, failed in its anatomy.] In the year 1849, I performed a series of experiments on the dead body, with a view to ascertain the force of contraction of the larger muscles. The inquiry into the power of the biceps was made as follows. A hole was drilled through the tubercle of the radius, at about a third from its lower end. A wire was passed through the opening, and was carried upwards, along the surface, or through the substance of the muscle, and under the acromion. The wire terminated in a cord, which passed over a pulley. Weights were applied to the hand, of increasing magnitude. The forearm was raised to a right angle by 20 lbs.; 5 lbs. required 70 lbs. to raise it to a right angle; 7 lbs., about 90 lbs.; 14 lbs. required 190 lbs.; 28 lbs., about 3½ cwt. The power exercised, then, in raising 56 lbs. in the hand would be about 6 cwt. This power must be shared in somewhat unequal proportions between the biceps and brachialis.

In the difficulty inseparable from our want of knowledge of the exact points of the power and the fulcrum, it would appear that this is the only form of inquiry from which we can draw any near approach to a satisfactory conclusion; and this only approximates to the truth. In the case of the biceps, Borelli examined the muscle with the arm extended, and then calculates its power as proportional to the distance between the fulcrum and the weight, and the fulcrum and the distance of the direction of the muscle from it. The inference, then, is, that the power is equal to twenty times the weight,—a result which appears to me clearly disproved by the above experiment. I tried similar experiments with the deltoid, which, in raising the arm, acts with a force of 50 to 60 lbs. It will raise a weight of 7 lbs. with 150 lbs.; 14 lbs. with about 2½ cwt.

On this principle, I experimented on the actions of various other muscles. In works devoted to this purpose, to the psoas muscle is assigned the function of flexion of the thigh —a power it does not possess, except in the smallest degree. This movement is effected by the rectus femoris, and almost exclusively by it alone, acting on the unweighted foot, and while in the horizontal position of the body, with a power equal to 140 lbs. By the addition of 7 lbs., applied over the line of the tarsus, the muscle acts with a power equal to about 250 lbs. The larger number of the muscles of the lower extremities act principally from below, upwards. We divide the actions of muscles into primary and secondary. It often happens, that the action which we call primary is a very inconsiderable one; and for a purpose to effect which, a muscle of a tenth part of its size would be sufficient, such as the flexors or the extensors of the leg. Such muscles have other and far more important actions, and in which the power of these muscles is exerted to the extent of more than ten or even twenty times that of the so-called primary action. The terms, therefore, appear to me objectionable; for the size of these muscles is obviously given for the larger, even although it be the rarer purpose. For example: the leg is bent by the semi-tendinosus, biceps, and semi-membranosus, acting with a force of 60 or 70 lbs., by a leverage of the third class. To test this power, when employed to the utmost, the leg should be bent at right angles, in the upright position of the body, and a weight placed on the foot. If half a hundredweight were thus appended, these muscles would act with a power equal to about 3½ or 4 cwt.—a power greatly within that of the biceps flexor cubiti. In order to understand the function of this group of muscles, we must reverse their action, and give their origins below. They now become levers of the first class, in supporting or raising the body upright from the stooping posture, as in picking up an object from the ground; and here their force is immense, but for which Nature has provided the double set, or the muscles of both sides. The actions of the psoas magnus and iliacus internus are invariably reversed, their office being that of raising the body from the horizontal to the sitting posture. The subject of the actions of the individual muscles requires re-consideration. I believe there are yet several examples of error, of which I will mention two, in addition to the psoas and iliacus. The deltoid exerts no power over the arm, beyond raising it to an angle with the body of about 60°. This is obvious, if we examine the structure of the shoulder-joint. The articular surface of the humerus is comparatively small, and is quickly exhausted in raising the arm. If we attempt to raise it beyond the angle I have mentioned, the bony surface will be brought into contact with the glenoid cavity. The elevation of the shoulder beyond this angle devolves entirely on the trapezius muscle, by which the whole shoulder is rotated backwards, and the arm consequently rises. The function, therefore, of the trapezius muscle is an important one.

The omo-hyoideus is called a depressor of the os hyoides; but the os hyoides is placed at the summit of an elastic tube, and regains its position on the cessation of the action of its elevators, the digastricus, etc. The omo-hyoideus is not the antagonist of the digastricus. The elasticity of the trachea is the antagonist to both muscles. The omo-hyoideus depresses the bone, and with it the tongue, for the purpose of imbibition. It is only found in man, and in animals that drink by suction—never in animals that drink by lapping.

A tendency to a vacuum is formed in the mouth by that muscle when the soft palate is drawn downwards; and thus it affects all actions by suction, whether drinking, smoking, regulating the quantity and the force of entrance to the mouth of all fluids, whether air or water. Its origin below from the scapula in man is consequent on the organisation of the neck. In many animals its origin is from the cervical vertebræ. It may be partially paralysed by forcibly raising the shoulders.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. II.

CASE OF RUPTURE OF THE BLADDER.

By J. W. CHAMBERS, M.D.

Surgeon 35th Regiment.

H. F., a soldier, just discharged from the service, after having served upwards of twenty-one years, was admitted into the Regimental Hospital, at six a.m., on the 4th of July, 1853, having met with an accident on Saturday, the 2nd inst., at eight o'clock p.m., on his passage from London to Plymouth by steamer.

While sleeping on the lower deck, a man fell on him from the upper deck, the full weight falling on the lower part of the abdomen. Great desire to urinate at once came on, but with inability to do so; much distension about the region of the bladder, with effusion at the scrotum and perinæum; swelling and ecchymosis of both.

On introducing a catheter, immediately after his admission to the hospital, a considerable quantity of blood came away, which was mixed with a little urine, although it appeared impossible to pass the instrument into the bladder, owing to a rupture of the urethra near the bladder.

Free incisions were made into the scrotum and perinæum, and from these urine flowed; but the painful and distended state of the lower part of the abdomen remained unrelieved.

On consultation with the senior medical officer, Dr. Mitchell, Surgeon 7th Fusiliers, and Assistant-Surgeon Clarke, we decided that an immediate incision should be made in the perinæum, down to a staff in the urethra, and from thence into the bladder, as in lithotomy, in order to give free relief to the bladder, to allow the escape of extravasated urine, and also to prevent further extravasation.

On doing this, and opening the bladder, a considerable quantity of coagulated blood and urine escaped, and the swelling of the lower part of the abdomen was reduced. A flexible catheter was then passed from the wound in the perinæum into the bladder, and secured there by tape. The urine soon afterwards began to pass slowly by the instrument. Some little venous bleeding followed the operation, but it soon ceased.

In addition to the lapse of time from the receipt of the injury, the age, debilitated constitution, and general appearance of the patient, of course led to the fear of an unfavourable termination of the case.

No unusual loss of blood, or other untoward result, followed the operation. On the contrary, the man experienced some relief from it; but the system did not recover entirely from the shock first received. Vomiting, restlessness, and tenderness of the lower part of the abdomen, set in towards the close of the day, with failing pulse. Urine of a natural, healthy character, to the amount of about two pints, flowed from the instrument, which remained in the bladder from the time he had been operated on until his death, which took place twenty-six hours afterwards.

A *post-mortem* examination was made in presence of all the military medical officers here; and we found, as we had expected, a rent in the membranous part of the urethra, about a quarter of an inch long. On introducing an instrument through the rent, it passed from the natural canal up behind the bladder. The bladder was also torn in two places, at its upper and anterior part. Each rent was about the size of a shilling. Urine had been extensively effused into the surrounding cellular tissue. There was neither serous effusion nor urinary extravasation into the peritoneal cavity; but the intestines were united together in some few places by lymph, showing that peritonitis had come on.

On examining the wound made in the operation, it was proved that no injury was done either to artery, rectum, or peritoneum.

General Hospital, Stoke, July, 1853.

ON THE

TREATMENT OF CONTRACTIONS AND ANCHYLOSIS OF THE KNEE AND HIP JOINTS BY FORCED RUPTURE.

By Dr. PHILIP FRANK, of Manchester.

Gradual extension, by means of pressure, or by the instrumentality of orthopædic apparatus, was the oldest method of treating contraction and anchylosis of the joints. This method has continued in practice even to the present time; and many, who are either unwilling or unable to appreciate the advances of modern surgery, regard it as the only course commendable or judicious. We will, therefore, abstain from criticising this method as practised in former times, inasmuch as the results might be ascribed rather to the insufficiency of the apparatus in use than to the method itself. Let us regard it in modern times, where the apparatus of Bonnet, Stromeyer, and others, constructed on the most scientific principles, have come into use. Still, how few satisfactory results have been obtained. It is not to be denied, that the method has been found equal to the cure of simple contractions of the joints, uncomplicated with organic disease. Even cases of spurious anchylosis, with contractions at a small angle, have been successfully treated by gradual extension. Yet, even in these cases, simple as they were, the results were uncertain, the treatment tedious, inconvenient, and laborious.

Excoriation and mortification supervening on those parts of the skin most exposed to the pressure of the machine; pains occasioned by continued tension, repeatedly exciting the muscles to renewed contractions; reflex action in different organic spheres, after a certain degree of extension has been arrived at,—all these form a long series of evils often enforcing protracted interruptions in the treatment, with loss of the advantages already obtained, and sometimes the total abandonment of the attempt. It will be hardly a matter of surprise, that, in cases where this treatment might have been successfully pursued, want of perseverance on the part of the patient has prevented its accomplishment.

But what could be expected in those cases of contraction and spurious anchylosis, where the patella, adhering to one or the other condyle of the femur, and protruding its inferior margin backwards and downwards, forms an invincible impediment to the extension of the joints. If ever gradual extension was of any avail in cases of this kind, it could only be effective, either by the luxation of the tibia backwards, or by the gradual absorption of that part of the patella exposed to the pressure of its anterior surface.

It is evident how much valuable time had to be expended in attempting to attain a result, after all but questionable; a loss of time which, in young individuals, is, on that account alone, of such high importance, because, by the more rapid growth of the healthy limb, an increasing disproportion of the parts must ensue. It is well known in how few cases this loss is afterwards repaired. Of course, no one would expect a result from the employment of this method in those cases of extra-capsular anchylosis, where osseous bridges extend from the posterior of the femur to the tibia, or in cases of true anchylosis, where the articular surfaces are firmly connected by fibrous or osseous adhesions.

A new epoch in the treatment of contractions and anchylosis in the knee and hip-joint seems to have dawned, when the brilliant discovery of subcutaneous tenotomy was introduced: and its successful employment in the treatment of deformities of the foot, gave rise to hopes which were doomed to be but sparingly realised. The impediments which the falciform knife was able to overcome, differed, after all, but little from those which the apparatus for gradual extension was wont to subdue. It cannot be denied, that tenotomy in conjunction with gradual extension, tended to facilitate as well as to shorten the cure; and the services it rendered, by division of thickened and retracted fasciæ, as well as of superficial bands, were invaluable. Nevertheless, in most of those cases where gradual extension had failed to be successful, tenotomy proved equally unavailing. These assertions will be satisfactorily confirmed by consulting the works of Duval, Stromeyer, and Philipps, whose experience in this field of practice is the largest on record. The method introduced by Dieffenbach, and published in the year 1841, was the first which appeared to answer every indi-

cation. Dieffenbach instituted the practice of violent rupture, in addition to that of tenotomy and gradual extension, in order to combat those impediments which these had shown themselves unable to subdue.

It was now that forced rupture, which the pathological anatomy of anchylosis so imperatively demands, was first legitimately received among the resources of surgical art; —we say legitimately, for, prior to this time, chance has been known to have produced cures by its agency, and rustic Hippocratean aspirants have succeeded by its practice, where their more learned, but less daring contemporaries have failed.

In cases of contraction and anchylosis of the knee-joint, Dieffenbach first performed the subcutaneous discision of the flexor tendons, and of all contracted portions of the fasciæ; upon which, a towel having been firmly bound round the joint, the adhesions between the articular surfaces were ruptured by forcible flexion; thereupon the joint was forcibly extended, and the apparatus of Stromeyer applied to maintain that degree of extension already arrived at, and to further its perfect accomplishment.

By this practice Dieffenbach succeeded in extending a vast number of contractions and anchylosis of the knee-joint; but, content with this result, he was not in the habit of having recourse to the laborious orthopædic treatment which, in favourable cases, might have tended to restore the normal functions of the joint. But although the results obtained by this method were, as far as the extension of the joint was concerned, for the most part favourable, a series of accidents occurred in its execution, of sufficient magnitude to deter many from adopting it. For the forced rupture being instituted directly after the division of the tendons, the apertures through which the knife had been introduced were unavoidably widened and lacerated; the air then gained free access through the wound, occasioned by the tenotomy knife, and the di-lacerations and fractures produced by the forced rupture lost the innocent character of subcutaneous injuries. Violent inflammations and suppurations often supervened, which always causing long and tedious interruptions in the cure, necessitated amputation of the thigh in one case, and brought on fatal terminations in two others.

Nor must we omit to mention the division of the peroneus nerve, which has so often happened, even under the hands of the most skilful operators, while performing tenotomy of the biceps in cases of contraction of the knee.

Thus much for the knee-joint, when, notwithstanding the accidents enumerated, the results were, nevertheless, more favourable than any method before in use could boast of. In the treatment of contractions and anchylosis of the hip-joint by the same method, Dieffenbach scarcely obtained a single perfect result. This I am justified in asserting on unequivocal authority.

In tracing the course of this want of success, we do not hesitate to ascribe it to the insufficient and ill-adapted orthopædic treatment employed after tenotomy and forced rupture had been instituted,—a treatment which in no other joint is so highly important, but at the same time so difficult and laborious.

Bonnet, who, in the year 1845, declared all anchyloses of the knee-joint with rotation of tibia outwards and anchyloses of the patella incurable, published, in 1850, six cases successfully treated by a method devised by himself and Palasiano, but little in variance with that practised by Dieffenbach. This method of Bonnet is chiefly characterised by some slight modifications in the tenotomy of the biceps. Bonnet punctures the skin, not as Dieffenbach did in the popliteal fossa, but on the anterior and exterior surface of the thigh, and then divides the tendon with a round-headed bistoury. He trusts, by thus attaining a longer canal between the skin and tendon, to obviate the danger of suppuration, as well as that of wounding the peroneous nerve. After dividing the flexor tendons and the contracted portions of the fascia lata, Bonnet and Palasiano forcibly flexed the tibia, in order to separate the adhesions between the articular surfaces, and, at the same time, by the traction of the patellary ligament, to detach the anchylosed patella from the femur. With the idea of facilitating this detachment, the subcutaneous tenotomy of the extensor quadriceps was, prior to the forced flexion, an operation which we do not hesitate to designate as quite superfluous; for fibrous and osseous adhesions connect the patella with the femur, and if these are forcibly separated, the distended, and, in all cases, atrophied and atonic muscle, will offer but slight hindrance to the further motion of the patella.

Nor does this operation appear devoid of danger, for in one case where Bonnet performed it he divided the external articular artery, which caused an extravasation which was not absorbed after a space of five weeks, and terminated in producing a suppurative phlegmon over the whole thigh. The only cases in which this operation might be necessary are those where the patella is dislocated over the external margin of the fossa, so as to be situated on the outer surface of the external condyle of the femur.

The description of a case of this kind, as far as we are aware the only one hitherto published, will be found in the pathological part of this dissertation. Of course a dislocation of this kind could not have been effected if the patella had entered into adhesion with the femur. In the case mentioned, a contraction formed during a chronic, rheumatic, arthritic inflammation; the patella is perfectly moveable on the outside of the external condyle; and Mr. Langenbeck expressed it as his opinion, that the division of the quadriceps tendon might be necessary to effect the reposition.

To return to the method of Bonnet, we cannot deem it advisable to lay down as a rule, as he has done, that the detachment of the anchylosed patella from the femur is always to be effected by forced flexion of the joint. In those cases of anchylosis, for instance, where the joint is so contracted that further flexion is impracticable, this, of course, is out of the question; and where the patella adheres very firmly to the femur, the powerful pressure of the anterior surface of the tibia against its inferior margin produced during forced extension, is likely to prove more efficacious than forced flexion, which might frequently only cause a distension or rupture of the patellary ligament. Every practitioner who is experienced in these subjects will remember to have met with cases where, although the patella was intimately connected with the femur, still no small degree of flexion was possible, which can only be ascribed to a distension of the patellary ligament. This will support our assertion on the impracticability of always detaching the anchylosed patella, by traction of the ligamentum patellæ. According to my observations in the cases operated on by Mr. Langenbeck, the patella was nearly always detached during the forced extension. It will no doubt be most advisable to practise both forced flexion and forced extension, as in the method of Mr. Langenbeck, afterwards to be described. After instituting forced flexion, by the medium of which, in the six cases of Bonnet, the patella was detached, an apparatus acting by traction on the leg and pressure on the anterior surface of the epiphysis of the femur was applied, in order to effect a gradual extension. This practice was successful in the few cases described by Bonnet. Nevertheless, in taking into consideration the pathological anatomy of true and spurious anchylosis, we are not inclined to believe, that in a vast number of cases forced extension can be dispensed with. The final results in five of Bonnet's cases can be designated as highly favourable. The after-treatment he adopted is particularly worthy of recommendation. Still, the same evils occurring in Dieffenbach's practice are here also not avoided.

Suppuration supervened several times, and once the peroneus nerve was divided, producing a perfect paralysis of the flexors of the foot. Bonnet has also treated contractions and anchyloses of the hip-joint by this method. He has only published two cases: in one, the supervention of inflammatory symptoms prevented the consummation of the cure; in the second, a perfect result was obtained, but the patient being prematurely dismissed the cure failed to be permanent. The principles he lays down for the treatment after the rupture of the adhesions are so excellent, that good results must necessarily accrue from their adoption. No doubt could prevail, after the brilliant successes of Dieffenbach, that, by the introduction of forced rupture, the main difficulties had been overcome; the method devised by Louvrier in 1841 was the first to attempt forced rupture without the aid of tenotomy. The evils before enumerated, connected with the practice of Dieffenbach's method, were thus to be avoided.

Armed with a powerful machine most ingeniously constructed, Louvrier undertook to stretch all contracted and anchylosed knee-joints by a single operation.(a) He came to Paris after having successfully treated five cases in the

(a) M. A. Berard, *Gazette Medicale de Paris*, No. XXI., p. 324—329.

provinces. The whole surgical world of the great capital dreaded the very idea of so violent a method; they apprehended serious disturbances of the nervous system, inflammation, and suppuration of the joints; they feared rupture of the arteries and nerves, as well as fractures of the osseous epiphyses. In far the greater number of cases, these apprehensions proved to be unfounded. Out of twenty-two cases, operated in presence of the most eminent surgeons in France, serious accidents only occurred in three. In the first of these three, an acute angular contraction of the knee-joints, the integuments of the popliteal fossa were torn asunder, and death ensued after a long suppuration. It was a debilitated woman, with venereal sores on the lower extremities. The popliteal artery was found uninjured, the vein filled with pus communicating with an abscess in the hollow of the knee. The semi-tendinosus was the only muscle partially torn. In the second of the three unfortunate cases, a rupture of the popliteal artery took place without injury to the skin. A partial gangrene of the leg was the consequence; but the sphacelous parts sloughing off, the patient ultimately recovered. In the third unsuccessful case, the machine produced a fracture of the lower extremity of the femur. This escaped observation. An apparatus was applied to perfect the extension, in which a strong pressure was brought to bear on the anterior surface of the epiphysis of the femur. Notwithstanding the violent pains complained of by the patient, the apparatus was not removed till twenty-four hours had elapsed; its pressure was found to have occasioned a gangrenous sore on the anterior surface of the thigh, by which the fractured bone was exposed. The patient died after protracted suppuration. The injudicious after-treatment was no doubt the cause of this fatal termination. The most serious opprobrium attached to Louvrier is, besides the fracture of the bone, the possibility of the skin being ruptured, by which the considerable injuries of the parts beneath, occasioned by the rupture of the adhesions, lose their *innocuous* character. In the other nineteen cases, scarcely the least reaction supervened after the operation. Only one was followed by a phlegmon of the thigh, which yielded in a few days to the common antiphlogistic treatment.

[To be continued.]

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

CANCER IN EARLY LIFE.

Among the cases which we have this week to record, one of the most interesting is that of an infant, aged eight months, whose arm was recently amputated at the London Hospital, on account of a large malignant tumour. Two of the others also present examples of the same disease affecting patients of the respective ages of seven and eight years. The consideration of these naturally suggests that of the general question as to the forms of cancer to which those in early life are most liable; and in the hope of affording some facts for its decision, we shall, accordingly, before proceeding to detail the cases alluded to, briefly enumerate the whole of the examples of malignant disease affecting patients under the age of twenty which have fallen under our observation during the past year.

Case 1.—*Medullary Cancer Deposited in the Cellular Tissue of the Orbit, External to the Eyeball.*—St. Bartholomew's Hospital.—Mr. Lloyd.—Elizabeth Reeves, aged 7 when the disease commenced. Operation of removal of the entire contents of orbit nine months afterwards. The disease returned before the patient left the hospital, and within a month of her return home she was suddenly attacked with head symptoms, and died. Mr. Lloyd informs us, that at the autopsy a large mass of soft cancer was found in the brain. The disease ran its course within a period of about eighteen months. For particulars respecting the operation, see *Medical Times and Gazette*, Nov. 6, 1852.

Case 2.—*Medullary Cancer of the Eyeball (Choroid Coat?)*—Ophthalmic Hospital.—Mr. Bowman.—William Crickwell, ten months old when the disease was first perceived, two and a-quarter when the extirpation of the eyeball was performed. He recovered well, regained his flesh, and continued in apparent health until within a few days of his death, which was attended by symptoms of return of the disease within the skull, and took place four months after the operation.—*Medical Times and Gazette*, Jan. 29, 1853.

Case 3.—*Medullary Cancer of the Femur.*—St. Mary's Hospital.—Mr. Lane.—Benjamin Wakeley, aged 16. The disease followed a severe dog-bite, and amputation of the thigh was performed six months after its appearance. Inflammation of the shaft of the bone followed the operation, involving its entire length, and extending into the hip-joint. Necrosis of the whole, excepting the articular head, took place; and under the profuse suppuration which resulted, the boy ultimately sank. Death occurred rather more than six months after the amputation. At the autopsy, no secondary deposits of cancer were found; the inguinal glands were not diseased—*Medical Times and Gazette*, Jan. 8, 1853.

Case 4.—*Medullary Cancer of the Eyeball (Optic Nerve?)*—St. Bartholomew's Hospital.—Mr. Paget.—William Neville, aged two and a-half at the time of the operation (removal of all the contents of the orbit), which took place six months after the disease had been first discovered. The child was extremely cachectic at the time of the operation (November, 1852), but recovered favourably, and soon afterwards left the hospital. We are not acquainted with its further history, but it is probable that the disease has not yet returned, as the patient has not again come under case.—*Medical Times and Gazette*, Nov. 6, 1852.

Case 5.—*Large Tumour of Medullary Cancer in the Abdomen (Liver?)*—St. Mary's Hospital.—Dr. Alderson.—James C—, aged 5, died about seven weeks after the existence of a large solid tumour in the upper part of the abdomen had been discovered. His friends refused to permit a *post-mortem* examination; but, by making a small incision over the diseased mass, Mr. Trotter, one of the resident medical officers, succeeded in removing a small portion of it, which was firmer than the ordinary forms of soft cancer, but exhibited, under the microscope, the cells characteristic of that disease.

Case 6.—*Medullary Cancer of Eyeball.*—St. Bartholomew's Hospital.—Mr. Lawrence.—Arthur Pidduck, when a little more than three years old, received a blow over the right eye; the organ recovered its natural appearance in every respect; but, after about five months, it began to enlarge in size, sight was lost, and a light-coloured mass was observed on looking into the pupil. When admitted under Mr. Lawrence, nine months later, the diseased growth had burst the eyeball, filled the orbit, and extended over its outer boundary, as a soft-feeling mass, on to the right temple. The child was emaciated, was frequently troubled with sickness, and suffered very great pain. The disease was much too advanced for surgical treatment, and the patient was accordingly sent home to some distance in the country. It is not probable that he lived more than a few weeks afterwards.

Case 7.—*Medullary Cancer of Femur.*—St. Bartholomew's Hospital.—Mr. Skey.—Henry Larner, aged 18. Swelling and pain commenced spontaneously in the lower third of the left femur, a year before admission. The constitution had suffered much, and the pulse had become very rapid. Amputation of the thigh was performed. Death took place about three weeks after the operation, from acute inflammation of the medullary cavity of the bone.

Case 8.—*Medullary Cancer in the Cellular Tissue of the Orbit.*—Ophthalmic Hospital.—Mr. Bowman.—Elizabeth Abithell, aged ten months, a cachectic and puny infant. When six months old, she received a knock on the eye or orbit in a fall, and, soon afterwards the eyeball was observed to protrude. The disease rapidly extended, and escaped over the margins of the orbit outwards on to the left temple, and upwards beneath the eyebrow. When brought to Mr. Bowman, the eye was forced outwards and downwards, but did not appear to be affected by the disease, as the child could turn it about in any direction, and the only visible difference between it and the other consisted in its having a rather smaller pupil. Mr. Bowman declined to interfere, and the child was accordingly taken home, where she soon afterwards died, brain symptoms having in the interval come on.

Case 9.—*Medullary Cancer of the Testis.*—University College Hospital.—Mr. Quain.—James Hill, a clerk, in the previous enjoyment of excellent health. The disease had first appeared at the age of 16, and he was admitted eight months afterwards, when the tumour had attained a very large size, measuring eight inches and a-half in length; the vas deferens was also diseased, being as thick as a little finger. Mr. Quain performed castration on Sept. 9 last, dissecting out the diseased portion of the cord up to the commencement of the inguinal canal.

Ten days after the operation, the wound at the time looking well, the lad began to complain of tenderness and pain in the right hypochondriac region of the abdomen, attended with vomiting, and much febrile disturbance. These symptoms increased, and he died on the 24th, a fortnight after the operation. At the autopsy, there was found a very large mass of medullary cancer in the right lumbar region, in the immediate neighbourhood of which were evidences of recent and acute peritoneal inflammation. The testis presented one mass of medullary deposit; in respect to it, as well as the growth from the lumbar glands, the diagnosis was confirmed by the microscope.

Case 10.—*Medullary Cancer of the Femur.*—Middlesex Hospital.—Mr. Shaw.—Mary Shaw, aged 18, at the time of the appearance of the disease, a stout, healthy-looking girl, living in the country. When admitted, six months afterwards, the whole lower third of the left femur was involved in a very large, soft, but elastic growth, in many parts of which a deceptive sense of fluctuation was felt. It encroached upon the knee-joint, but terminated by an abrupt border at the commencement of the middle third of the femur. The patient had suffered most severe pain, and was much emaciated; her pulse had an average frequency of 130. In such a state, Mr. Shaw refused to perform any operation, as it was evident that the fatal termination was rapidly approaching. She remained in the hospital for some weeks, during which time narcotics were freely administered, but getting weaker, and being anxious to die at home, she was subsequently discharged. The disease would probably terminate within ten months of its commencement.

Case 11.—*Melanotic Cancer of the Skin, followed by Medullary Deposit in the Inguinal Glands.*—St. Bartholomew's Hospital.—Mr. Lloyd.—Emma Bentley, a fair-complexioned, delicate girl. The melanosis began at the age of 14, in a mole on the foot; it was twice excised, and as often reappeared in the cicatrix. Death took place four years afterwards, from an enormous ulcerating and sloughing mass of medullary cancer in the groin.—*Medical Times and Gazette* for May 21, 1853.

Case 12.—*Melanotic Cancer of the Skin.*—St. Bartholomew's Hospital.—Mr. Wormald.—Edward Kent, a healthy boy, aged 8. The tumour, situated on the back, began to grow at the age of three years, and increased painlessly. Mr. Wormald excised it, the wound healed well, and no return is as yet known to have taken place.—*Medical Times and Gazette* for May 28, 1853.

Case 13.—*Melanotic Cancer of the Skin.*—St. Bartholomew's Hospital.—Mr. Lloyd.—Ann Barnes, aged 13. The disease, melanosis, affecting a mole on the foot, had existed a year before the operation, which was in June, 1852. She has hitherto remained quite well.

Continuing the same subject, we shall now proceed to cases which it will be necessary to give at greater length:—

ST. BARTHOLOMEW'S HOSPITAL.

Case. 14.—MEDULLARY CANCER OF THE HUMERUS EXTENDING INTO THE SHOULDER-JOINT.—AMPUTATION ABOVE THE JOINT.

[Under the care of Mr. LAWRENCE.]

Charles Copley, aged 12, a schoolboy, of rather fair complexion, admitted June 17, 1853. The upper half of his right arm is much swollen in all directions, the swelling increasing as the shoulder-joint is approached, and gradually tapering off at about the middle of the humerus. The skin over the tumour, especially about the joint, is tense, smooth, somewhat reddened, and marked by numerous tortuous veins. To the touch the swelling is tolerably firm and elastic; it does not adhere to the skin, but feels as if attached to the bone itself, which it entirely surrounds. Its exact boundaries, above and below, are very ill-defined, but it appears to extend for some distance over the shoulder-joint. The boy states that the whole of this large growth has formed within two months, and that he has only had pain in the part for about twelve weeks. On inquiry from his mother, however, it appears, that for seven or eight months he has been in the habit of complaining to his father, that his school teacher was accustomed to rap him, with the back of a book, over the right shoulder, and that it gave great pain. These blows do not appear to have been severe ones, and the lad never complained of their hurting him in any other part. The mother confirms his statement as to the date of the swelling, and adds, that he has latterly lost much flesh, as well as colour, and that the pain for about a month has been so severe as to keep him awake at night. He has consulted several surgeons, and on May 3 was admitted into King's College Hospital, where the removal of the arm was proposed, but declined by the parents, who took him out of the hospital in order to obtain Mr. Lawrence's opinion. There is no known history of malignant diseases having ever occurred in any of the boy's relatives. Mr. Lawrence stated, that from the first time he had seen the boy, (a few days before admission,) he had felt no doubt as to the nature of the disease, and that the only difficulty appeared to be in determining its exact limits. As there was, however, from the general distension of the parts around the shoulder-joint, and even in the supra-spinous fossa, reason to fear that it had already extended beyond that articulation, he should feel no hesitation in advising amputation above that part, so as to make certain of including the whole disease. The probabilities of the case having been fairly explained to them, the parents of the lad at once acceded to the proposal, and the operation was accordingly performed on June 19. Chloroform having been administered, Mr. Lawrence commenced by making an incision with a common scalpel through the skin and subcutaneous cellular tissue, from the junction of the middle with the outer third of the clavicle over the shoulder to the lower part of the posterior boundary of the axilla, joining the extremities of this by a second incision carried across the front of the axilla. Both of these, and especially the upper one, were made in a direction curved forwards, so as to surround convex flaps of skin. These flaps, which did not include any of the deep structures, were then dissected back, and the next step consisted in the division of the clavicle. The skin being held aside by assistants, and a metallic spatula passed under the bone to protect the parts beneath, Mr. Lawrence cut through it with a small saw. Its outer third being thus separated, it was held away, and the trunk of the subclavian artery now brought into view was easily ligatured by passing beneath it an armed aneurism needle. The operator next proceeded to dissect away the soft parts over-lying the scapula; and having done this, he divided that bone with bone-cutting forceps vertically through its middle. The structures in the axilla having next been divided, the whole extremity was dismembered; and about ten ligatures having been applied to as many bleeding vessels, the operation was complete. We were struck with observing how well the flaps of skin come into apposition, and how much smaller the wound appeared than, from the consideration of the extent of the excisions, one would have been inclined to expect. The quantity of blood lost had not been large, having issued solely from the small vessels, or from venous trunks. The edges of the wound were brought together by sutures; and the patient having been sent back to his bed, Mr. Lawrence, after addressing to the students some brief clinical remarks on the case, proceeded at once to the examination of the diseased portion of the amputated limb. The whole upper arm, inclusive of both bone and soft parts, having been divided by a longitudinal section, the following appearances were presented. The upper half of the humerus was enlarged to twice, and in the superior portion to three times, its natural thickness, partly by the expansion and splitting into layers of its outer walls, and in part by the deposition of new bone on the periosteal surface. It was softened in structure, and of a yellowish white colour. Springing from its outer surface in all directions was a growth of firm medullary cancer, which, over the upper third, was a full inch in thickness, and gradually tapered down to the commencement of the lower third, where the bone assumed its natural characters. The margin of this layer was well defined, as it had not infiltrated itself among the surrounding muscles, which, in a perfectly healthy condition, were stretched over it. The line of separation of the epiphysis from the shaft was still distinct, and the head of the bone was not affected by the disease. The articular cartilage was healthy, and the joint contained no fluid, but growing into it from below, and extending all around the head of the bone, were thick, fungating tufts of the diseased structure. The clavicle and scapula were not in any way involved; but, from the way in which the growth projected into the joint, and adhered to the parts required for flaps, it was evident, that the operation of disarticulation could not have been attempted without great risk of cutting into the tumour, and leaving some portions of it behind. The cancerous structure itself was, in most parts, very unusually firm, and not at all brain-like; there were, however, some small portions in the lower part, which were soft and pulpy, and into which large extravasations of blood had taken place. The section of the upper two-thirds showed no effusions of this kind, but was of a uniform, pale grey colour. A creamy juice exuded plentifully from all parts, which, examined under the microscope, showed the appearances commonly met with in soft cancer.

July 11.—The boy has progressed very satisfactorily ever since the operation, and the wound is now all but healed.

Case 15.—LARGE GROWTH OF MEDULLARY CANCER IN THE BACK OF A CHILD—EXCISION—RECOVERY—RETURN OF THE DISEASE—RE-EXCISION—RECOVERY.

[Under the care of Mr. STANLEY.]

Mary Ann Payne, aged 8, a fair-complexioned and delicate-looking child, was admitted in April, 1852, on account of a soft swelling, the size of a fist, situated on the back, between the shoulder-blades, rather more to the right than left side. She had known of its existence for about two months, and its increase had been unattended by pain, excepting when, as in lying on the back, it was accidentally pressed. She was very thin, and stated, that she had lost flesh since its appearance. It was attached both to the deep parts and to the skin; but the latter was but very little inflamed. The sensation of fluctuation was so distinctly conveyed on pressure, that the diagnosis of a chronic abscess was confidently pronounced, and Mr. Stanley accordingly had it punctured with a small bistoury; nothing, however, but blood escaped. The wound soon healed, and a linseed-meal poultice was kept applied. A week after the first puncture, at the suggestion of Mr. Paget, who saw the case, in consultation with Mr. Stanley, a second and much more free opening was made, in the conviction, that there must be a collection of fluid of some kind, and, most probably, of pus. As before, however, nothing but a small quantity of blood escaped. After this last incision, the tumour increased very greatly in size, and Mr. Stanley accordingly determined no longer to defer its examination, and, if found necessary, its removal.

On May 15, the girl being under the influence of chloroform, an incision was made through the middle of the tumour, when it was found to consist of a growth of very soft medullary cancer, in the middle of which was a collection of about an ounce of dark, grumous blood, probably the result of the previous puncture. Mr. Stanley accordingly proceeded to dissect away the entire mass, the base of which was found to extend very deeply among the muscles of the part; and in effecting its removal, the angles of the ribs were exposed. On account of the extreme vascularity of the growth, the hæmorrhage throughout the operation was very profuse. Numerous ligatures having been applied, a pledget of lint was introduced into the wound, and supported by a moist compress. The structure of the growth, which was much broken down in the operation, presented a good example of soft cancer, being chiefly remarkable for its very congested condition; in many parts, small yellow masses, resembling crude tubercle were seen (fatty degeneration of cancer). The large wound healed well, the girl regained her flesh and colour, and left the hospital in July, in very much better health than she was at the time of admission.

She remained at home in good health for about seven months before the disease re-appeared, when there formed beneath the cicatrix two small distinct masses. After their appearance, she rapidly lost flesh, and was admitted again, under Mr. Stanley, in the latter end of March, 1853, at that time looking very ill. The swellings were not larger than pigeons' eggs, immediately beneath the skin, and quite movable. They had occasioned no pain. Mr. Stanley performed a second operation of excision, and the wounds again healed favorably. The child was discharged on May 2nd, and has been seen several times since. She remains thus far quite well.

We must remark, that this case affords a very instructive illustration of the constitutional influence exerted by malignant growths, and appears to confirm strongly a general observation respecting cancer, that the peculiar cachexia of that disease is not so much dependent on a pre-existing state of the system, as directly induced by the presence of the tumour. The child, previously in good health, began to emaciate when the disease first appeared, and gained health remarkably as soon as it had been extirpated by operation. The same occurred on its re-appearance; and again, subsequent to its second removal, she has regained flesh and colour, and is now apparently in perfect health. It must be borne in mind, that this depraving influence was exerted by the simple act of growth, and was quite independent of either ulceration or pain, neither of which had attended it.

GUY'S HOSPITAL.

Case 16.—ENORMOUS GROWTH OF MEDULLARY CANCER IN THE NECK OF A BOY.—DEATH.

[Under the care of Mr. BRANSBY COOPER.]

Charles Lacey, aged 12, of fair complexion and brown hair, a remarkably intelligent boy, was admitted on Feb. 2, 1853. In the right side of his neck was a very large projecting mass, which extended from the median line in front to the spinous processes of the vertebræ behind, and from a little below the base of the jaw to the clavicle. It was closely attached to the deep structures, but the skin over it, although tense, was movable, and could be pinched up. The exterior of the mass felt smooth, excepting where marked by shallow furrows, which appeared to indicate its division into three or four mutually-adherent compartments. In some parts, a very distinct sense of fluctuation was felt, while others appeared to be tolerably firm and solid. The boy stated, that the disease had commenced as a very small movable swelling, about six months ago, which the surgeon whom he consulted said was an enlarged gland. He had lost flesh since its appearance, and was, at the time of admission, thin and pale, and feeling very weak. Pulse 84, and of tolerable volume. No family history of tendency to malignant diseases. It came out afterwards, on inquiry from his mother, that there was reason for believing that the present growth was a secondary, and perhaps a glandular one. In February, 1852, a very little lump had been found in the scalp of the occiput, which was not painful excepting when scratched by the comb. It increased to about the size of the kernel of a hazel-nut, and was then removed by a surgeon. The wound soon healed, and no further notice was taken of the matter. It was not till seven months after this operation that the tumour in the neck was first noticed.

A consultation on the case was held, in which Messrs. Cock and Hilton took part with Mr. Cooper. It was the unanimous opinion, that the tumour was a malignant one, and that, from its size and deep attachments, it would be a very unwise measure to attempt its removal. By way of confirmation, however, a very small trocar was passed into one of the parts in which the pseudo-fluctuation was most distinct, but nothing excepting blood escaped. The boy was accordingly allowed to return home, his parents having been made acquainted with the nature of the disease, and remedies for the mitigation of pain having been suggested.

After leaving the hospital, the growth very rapidly increased to an enormous size, pushing the head over towards the opposite shoulder. A tumour of a similar character also made its appearance on the side. The boy had a very troublesome cough, and expectorated much thick, whitish matter, occasionally tinged with blood. He suffered extreme pain, and for several weeks preceding his death had almost never slept. He died on April 12th, worn out with pain, no ulceration having taken place. After death, the tumours were examined, but not the internal viscera. As had been expected, they were found to consist of very vascular brain-like cancer.

Case 17.—MEDULLARY CANCER OF THE FIBULA IN A CHILD.—AMPUTATION.—RECOVERY.

[Under the care of Mr. BIRKETT.]

Elizabeth Caines, aged 7, a delicate-looking child, was admitted on March 9, 1853. She was of a scrofulous family, but had not herself, until the present illness, exhibited any symptoms of ill health. About four months ago, she had received, while at play, a severe kick on the outer part of the left leg, which gave her considerable temporary pain. Within a week or two after this accident the injured leg was observed to be gradually enlarging on its outer aspect, and she began to complain occasionally of sharp pains in that part. The medical men who were consulted tried various remedies, but without the effect of at all checking the progressive increase in the size of the swelling, and ultimately, about a week before admission, a puncture was made in a part which felt soft, and as if fluctuating. Nothing, however, followed the incision excepting blood, which continued to flow rather freely for several hours afterwards. As the child was losing health, and suffering more and more from the painfulness of the disease, the parents at length consented to the removal of the limb,—a measure which had before been proposed to them in vain,—and with this object she was now admitted.

The whole outer half of the leg, from the head of the fibula to just above the malleolus, presents an evenly rounded and projecting enlargement, which is greatest about the commencement of the middle third, and gradually tapers off above and below. At this part the leg measures more than fifteen inches in circumference, the whole length of the tumour being about six and a-half. The superjacent skin is smooth and tense, and crossed by a network of purple veins; the orifice of the puncture is still visible. To the touch, an ill-defined softish swelling is perceptible, which in some parts yields a very deceptive sense of fluctuation. The leg is but slightly tender, though its temperature is greatly raised. The tumour is very rapidly growing, besides extending itself downwards and backwards, its lateral increase has been so great that the leg measures nearly two inches and a-half more in circumference than it did eighteen days ago. The inguinal glands on the affected side are a little enlarged, and somewhat tender.

The child appears to be suffering much constitutional irritation, and has a parched mouth, with tongue tending to become dry; skin hot, but moist; pulse from 90 to 100. Mr. Birkett had seen the patient three weeks before her admission, and had at that time formed a confident diagnosis as to the malignant nature of the disease.

On March 13, the girl being under the influence of chloroform, a circular amputation was performed in the lower third of the thigh. The operation presented nothing peculiar, and did not involve any great loss of blood. Reaction was soon afterwards well established, and the patient slept tolerably during the following night.

Examination of the Diseased Parts.—A longitudinal section of the leg having been made, the disease was found, as had been suspected, to be confined to the shaft of the fibula, the ancle and knee-joints, as well as the tibia, being quite unaffected. Growing from almost the entire length of the fibula was a thick mass of medullary cancer, the outer boundaries of which were marked by a line of whitish fibrous-looking tissue (periosteum) to which the muscles were attached. In the middle third of the tumour the fibula had been quite broken down and softened; its outline was, however, was still discernible by means of a yellowish border, in which small spiculæ of bone could be felt. The upper and lower thirds of the bone were more or less disintegrated, being most diseased towards the middle, and gradually assuming a bony character as they approached the extremities of the tumour. The substance of the growth was very soft, and in some parts quite pulpy; it was of a greyish white colour, and exhibited everywhere lines of radiation, proceeding directly outwards from the fibula. It had evidently grown from the interior of that bone, and pushed before it the outer layer of the periosteum, by which it was still bounded and prevented from infiltrating itself among the surrounding muscles. Mr. Birkett examined its microscopic structure, and found the characteristics of medullary cancer well marked.

The girl left the hospital on April 12th,—the stump very nearly healed, and the inguinal glands but slightly enlarged.

April 28.—A small abscess has formed and broke at the extremity of the stump, since which the child's health has greatly improved.

June 30.—The stump is quite healed; the inguinal glands are smaller; the patient's health is much better than it was before the operation, and, for the present, she may be said to be well.

We are indebted to Mr. Stilwell, the dresser of the patient, for some particulars respecting the preceding case.

ST. THOMAS'S HOSPITAL.

Case 18.—MALIGNANT DISEASE OF THE UPPER PART OF THE HUMERUS.—AMPUTATION AT THE SHOULDER-JOINT.—RECOVERY.

[Under the care of Mr. SIMON.]

Ashby Massender, a tall, thin, and pallid lad, aged 18, was admitted in the beginning of June, on account of a large swelling in the upper fifth of the right arm. The tumour had a smooth, rounded outline, and an oval shape. It commenced at the articular head, and extended downwards to about the insertion of the deltoid, bulging almost equally in all directions from the bone. The skin over it, excepting being crossed by an unusual number of veins, was healthy, and could be pinched up; but the intervening muscles closely adhered to the growth. To the touch, the tumour was in all parts elastic, and moderately firm; it was not tender. Spontaneous fracture of the humerus had taken place in the lower part of the diseased mass, and the inferior portion of the shaft of the bone was freely movable in the upper. Of this accident the patient was not aware, and did not at all know when it had occurred. By grasping the tumour itself, the head of the bone could be made to turn freely in the glenoid cavity; the outlines of all the parts of the scapula, overhanging the articulation, were clearly defined, (in this respect contrasting strongly with the case of Mr. Lawrence's just recorded,) and it was evident, that the disease did not extend either beyond or into the joint. The boy stated, that he had first perceived swelling six months ago, and there had been rather severe pain in the part almost the whole time. He knew of no injury, excepting having strained the arm in throwing a stone, which occasioned great temporary pain. This accident occurred a month or two before the appearance of swelling, but it is doubtful whether the pain it caused might not be due to the previous existence of disease in the part. He did not think that he had lost either flesh or strength since the tumour commenced to grow.

Before determining to resort to amputation, Mr. Simon had a grooved needle passed down into the middle of the mass, and examined under the microscope the fluid which escaped. It consisted only of a small quantity of bloody serum, and its characteristics appeared to be numerous elongated fibre-forming cells, each having in the middle a bulging portion, which contained a nucleus, and a few cells of large size, containing a number of clear, well-defined nuclei. These appearances Mr. Simon believed to indicate a malignant disease, but not of the medullary variety; and he accordingly decided to give the patient the chance of relief by removal of the limb at the shoulder-joint.

June 25.—*Operation.*—Chloroform having been administered, the patient was seated in an upright position in a chair. The arm having been carried away from the side by an assistant, and Mr. Le Gros Clark having taken charge of the subclavian artery, Mr. Simon commenced his incisions with an ordinary scalpel, cutting from without inwards; as, from the way in which the muscles were involved in the disease, it was impossible to transfix a flap. The first incision extended in a curved direction forwards over the upper part and back of the shoulder, from the coracoid process to the lower border of the axilla; and its extremities were connected by another, which crossed the lower and front aspects of the articulation. The flaps thus marked out having been dissected up, and reflected backwards, a deep incision was then carried through the deltoid muscle into the glenoid cavity, and the bone disarticulated. On account of the fracture, the shaft could not be used as a lever to move the head, and some little difficulty was thus occasioned in accomplishing the disarticulation. The structures in the axilla were left to be divided last; and, when cut through, Mr. Simon at once placed a ligature on the axillary artery. There was during the operation considerable bleeding from the veins and small vessels, but none occurred from the main trunk. Two or three having been placed on the bleeding arteries, the flaps were brought into exact apposition by means of plaster, covered by a compress and supported by a bandage. The patient has since progressed very well; a large part of the wound united by first intention; and, excepting some very small points, it is now (July 8) completely healed. The lad is in good health, but complains of great annoyance from the sensation of pain referred to the fingers of the amputated extremity. The line of the cicatrix extends downwards obliquely from before backwards.

Examination of the Seat of Disease.—The glenoid cavity was quite healthy, as also the whole lower three-fourths of the arm. A section having been made of the tumour, it was found to be composed of a very vascular structure, much firmer in consistence than ordinary medullary cancer, and contained in various spiculæ and plates of bone derived from the splitting up of the shaft of the humerus. The disease had evidently commenced within the bone, and was still circumscribed in most parts by the distended periosteum, to which the adjacent muscles closely adhered. The structure was too firm to be readily broken down into pulp, but it yielded juice freely when scraped.

Mr. Simon has kindly furnished us with the results of a careful microscopic examination of the disease after the operation, from which it appears rather doubtful to what precise class of tumours it should be assigned. Its elements differed from those usually considered characteristic of cancer, consisting chiefly of peculiar bodies, similar to those described by Lebert as the usual constituents of the "fibro-plastic tumour." These bodies were of very large size, and were distinguished by their very great number of nuclei,—in some cases as many as fifty,—and by their prolongations or branchings out in various directions, which occasionally appeared to anastomose. One very remarkable feature in the disease was, that it had extended itself into the veins, so that behind the neck of the bone was a plexus of them (radicles of the posterior circumflex) so stuffed with the growth, that they varied in size from a goose-quill to a little finger. Mr. Simon remarks, that he has seen two cases of similar character, "one decidedly cancerous in its signification—since it returned by secondary and tertiary growths, and killed—the other probably not so." Under these circumstances, we have, with some hesitation, felt warranted in admitting the case in our present series. Should any facts of interest come to our knowledge in the future history of the patient, we shall not fail to communicate them to our readers.

THE LONDON HOSPITAL.

Case 19.—LARGE CANCEROUS GROWTH IN THE FOREARM OF AN INFANT.—AMPUTATION.—DEATH.

[Under the care of Mr. CURLING.]

Henry Prescott, a fair-complexioned child, aged nine months. When born, he appeared free from disease; but, when about six weeks old, his mother noticed a fulness in the front of the lower part of the right forearm. This gradually increased in size; and, after some time, the infant was, on account of it, made an out-patient, under the care of Mr. Wordsworth. The arm then presented a large, very soft swelling in the front aspect, just above the wrist-joint, where it was naturally fat. It was painless, and the overlying skin was not in any way reddened or diseased; its boundaries could not be easily felt, yet there was an apparent sense of fluctuation in its centre. The child appeared in perfect health. The question as to diagnosis seemed at this time to be between a fatty tumour and a collection of synovia, either in the thecæ of the tendons, or an adventitious bursa. After a month or two had elapsed, and no diminution resulted, Mr. Curling was requested to see the case; and, under his direction, a puncture with a grooved needle was made into the middle of the swelling; excepting, however, a few drops of blood, nothing escaped. The puncture soon healed, and the swelling subsequently continued its slow and painless increase in size. In the beginning of June, Mr. Wordsworth made an incision deeply into the front of the tumour, by which a pale, soft, fibrous-looking mass was exposed, but no fluid evacuated. The cut was about two inches in length, and in the long axis of the limb; it had the effect of liberating the growth from the fascia, by which it had previously been bound down; and was followed, in the course of a few days, by the projection into the wound of a large portion of it. In this condition it was obvious that some further operation must be adopted; and the child was accordingly made an in-patient under Mr. Curling's care, with that view.

June 23.—*Condition at the Time of the Operation.*—The infant is well-grown for its age, and proportionably stout; it is plump and rosy, and presents the appearance of perfect health. The lower half of the front of the forearm is much distended, and presents a wound of considerable length, the edges of which are widely separated by a protruding mass of solid-feeling structure. This mass is divided by the incision into two lateral halves, and the whole exposed surface is covered with small, pale pink granulations. The borders of the wound are not inflamed, and there is nothing of the fungating, sloughy, unhealthy appearance usually characteristic of a malignant sore. The immediate edges of the wound do not adhere to the growth, but over its sides the skin is firmly united to it. Chloroform having been administered, Mr. Curling commenced the operation by slicing off, for inspection, a portion from the front of the protruding mass. The section was of a pale greyish white, interspersed with much semi-transparent structure; it was very firm, sparingly succulent, and could not be broken down by pressure. In the opinion of those who examined it, the portion cut through did not resemble any known form of cancer, and Mr. Curling accordingly determined to pursue his original intention of dissecting out the tumour, instead of amputating the arm. The incision in the skin having been enlarged, the latter was, with some difficulty, separated from the mass beneath, to which it very closely adhered. On attempting, however, to get beneath the tumour, and to separate its connexions with the surrounding parts, the task was found to be almost impracticable. Not only did the growth, which was partly solid and partly cystic, adhere closely to the tendons, muscle, and periosteum, in relation with which it lay, but it was found to extend up the arm much further than had been suspected. It was evident, therefore, that its removal could only be accomplished by making very extended incisions, and a long dissection, at the risk of great injury to the parts concerned; and, under these circumstances, it was deemed better to amputate the arm. Mr. Curling accordingly commenced a circular amputation, immediately below the elbow, at a part supposed to be just above the limits of the tumour. On making the deep incision, however, it was discovered that the growth had extended itself yet higher, and that, consequently, the whole of it could only be removed by amputation above the joint. The latter operation was accordingly performed by the ordinary circular method, and as low down as possible. The stump having been dressed, the little patient, who had been quite unconscious the whole time, was sent back to bed. Although the operation had been somewhat prolonged, yet the quantity of blood lost had been but small. Mr. Curling remarked on the extreme advantage which had been derived from the use of chloroform, by the aid of which it had been practicable to make two distinct attempts at the removal of the disease by less serious operations than that ultimately resorted to, without occasioning any pain, and probably without materially increasing the patient's danger.

After the effects of the chloroform had passed off, the child became very restless, and a draught, containing two drops of tincture of opium, was therefore administered, after which some quiet rest was obtained. On the following day, its condition was, however, not satisfactory; it was extremely restless, and apparently suffered much pain. The stump was not much swollen, but the edges of the wound did not adhere together, and were dry and unhealthy-looking. No food, excepting the mother's milk, was given, which, however, was freely taken.

During the next three days, the condition of the stump and of the child's general health remained much as before—the unfavourable symptoms, if anything, rather increasing. In spite of a free allowance of wine, the vital powers did not appear to rally. On the fifth day, there was a blush of redness about the stump, without, however, any material swelling; and on the following day the same condition was apparent over both ankles and feet.

From this time the patient rapidly sank, and died on July 30, a week after the operation.

Examination of the Arm.—The growth, which had defined borders and an irregular form, extended itself along the front of the forearm from the wrist to the elbow-joint. In the lower half of the forearm, it covered the whole of its width, adhering closely to both bones; while in the upper part it consisted only of a small tapering prolongation, firmly united to the front of the ulna. It appeared to have originated in the cellular tissue between the deep layers of muscles, and, though attached by dense fibrous connexions to the fascia, tendons muscles, and periosteum adjacent to it, more especially to the latter, yet, with the exception of some portions of the muscles, none of these parts were in any way implicated in the diseased action. It was lobulated, and for the most part enveloped in a thin capsule of cellular tissue, which entirely prevented anything like infiltration among the surrounding structures, which were simply pushed aside. The larger portion of its mass consisted of a firm, tough, whitish structure, yielding but little juice, and much resembling that of a mammary glandular tumour. In its deepest portions, however, in the lower part of the forearm, where probably it had first formed, were numerous small cysts, containing from a few drops to nearly a drachm of thin bloody serum. The solid matters intervening between these cysts differed very much from the rest of the tumour, being softer, much more congested, and more succulent. It was, however, moderately tough, and could not be reduced to pulp by pressure. We should have stated, that several of the largest of these cavities were opened during the operation, and their contents, examined by the microscope, did not display any of the characteristics of malignancy. Mr. Curling informs us, that parts of the tumour itself were, after the operation, submitted to careful microscopic examination by Professor Quekett, who felt no hesitation in pronouncing it to be a variety of soft cancer, though containing a much larger amount of fibrous tissue than is common in that disease.

ST. MARY'S HOSPITAL.

Case 20.—MEDULLARY CANCER OF THE CLAVICLE IN A BOY.—ENORMOUS GROWTH OF THE TUMOUR.—DEATH.—AUTOPSY.

[Under the care of Mr. COULSON.]

We have extracted the particulars of the following case from the notes taken by Mr. Bullock, the House-Surgeon of the hospital:—

Frederic Goodall, aged 14, a farmer's boy, of healthy, rural complexion, was admitted April 9, 1853, on account of a large elastic swelling, which obscured the sternal two-thirds of his right clavicle. The account given was, that, six months since, while carrying a large basket, he had bruised his shoulder, and that, very shortly afterwards, the part injured had become tender and swollen. From that time to the date of admission the swelling had been progressively increasing, without occasioning much pain; what pain there had, however, occurred, had been of a shooting character. The tumour was crossed in various directions by a network of enlarged veins, and, from its soft, elastic character, taken with the history of rapid growth, Mr. Coulson felt no doubt from the first as to its true nature, and, beyond palliative treatment, it was evident that nothing could be done. The boy remained in the hospital for nearly three months, when he died, in part from the pressure of the growth upon the trachea. During that time, it had increased to an enormous size; the pain connected with it had at no time been very severe, but, during the last few weeks of life, ulceration had taken place over one part, and two attacks of bleed-

ing from the sore had occurred, which it was necessary to arrest by the application of the tinct. ferri sesquichlorid.

Autopsy, July 3, the day after Death.—From the inner three-fourths of the clavicle, the tumour extends outwards, overlapping the shoulder-joint; inwards across the median line to the middle of the opposite clavicle; downwards below the nipple, and upwards nearly to the chin. On dissection, the growth was found to have completely disorganised the bone from which it sprang, with the exception of its acromial fourth, which was unaffected. The whole mass when removed weighed nearly six pounds and a quarter; it presented the usual structure of medullary cancer, both to the naked eye and under the microscope. It had grown downwards behind the clavicle, and pressed somewhat upon the apex of the lung; in the median line it had exercised pressure on the trachea, so as to narrow its calibre, and make it assume a triangular shape. The abdominal and thoracic viscera were examined, but no secondary deposits were discovered.

Remarks on the Series.—Of the twenty cases now recorded, we may remark respecting the form of cancer, that there is not a single example of scirrhus, epithelial, or colloid; three of melanosis, fourteen of the common, soft, brain-like form of medullary; and three others (including the case of Mr. Simon's which is perhaps questionable) of a firmer varieties of the same disease. All the cases of melanosis affected the skin, and two of them congenital moles. Of those of medullary cancer, three affected the eyeball, two the cellular tissue of the orbit, three the cellular tissue of other parts of the body, one the abdomen, one the testis, and seven the bones; of which latter, three were in the lower third of the femur, two in the upper part of the humerus, one in the clavicle, and one in the fibula. Respecting age, in one patient the disease commenced at 6 weeks, in one at 6 months, in one at 10 months, in one at 2 years, in two at 3, in one at 5, in two at 7, in one at 8, in one at 11, in two at 12, in two at 14, in one at 15, in one at 16, in one at 17, and in two at 18. It might be supposed, that, in the case of a disease dependant upon a constitutional cause, and reputed to be often transmitted from parent to child, the existence of hereditary tendency would be capable of being most frequently proved in those cases in which it appeared in very early life. At any rate, such is probably the fact with regard to infantile phthisis. We were only able to obtain reliable evidence on this point respecting nine of the above cases, and in not one of these was there any known history of the disease having previously existed in the family of either parent.

Medical Times & Gazette.

SATURDAY, JULY 16, 1853.

THE CHARTER OF THE ROYAL COLLEGE OF PHYSICIANS.

At the present time, the Royal College of Physicians is the most illiberally constituted of all our corporate bodies. Its President is chosen from among, and by the Elects; while the Elects themselves are self-constituted. The President nominates all the other officers of the Corporation. The Fellows have scarcely a voice in the management of their own College. When summoned by the President, they assemble to receive into their body such Licentiates as the President recommends as fit and proper persons to have the honour of the Fellowship bestowed on them, and to give a licence to practise to all those whom the Censors' Board report to be qualified to practise as physicians within London and its seven miles circuit. As to the Licentiates Extra-urbem, the Fellows never hear of them.

The most influential of the Fellows, including the President himself, have long been most anxious to obtain a more liberal constitution for the College. Unfortunately, their Charter was confirmed by Act of Parliament; and, consequently, they have to apply to Parliament in order to procure a new one. Hence some of the delays they have experienced in the fulfilment of their wishes.

The following are the changes the proposed new Charter of the College is intended to effect:—

1. At present, those who apply for a licence to practise as physicians in the country, are examined by the Elects. It is proposed that all the Licentiates of the College shall submit to the same examination; that henceforth there shall be only one Board of Examiners at the College.

2. The name of the College to be exchanged for that of "The Royal College of Physicians of England."

3. By the new Charter a real voice in the management of the College would be conferred on the Fellows, *e. g.*, the President would be elected by the Fellows instead of by the Elects.

4. The College would have the power of expelling any Fellow or member convicted of certain offences.

5. The College would, by the new Charter, gain the privilege of conferring the degree of Doctor of Medicine and the membership of the College, by a single examination, on all persons more than forty years of age.

In addition to making these changes in the constitution and privileges of the College, a Clause in the proposed Charter would provide for the admission into the College of many physicians now practising in the country without the Licence of the College, and of all the Licentiates Extra-urbem.

That, regarded as a whole, this Charter would be a great improvement on that which the College now possesses there cannot be a question; that it is still open to amendment, none can doubt. It is now in the hands of the Charter Committee of the College, and, from the liberal views of the members of that Committee, we anticipate the complete removal of all its obnoxious points.

It is matter of notoriety, that the Ministers of the Crown are always unwilling to legislate on medical matters; that they most obstinately refuse to admit any question connected with the management of the Medical Corporations to be of any importance to the interests of the public; and that they consequently decline to promote the success of any particular measure till all the parties whom they hold to be interested, *i.e.*, ALL the various medical licensing and honour-conferring bodies, are agreed that the particular measure in question will not be detrimental to their several privileges.

The only parties from whom any effective opposition to the Charter has arisen, are, the University of London and the Scotch Universities.

The Universities of Oxford and Cambridge are to retain all their old privileges. It is true, that considerable disadvantages must ensue from a want of concentration of the licensing power,—true, that neither Oxford nor Cambridge possess the hospitals, etc., essential to the practical educa- of the Physician,—and true therefore it is, that the public are injured to some extent by the privilege of granting licences to practise Medicine enjoyed by Oxford and Cambridge; but they have the privilege, and to ask them to give up a privilege they have, however much their self-negation might benefit the public, would, we all know, be labour lost; and no Minister bold enough to deprive them of their privilege can be found. Oxford and Cambridge are left by the College in the enjoyment of all their former powers. Oxford and Cambridge therefore do not oppose the Charter. The University of London would withdraw its opposition to the Charter, provided the privilege of practising without any reference to the College of Physicians were conferred on its Graduates; provided the right of its Graduates to practise all and every branch of their Profession, in all

and every part of the Kingdom, without regard to any exclusive privileges at present enjoyed by any other Corporate body, were fully recognised by Parliament and the Crown. Oxford and Cambridge are contented to enjoy what they have long possessed. The University of London will be satisfied with nothing less than the privileges of everybody else. Modesty is certainly not a marked trait in the features of the University of London.

But while demanding the full enjoyment of everybody's privileges, the University of London combines with the Scotch Universities in opposing that Clause in the Charter of the College, by which it would be empowered to confer degrees in Medicine on persons more than forty years of age, who should be found on examination by the Censors of the College to be practically and theoretically qualified to practise as Physicians. Now, as our readers know, we are strongly opposed to the College of Physicians having the power to grant degrees in Medicine. We hold, that the function of the College is to determine whether its members are qualified to *practise as Physicians*, and that it is not by its constitution qualified to determine whether a man has that literary knowledge which he who appends M.D. to his name ought to possess. The State has no guarantee, not even a moral guarantee, that the Censors of the College shall be men of high literary acquirements; that they will be eminent physicians, the State may be satisfied; that they will be more, no one can feel in any degree certain. We hold, therefore, that the College is not qualified to grant honorary distinctions which ought to be conferred only on those who have proved to their examiners that they have received a learned education.

We object, therefore, on principle, to the College having the power it desires. We say desires; but the expression is not correct, for the College does not desire to possess this power; it rather consents to exercise it, because the Secretary of State thinks it well that it should exercise it.

And, in so consenting, we believe the College to be animated by the most liberal motives. Mr. Dash is a general Practitioner; he has greatly distinguished himself as a Practitioner and a man of science. He feels, by the time that he has reached the age of forty years, that he desires to be freed from some of the more laborious of his duties, and, for the better accomplishment of his wishes, would join the College of Physicians. Is the College, it is urged by liberal-minded men, to close its portals to such a Practitioner, until he has retired to the shades of some University for two or three years, "got up" Virgil, Xenophon, *et hoc genus omne*, and satisfied the University authorities in regard of his classical acquirements. Or, is the College to admit degrees from Universities that do not require residence, from Universities at which the questions for a Degree in Medicine, untainted by Latin or Greek, are identical in nature and quality with those set by the authorities at the Apothecaries' Hall, or from Universities over the portals of which should be emblazoned, "DEGREES CONFERRED HERE, AND NO QUESTIONS ASKED." It is granted, that General Practitioners desirous of being admitted into the College of Physicians should be received. It is granted, that the College of Physicians ought not to compel such Practitioners to retire, term after term, to the banks of the Isis or the Cam, or to spend long years in matriculating and preparing for first M.B., and second M.B., and M.D., at the London University, or even to pass a winter in that Capital, which its inhabitants still designate the Modern Athens. It is granted, that the College should not encourage that scandalous and debasing traffic in degrees in which some Universities indulge. But because all these points are granted, is it to be concluded with the Charter Committee, that degrees ought to be conferred by the College of Physicians itself on all the practitioners in question? No. For our part, we believe there is a mode of escape from the difficulty without any sacrifice of principle. Let the College insist on those who apply for its licence, before they have attained the age of forty years, having a degree obtained after examination at a University that enforces residence and examines the candidates for its degree in classics or mathematics. But let the College admit to examination before the Board of Censors candidates for its licence, if more than forty years of age, who have no degree; and, if such candidates answer the questions propounded to them, let them be admitted Members, nay, Fellows of the College, even though they have never obtained the degree of M.D.

The College, under these circumstances, would have done its duty; it would have admitted the men found qualified into the order of Physicians; it would have exercised, in regard of them, its proper functions. And if subsequently these Physicians require to be something more than physicians, with that the College would have nothing to do, directly or indirectly. The same means for obtaining the coveted title would be open to those who had and those who had not united themselves to the College.

Thus constituted, and with these powers, the College of Physicians of England might be a kind of censor over the Universities, compelling the lax to be strict, and the unlearned learned. It might say to one University, Your examinations must be more stringent, or we will decline to admit your Graduates to examination; to another, you must compel residence if your Graduates are to become Physicians; and to a third, you must test your Graduates' classical and mathematical acquirements, or we will have nought to do with them.

As the censor of the Universities, the College would stand far higher in public estimation than it could do as their competitor. Better be the Royal COLLEGE of Physicians than a one faculty fifth-rate University.

Our own knowledge of the wishes of the Fellows of the College leads us to believe, that though unwilling in any way to interfere with the action of the Charter Committee, yet should that body adopt the solution of the difficulty we have advised, their decision would be almost universally approved, and at the same time all pretext for the opposition of the Scotch Universities would be removed.

THE CASE OF CRIMINAL ABORTION.

WE have hitherto refrained from offering any observations upon the late case of procuring criminal abortion, because we were unwilling to prejudge the accused, and to heighten the feelings of abhorrence with which the crime itself, and its perpetrator and abettors were regarded by the public mind. But as the prisoners have now had a fair and impartial trial, and a most righteous, though severe judgment, has been inflicted upon the chief delinquent, we may make a few comments upon the whole transaction.

In the first place, we beg to protest, in the name of our common Profession, and in the name of Medical science, against the pertinacious and persevering attempts made to include the culprit Cunningham within the ranks of legitimate practice. Having been present at the trial, we regretted to find that this very common misapprehension was in great measure countenanced both by judge and counsel, the latter describing him as a member of the College of Sur-

geons, and one of the witnesses stating his belief that he was a Licentiate of the Apothecaries' Society; and Sir Thomas Talfourd, in passing sentence, denounced him as having perverted the noble science to which he belonged to the basest purposes. Now, as lawyers profess to believe and to state nothing but what is proved upon evidence, we really wonder how such assertions or remarks should have been made. As far as the College of Surgeons and the Society of Apothecaries are concerned, we can state authoritatively that Cunningham belongs to neither of those bodies; and although we have made numerous inquiries upon the subject, we cannot find that he possesses any legal medical or surgical qualification whatever. In fact, under a healthy system of medical police, such a person ought to have been punished long since for practising an art for which he was not qualified, quite independently of the specific felonious actions for which he has just been sentenced to transportation.

In the second place we may remark, that suspicions generally entertained that the crime of which Cunningham has been convicted was very commonly committed, have been by no means verified; and although, of course, diligent researches have been made to discover similar cases, none has been brought to light. It appears too, that whether Cunningham were or were not engaged in other proceedings of a like character, he made but little profit by his villany; for he seems to have been a miserable wretch, sneaking about from one locality to another, without possessing any fixed residence, and assuming a false name to save himself from arrest on account of pecuniary difficulties. It also appears by the evidence, that all he ever received on account of his crime was ten pounds,—a sum which was very probably divided (though this was not proved) with his accomplices. We think, also, that we are justified in believing, that the crime of procuring criminal abortion is not a common one, at least in this country; and that, if it be practised, it must be by the very dregs of society,—by persons like Cunningham, without education, without character, and without bread; by persons, in fact, who are in such a state of destitution, that they will do anything for the paltry reward which may be offered them.

The whole case, then, affords no useful lesson to society, nor does it develope any features which indicate the general or widely-spread commission of a crime which is hateful to a civilized and Christian community. It is an isolated and a vulgar piece of rascality and vice, in which several are deserving of the severest punishment who have nevertheless contrived to escape from the hands of justice. The original delinquent, a member and a preacher, we regret to write, of our Established church; the young girl who was the chief witness for the prosecution; the chemist who introduced her to Cunningham, and perhaps one or two others, are all more or less open to censure, or even worthy of that retribution which, sooner or later, overtakes the perpetrators of crime; but we willingly drop the curtain over the revolting scene, with a fervent hope that the case is an isolated one, and that the practices which it discloses are as much unknown to our countrymen and countrywomen, as they are abhorrent to every feeling of virtue and every sentiment of religion.

Although, as we have already observed, society may obtain no useful lesson from this case, we must be impelled by it more ardently to insist upon obtaining legal powers to punish those who falsely style themselves members of our honourable Profession; and we must also insist upon the Colleges expelling such of their Fellows, Members, or Licentiates, as act in a manner to bring discredit or disgrace upon the body to which they belong.

CHARING-CROSS HOSPITAL.

It has been reported to us that an inspection of Charing-cross Hospital was made on Monday, the 4th instant, by Messrs. Stanley, South, and Luke, on the part of the Council of the College of Surgeons, in order to ascertain how far the Hospital has complied with the necessary regulations for retaining the recognition of its practice, of the museum, and of the lectures at the School. The result is said to have been, that, on Saturday the 9th instant, official notice was given of the withdrawal of the recognition. The students are, of course, in a state of considerable anxiety on the subject. Various courses are open to them: one is, that they should have a portion of the fees they have paid returned; the other, that they should be transferred to another school without charge to themselves for the completion of their studies. The latter would be the fairer method; for, in the case of a second year's student, a third part of the fees he had paid would not obtain him a year's entrance to another hospital and school. In a question of this public nature, affecting the prospects of a large body of students and the reputation of the officers of the hospital, it is due to the Profession that, if the College of Surgeons have acted as they are said to have done, they should make known the special grounds on which the recognition of a metropolitan institution has been withdrawn.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.—MONDAY, July 11.

GENERAL BOARD OF HEALTH.

Mr. Drummond begged to put a question, of which he had given notice for a previous day:—"Since the Commission appointed to inquire into the causes which produced the fever at Croydon, had reported that 'the operations for the plan for the sewerage had been influential in producing the disease, and that the absence of proper provisons in that plan had been productive of misfortune to the inhabitants,' whether any and what steps had been taken to prevent the General Board of Health in London from inflicting similar misfortunes upon other places?"

Sir W. Molesworth, in reply, said, he would admit that some errors had been committed in the construction of the drainage-works at Croydon,—that some of the sewage points were too small, and not properly ventilated. The consequence was, a noxious and pestiferous atmosphere, producing fever and disease; but he had been instructed by the General Board of Health that they would not consider themselves responsible for the defects in the drainage-works at Croydon. Steps had been taken by the noble Lord the Secretary for the Home Department to institute a full and careful inquiry by Dr. Arnott and Mr. Page; and the report of those gentlemen would tend to prevent similar errors; but it was not the intention of the Government to take any other steps. The constitution of the General Board of Health would terminate next Session, when a general reconstruction of that Board would come under consideration.

Mr. Evelyn stated, that the works at Croydon were done under the orders of the General Board of Health, and they were held responsible for these works by the inhabitants of Croydon, and of other places in Surrey, who regarded with dismay the probability of similar works being executed against their desire.

TUESDAY, July 12.

POOR-LAW MEDICAL RELIEF.

Mr. Miles called the attention of the House to the system of Poor-law medical relief at present existing in England and Wales, with a view to its revision, and also to the large number of persons who annually became chargeable to the Poor-rates, from no medical relief being afforded to them in their sickness unless they became paupers. The imperfect manner in which medical relief was administered was one of the few blots defacing an otherwise admir-

able system. The number of Medical Officers was nearer 4000 than 3000, and the average number of patients was 835,000. The only check upon the improper treatment of patients was the production of the case-books at the Boards of Guardians; but it was evident that the Guardians must be incompetent to decide upon questions of disease, or the proper means to be employed for its alleviation. The provision made for the Medical Officers was most scanty, particularly when they not only performed their medical duties, but provided medicines for the poor. He proposed, that a Medical Inspector should be attached to the Poor-law Board, independent of the President, and that he should have the power of sending down an Inspector, professionally educated, to inquire into any case that might be laid before him. (Hear, hear.) He thought it most unfair to call on the Medical officers to pay for drugs, and that it operated injuriously on the poor; inasmuch as, in the case of expensive drugs, it became a question between honesty and prudence on the part of the Medical officer. To meet that difficulty, he proposed, that the Boards of Guardians should themselves find the drugs. He believed the changes which he now recommended would inflict no additional cost on the management of the poor, but would rather tend to decrease the amount of the rates. Another object he wished to accomplish was, the extension of the system of medical relief to the sick poor.

Mr. Baines said, that there never was a time when the duty of providing medical relief for the poor was so carefully attended to. He could assure the House, that any improvements in the system of medical relief that could be shown to be really such would be adopted by the Board; and, if he found that he had not the power of adopting any valuable suggestions that might be made, he would not hesitate to make application to the Legislature. There had been a very great increase in the expenditure for medical relief. He did not say, that this was too large; in his opinion, the expenditure might go further; but still a great increase had taken place. As one result of the Committee of 1844, there were extra fees for surgeons, amounting, in 1840, to 5499*l.*; and in 1852, to 30,727*l.* Then, the number of Medical officers had been increased. In 1838, the number was 2091; in 1852, they amounted to 3233. The districts had also been materially abridged. With regard to the qualifications of the Medical men, some fault had been found with their qualifications as too high; but he thought the medical man appointed to attend the poor should have the highest qualifications—such as would be required in the case of any one else. (Hear, hear.) In all cases a double qualification was required,—that was to say, both a medical and surgical qualification; and he was happy to say, that the system had worked exceedingly well. (Hear, hear.) One important matter, as regarded the efficiency of medical relief, was the responsibility of medical officers. There was now a very efficient system of responsibility. Every medical man was responsible to the Poor-law Board for the proper discharge of his duty; and he would venture to say, that no case of neglect or maltreatment had ever been brought before the Board without an instant inquiry being made. (Hear.) The complaints against the medical officers were, on the whole, few, considering their great number, and also the number of the poor attended to. At the same time, the Board was anxious to protect the medical officer in the fair, proper, and independent exercise of his duty, whenever a cabal, as sometimes happened, was formed against him. Their salaries were not high; on the contrary, he (Mr. Baines) thought they were low; but, from a very great number of agricultural unions, within the last three years, requests had been made, desiring that the salaries of the medical officers might be cut down, and in every one instance those requests had been refused. He must, however, do the Boards of Guardians the justice to say, that in a great many cases they had afterwards taken a more liberal view, and had had admitted the justice of the decision of the Poor-law Board. The Poor-law Inspectors, also, had now associated with them a Medical man accustomed to hear evidence, and whose duty it was to give advice upon sanitary points. This system was found perfectly satisfactory, and the House would see that under it the Poor-law Board had the means of availing themselves of the best medical and surgical advice, and at a less cost than keeping up a large medical staff would entail. With regard to the suggestion made by the hon. gentleman on the subject of drugs, he observed that opinions varied very much. In conclusion, he expressed his readiness earnestly to consider any suggestion for the improvement of the medical relief system for the poor; and he trusted that the hon. gentleman, having called attention to the subject, would not think it necessary to press his motion to a division. (Hear, hear.)

Sir J. Trollope said, that during the past year, for the greater part of which he held the office of President of the Poor-law Board, he thought the whole number of cases of neglect or maltreatment on the part of medical officers brought before the Board, did not exceed four or five; and, when the total number of medical officers was nearly 4000, that must certainly be considered comparatively a very small number. As to the pay of medical officers under the Poor-law Board, he thought that, in many cases, it was greatly inadequate; but the rate of salary rested more with the Boards of Guardians than the Poor-law Board—the latter having only the power to affirm or not the arrangement made by the former. However, he believed that the salaries of those officers were gradually on the increase. The complaints against them were exceedingly few; and, though during the past year some applications had been made to reduce their salaries, on the plea of the low price of provisions, that plea had never been listened to; for obviously it would not be right that the salaries of medical officers should be regulated by a sort of sliding-scale, continually rising and falling. He might state, that extra fees, settled by the Poor-law Board, were paid to medical officers for certain services; and, generally speaking, a more liberal view with regard to their remuneration was now taken by Poor-law Guardians.

Mr. Miles consented to withdraw the motion.

REVIEWS.

On the Pathology and Treatment of Acute Rheumatism. Being the Lumleian Lectures delivered before the Royal College of Physicians in 1853. By James Alderson, M.D., F.R.S., Senior Physician to St. Mary's Hospital, &c. 8vo. Pp. 107. London. 1853.

In his first lecture Dr. Alderson examines "all the facts" bearing on his subject "which modern science has furnished within the last few years, such as the state of the blood, the secretions, the tissues," &c.; and enumerates the symptoms for which he who would advance a theory of rheumatism must account.

Dr. Alderson holds rheumatism to be a species of the genus inflammation. In the genus there is an over-fibrinated state of the blood, with defect in the blood corpuscles, excess of uric acid and urates and deficiency of the salts in the urine, and a volatile acid in the perspiration; pain, swelling, redness, and heat, are the local characters of the genus. The species rheumatism is characterised by the inflammation affecting the joints, and by that "which has been formerly called 'metastasis,' which consists in a sudden and complete change of the seat of the local affection."

"Therefore," Dr. Alderson says, "the pain, heat, redness, and swelling of the joints, and the so called 'metastasis,' are the chief subjects to be considered; and for this purpose we must first review the structure of the joints, and then refer to the nature of their tissues, together with the mode by which blood is supplied to them."

The capillary vessels in the fibrous tissues of the joints run a straight course between the bundle of the white fibres; hence they are "in the natural state of necessity compressed within and between the bundles of inelastic white fibrous tissue."

This combination of parts, Dr. Alderson thinks, must offer obstruction to the transmission of blood which is not normally constituted; and then the resistance to distension must cause pain.

The arrangement of the capillaries in the synovial membranes "displays the great facility with which fluids may be poured into the capsules of joints and sheaths of tendons."

The swelling of the affected joints is to be explained by the delay in the transmission of the plastic fibrinated blood through the capillaries of the fibrous tissue, conjoined with the velocity of transmission of blood from the heart. In consequence of these, "the thinner parts of the blood are forced through the coats of the vessels."

"The redness may be accounted for by considering, that, when the blood is delayed in vessels, and not submitted to the action of oxygen, the metamorphosis of the blood corpuscles does not proceed; and hence the corpuscles, arrived at a state of maturity, are not consumed, and consequently there is an accumulation of colouring matter,—of hæmaphæin."

The so-called metastasis is thus explained by Dr. Alderson. The fibrin, delayed in its transmission through the capillaries of the joint, is dissolved, and, in consequence of the stasis, no more fibrin can be supplied to the part from the general circulation.

"The solution of the fibrin, therefore, proceeds in that quantity of blood which is delayed and accumulated in the locality of the joint, and tends to restore the balance towards the normal proportion in that quantity of delayed blood. Blood, therefore, which has been accumulated by means of this stasis has been subjected to a sort of purifying process; and the fibrin having become no longer in excess, the disturbed relation between the vessels and the constituents of the blood in that particular locality no longer exists. The capillaries no longer resist the transmission, and a free passage for the blood is once more obtained. Hence, the depurating process being complete, we may see a mode of accounting for the desertion of one point of attack."

As the quantity of fibrin thus dissolved in the capillaries of a single joint is small, the effect of the local depurating process on the blood at large is slight; and, therefore,

"It is to be expected, that other joints, either in turn, or several simultaneously, may offer a similar obstruction to the abnormal blood, which will then and there go through the same renovating process."

Such is briefly Dr. Alderson's account of his theory of rheumatism, as set forth in his first Lecture. In his second Lecture, he defends his position against the various arguments which, he surmises, may be brought against it.

The localisation of the inflammation in the joints or viscera, in any given case, is determined by "some structural formation, or mere accidental impairment of structure, or even functional derangement" of the part affected. The reason why lymph is exuded on to the pericardium, and serosity effused into the joints, is to be accounted for by the fact, that the inflammation in pericarditis arrives at a maximum, in consequence of the impossibility of controlling the necessarily continued action of the organ."

At the conclusion of the second Lecture, our author shows the untenable nature of the various hypotheses propounded anteriorly to his own.

The last Lecture of the series is devoted to the consideration of the treatment of rheumatism. Bloodletting is to be employed for the purpose of lessening the whole quantity in the circulation, and so relieving the pressure. The disease cannot be radically cured by bloodletting, because the relative proportion of fibrin in the blood is not diminished by abstraction of blood. As the blood-corpuscles are diminished in number, and the water is increased by bloodletting, "the strength of the patient (being directly as the number of corpuscles) must be dangerously reduced by repeated losses of blood."

Local bleeding is warmly advocated by Dr. Alderson, because:—

"It not only relieves the distended vessels of the surface, and indirectly those which are deeper seated, but it also abstracts a larger proportion of fibrin than can be effected by taking the same quantity of blood generally."

Hot fomentations have a useful tendency. They act by diluting with the fluid used the blood in the capillaries too rich in fibrin. "It is probable that this effect is produced by the physical act of endosmosis."

Purgatives are "eminently useful," if the circumstances of the patient admit of their free employment. By purgation, "the blood is freed of albumen and fibrin, without suffering any diminution of the blood corpuscles."

Mercury controls the exudation of lymph; as there is no exudation of lymph so long as the disease is limited to the joints, mercury, in that stage of the disease, is useless; but, when the disease affects internal organs, mercury is useful, because then there is exudation of fibrin.

Bark has been found useful by some; this agent promotes the vital function, and so may lead to the "employment, for the purposes of nutrition, of that fibrin which is in excess in the blood, and so help to dispose of the fibrin, and restore to the blood a balance of the constituents."

Colchicum, "acting as a violent irritant of the mucous membrane, draws from the blood, in the form of secretion, its richer constituents."

A reason for the employment of alkalies and alkaline salts may be deduced from "the consideration of their power as oxidizing agents, by which power the water of the blood may be decomposed, the oxygen going to oxidize the uric acid, and the hydrogen to form ammonia."

"The salts of the organic acids pass off with the urine as alkaline carbonates; and this they do by giving up oxygen to oxidise the uric acid." As a further argument against the use of the vegetable acids in the treatment of acute rheumatism, excepting as palliatives of particular symptoms, Dr. Alderson says, "No equation has been given for disposing of the remaining elements of citric acid, if we give up the oxygen to oxidise the uric acid."

Dr. Alderson has no new remedy for the treatment of rheumatism, but thinks that the reception generally of his hypotheses in regard of the pathology of the disease in question will lead to a scientific employment of the remedies now in use.

In conclusion, to those who are fond of hypothetical pathology, and to those who feel greater confidence when prescribing remedies the actions of which can be explained by a hypothetical series of formulæ, we strongly recommend Dr. Alderson's lectures, as likely to afford them much pleasurable reading.

Report of Dublin University Commission, with Evidence and Suggestions, etc. Presented to both Houses of Parliament.

The Commission of Inquiry into the Dublin University, after thirty-seven meetings, has issued a very voluminous Report, which calls for notice on our part, in so far as it relates to the School of Physic in Ireland, which, as most of our readers probably know, is on the joint foundation of Trinity College, Dublin, and the King and Queen's College of Physicians in Ireland, each body respectively nominating a certain number of the Professors. Now, though the results of this inquiry, and the suggestions appended for the advancement of the interests of medicine fall short of what we may have expected, yet we gladly recognise the liberal spirit in which that portion of the Report emanating from the Committee of the Board of Trinity College, and that from the Professors of the School of Physic are drawn up. These Reports contains some sentiments and principles which might be adopted elsewhere with advantage. The Board, as well as the Medical Faculty, takes high ground, and we only wish their spirit was emulated in other quarters. The following passage is taken from the "Suggestions of the Committee of the Board," and has reference to "the means of rendering the School of Physic more efficient":—

"We do not think," say the Committee, "that the efficiency of the school is to be measured by the number of graduates in medicine which it annually puts forth; nor that its inefficiency can be argued from the fact, that a large number of Irish Medical men seek their Professional qualification from Glasgow, Edinburgh, or London. On the contrary, it is to be remarked, that we might easily increase the number of Graduates in Medicine if we would consent to lower the standard of education now required. But this in our opinion would be to take a step in the wrong direction, and to increase an evil which is already severely felt in medical education, namely, the want of a general literary education. The competition of rival schools of medicine has lowered the standard both in quantity and quality; and so long as a legal Professional qualification can be obtained at less sacrifice of time and money, and with less amount of literary attainment, the schools that exact more, however efficient, will be comparatively deserted. . . The vexed question of a uniform standard of medical education must be settled before any one school, without large and special endowments, can set itself to oppose the present system of competition. . . . . There is too much of prelection and too little of catechetical examination."

Allusion is also made to the example set by King's College, London; and the Committee express a hope, that enlightened medical men will soon universally acknowledge the necessity of making a sound religious and literary education the foundation of professional studies. It were earnestly to be wished, that some combined movement to effect this desirable object could be made by the heads of chief universities and colleges. Until some competent, though moderate, standard of preliminary education be made a necessary step to entrance on the career of medical studies, we may despair of ever seeing the Profession, as a body, attain that high and dignified position which its noble offices so justly entitle it to. In the answers of the Medical Faculty, also, some valuable suggestions will be found. In reference to the present state and number of the Professors, it is observed, that "since the creation of the Professorships of Surgery by the University, the revival of the Professorship of Midwifery, and the creation of the Chair of Medical

Jurisprudence by the College of Physicians, it appears to us, that there is now no course of study requisite in a complete school of medical and surgical education which is not adequately provided for in the school of physic, excepting that of pathology. Although this branch of medical science is taught by the Professors of the Institutes and of the Practice of Medicine, and by those of Anatomy and Surgery, the Professors are of opinion, that it would be very advantageous to create a distinct Professorship of Pathology in the Medical school of this University."

We are glad to see this important desideratum in the School of Physic is likely to be accomplished. The recent progress of this department of medical science has been so great, that in all great schools it has been found necessary to establish a Chair of Pathology; and even, in some cases, as in the School of Paris, two chairs have been founded, one for *Pathologie Interne*, and the other for *Pathologie Externe*. We trust this important suggestion will be carried out without delay. Much other valuable matter will be found in the Report of the Professors. Among the suggestions contained in the answer of the Regius Professor of Physic (Dr. Stokes), we would especially notice those concerning the establishment of a system of tutorial control over the medical classes, and the adoption of a proper system of catechetical and term examinations, in place of the final degree examination, "which encourages and almost necessitates the system of preparation by 'grinding,'" and disposes students to neglect legitimate sources of study and observation. Dr. Stokes further observes: "The extent and importance of our examination have of late years been greatly increased, but still the system remains objectionable here as elsewhere." In conclusion, Dr. Stokes specifies the following reforms, among others, as essential to the advancement of the School of Physic:—

"1. The revision of the Stamp-duty on the medical degrees of the University, and on the licence of the College of Physicians.

"2. The establishment of medical honours, scholarships, and exhibitions in the University.

"3. The modification of the system of examination."

We cannot conclude our notice of the report without an extract from the suggestions of Dr. Ingram, LL.D., the more remarkable as emanating from one not connected by his pursuits with the subject he has so opportunely turned his attention to. Dr. Ingram is a Fellow and Professor of Oratory. Among his suggestions he observes, in reference to *biological science*:—"I am of opinion that a fifth moderatorship should be established, partly on the plan of the examination for the natural sciences tripos, in the University of Cambridge. The course would embrace human and comparative anatomy and physiology, zoology (properly so called), botany, and such other kindred subjects as might with propriety be added. . . . Such a foundation would also have the advantage of offering to medical students who should have completed the full course in arts, an opportunity of distinguishing themselves at the close of their collegiate career, similar to that which the moderatorship in experimental physics and chemistry is found to supply to students of engineering." This is really a most valuable and important suggestion, and which we hope will be carried out. It would offer to the higher class of medical student, within the sphere of his own science, a reward equal in honour and dignity to that of his fellow-graduates who devote themselves to classics or mathematics, and immeasurably beyond the ordinary system of medical prizes. It could not fail to produce good fruits.

Plates of the Brain; or, Explanations of the Physical Faculties of the Nervous System. By Joseph Swan. London, 1853. 4to. Pp. 67.

This is a work which must be regarded for the future as a standard authority upon the structure of the brain. It is illustrated by twenty-two lithographs, which, though a little stiff and hard in general, give as faithful a representation of the appearances observed upon dissection of the brain, as can be attained without the aid of colour. Additional value attaches to them from the circumstance of the drawings being made from dissections carefully carried out for the express purpose of the work before us.

Our space will not allow us to follow the author through his arguments, but we may state, that his object has been to explain the parts of the brain which "minister to the leading physical faculties of the nervous system. The peculiar arrangements in man required for promoting each faculty have been confirmed by the examination of the corresponding parts in several animals; and their physiological bearings have been substantiated, by defining particularly the origins of nerves, and by tracing their distribution in organs whose functions are familiarly known."—P. 5.

The author also endeavours to determine, not only the limits of the structures from which the nerves ministering to each faculty arise, "but their special relation to the brain itself. The investigations thus continued have pointed out an especial centre for each leading faculty, and appropriate convolutions in a particular locality; they have also determined, that one-half of the larger portion of the fifth nerve belongs to the sensitive faculty, and the other half to the involuntary; and that the glosso-pharyngeal nerve and par vagum belong to the involuntary. The origin of the glosso-pharyngeal nerve, and par vagum, from the involuntary tract, not only readily accounts for their peculiar qualities, but gives a very sufficient reason for the combinations of the organs they supply with those under the influence of the fifth nerve."—P. 6.

We can cordially recommend an attentive study of this work to all those who wish to master the anatomy of the brain.

An Apology for British and Colonial Medical Degrees; or, Strictures on the Report of the Special Committee of the Legislative Assembly on the Laws Relative to the Practice of Physic, Surgery, and Midwifery, in Lower Canada. By A. Hall, M.D. Edin., Lecturer on Materia Medica and Pharmacy, University of M'Gill College, Montreal. 1853.

We learn from this pamphlet, that an attempt has lately been made to introduce into the Legislative Assembly of Lower Canada, an Act to amend the law relative to the practice of medicine in that colony. The object of the proposed Act was, to compel all persons to pass an examination, and to receive a licence from the Provincial Medical Board, before being allowed to practise the Profession. The graduates of British and Colonial Universities were not excepted; but officers of the Army or Navy were to be admitted to practise without any examination, and on the mere production of their diploma or commission.

Dr. Hall, as one of the Professors of the University of M'Gill College, warmly takes the part of his own University and of the British and Colonial Universities in general; and he argues upon the injustice of compelling those who have already obtained a University degree to pass an examination before another Board. He defends his own University from the charges which, it appears, have been made against it, and attributes the measure introduced into the Legislative Assembly to the jealousy felt by the incorporated Medical Schools of the province against the M'Gill College, which possesses a Royal Charter, together with immunities and privileges not enjoyed by other medical educational establishments.

The Landlord's and Tenant's Guide. A Compendium of Information upon the Procuring, Occupying, and Disposing of Estates and Houses. By Alfred Cox, Estate Agent. 8vo. Pp. 400. London. 1853.

We should be happy to hear that members of our Profession often required assistance to guide them in the purchase of estates. Those who may do so, will find a good deal of useful information in this work, with an abstract of the laws respecting real property, and the relations of landlord and tenant. The section on the selection, purchase, hire, and management of houses and land, is more likely to be useful to medical men.

New Fever Hospital at Manchester.—Some excitement has been caused in this locality, in consequence of the Trustees of the Manchester Infirmary having selected a site for the New Fever Hospital in the centre of the city. On all considerations a more outlying locality should be chosen.

Newcastle-on-Tyne Fever Hospital.—The Report of this Institution just published, exhibits the sanitary condition of the town in a highly favourable manner. During the month of December last, not one case of fever required admission into the hospital, a fact almost unprecedented since its formation, and during the whole term of which the Report takes cognizance, the town had been very sparingly visited by any contagious disease.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

STRICTURE OF THE AORTA.

By Dr. HARLIN, of Stuttgardt.

A WOMAN, aged 56, suffered during the last months of her life from obstinate vomiting and dysphagia. She complained of burning pain in the breast and epigastrium, constant thirst, and great weakness. Pulsation of the heart in the epigastrium, regular, and with a rubbing murmur accompanying the first sound. *Examination of the Body.*—The heart, pressed down upon the diaphragm to the region of the stomach, is much larger than natural, especially in the long axis, and is adherent to the pericardium. The left ventricle is concentrically hypertrophied; the right widened and thin. Insufficiency, partial thickening, and ossification of the valves. In the left cavities there were the products of endocarditis. The aorta, at its point of connexion with the ventricle, was double its normal size for an inch and a-half of its course. At its arch, after the giving off of the three main vessels, and at the point of attachment of the ductus arteriosus, there was a stricture so tight that scarce could the little finger pass. The walls in this situation were abnormally thick, and there were numerous atheromatous deposits; the aortic valves were in a similar state. The right lung was hepatised and œdematous. The œsophagus thick and pale, but without stricture. Stomach red, and displaced in the vertical direction. Spleen soft.—*Virchow's Archiv.*, 1853.

UPON APOPLEXY OF THE SPINAL CORD.

By M. TRIER, Hospitals Meddelelser.

Ollivier, in his work upon diseases of the spinal cord, based his views, as to the influence of spinal hæmorrhage on sensation and motion, upon the physiological views at that at that time recently propounded by Bell and Majendie. His obervations, however, wanted confirmation, inasmuch as pathology had not recorded a single case of hæmorrhage into the spinal chord, without there co-existing lesion of the brain or of its membranes, so that it was impossible to determine the share which each had in producing the morbid phenomena. Since then, Gaultier de Claubry, Cruveilhier, Monod, and Grisolle, have related cases; and Trier adds another, which occurred in the Friedrich's Hospital.

The author concludes, from these cases, that the paralysis affects that side of the body which corresponds with the extravasation. There may be loss of motion alone, or of sensation alone, or of both together; the last being the most common. It is not yet proved, that hæmorrhage into the posterior part of the spinal cord especially affects sensation, and into the anterior part of the spinal cord motion. From the cases hitherto recorded, it has been remarked, that paralysis is not the first symptom. The disease commences after a shivering fit, with pain along the corresponding part of the vertebral column, with increased sensibility to pressure upon the spinous processes. This pain soon extends from the affected spot to both sides of the body, and seizes on the limbs, which soon become paralysed. The pain differs from that of rheumatism, in not being increased by active or passive motion, or by pressure. In paralysis resulting from cerebral apoplexy, this symptom is wanting. In hemiplegia dependent upon hæmorrhage into the cord, there is frequently pain of the opposite side of the body, a symptom not remarked in similar conditions dependent upon cerebral disease. The degree of pain varies from a sense of weight and oppression to the most acute and agonising suffering. Cramps of the toes, so often witnessed in apoplexy of the medulla oblongata, and also in cerebral hæmorrhages, do not occur in apoplexy of the spinal cord. Paralysis of the bladder and of the rectum occur simultaneously with the muscular paralysis, or soon after; the former producing ischuria, or simple enuresis; the latter constipation, which, once removed, is followed by involuntary discharge of fæces. Respiration is affected in those cases only where the upper part of the spinal cord is involved. It is short, broken, and hurried, and sometimes purely diaphragmatic, from paralysis of the intercostal muscles. Paralytic aphonia is as rare as paralytic dysphagia from this cause. The pulse at the commencement is often strong, full, and frequent, but subsequently it resumes its usual beat, if nothing accidental occurs to interfere. The intellect is clear; the movements of the muscles of the face and tongue unimpaired. As secondary appearances, the author enumerates passive congestions and hæmorrhages into the abdominal viscera, ulceration of the urinary mucous membrane, abscesses, and bed-sores. Hæmorrhage frequently takes place in the spinal cord, which has undergone partial softening. It has occurred in persons who have been violently exerting themselves; but, as in cerebral apoplexy, recovery seems possible after the lapse of many years. As regards the ecchymoses upon the lower segment of the body, as also the dark colour and injection of the mucous membranes and of most of the viscera of the abdomen, both Ollivier and Cruveilhier have pronounced them to be appearances resulting from stoppage of the circulation consequent upom impeded respiration. But, observes the author, this explanation does not suffice for those cases in which respiration becomes free shortly before death; and it is remarkable, that similar morbid appearances do not occur under other conditions leading to difficulty of breathing. He, therefore, dismisses the generally received opinion, and believes, that the cause must be referred to want of power in the sympathetic nerve, which, from its intimate connexion with the spinal nerves, must sympathise with destruction of the spinal chord, and be reduced to a more or less paralysed condition. This influence is manifested by stoppage of the circulation, by transudation of blood, or by ulceration, and the formation of abscesses.

NEW OBSERVATIONS UPON THE HISTOLOGY AND GENESIS OF CANCEROUS GROWTHS.

By F. GUNSBURG.

After remarking, that epithelial cancer may occur in other situations than the mouth, the lips, the anus, or the subcutaneous tissue, the author proceeds to describe the minute structure of a hard knot, the size of a bean, removed from the root of the tongue. It consisted of a succession of layers of tesselated epithelium; but a colloid growth from the inner surface of the lower jaw was composed of cells, which contained many empty corpuscles, very few having nuclei. These cells were contained in a cyst, the wall of which was covered with fibre-cells continuous with its texture. He therefore concludes, that the fibrous cyst is developed from cells possessed of a definite morphological power; and in this view he is probably correct. New blood-vessels he found, developed in cancerous growths, arranged in loops, as in many of the fœtal tissues. Osteophytes contained bone-corpuscles, but no well-formed calcigerous tubes; he also observed traces of imperfectly-formed cartilage cells. Thus far do we agree with the author, who mentions that which abundant observation has, in this country, confirmed. But he proceeds to draw some remarkable practical conclusions from his observations:—"Fibrous tumours of the lungs, the stomach, or the liver, not rarely co-exist with carcinoma of other organs;" and, inasmuch as it occurred to the author to find in an *over-fed goose!* a knot of medullary cancer in the liver, he thinks himself justified in the view, that "conditions leading to excessive formations of fat and to carcinosis, are *identical!!*—that both can arise under the influence of a diet redundant in vegetable albumen; and he recommends, upon such grounds as these,—the overfeeding of geese,—that the genesis of cancer may be elucidated!!—*Günsb. Ztschr.* IV. I. 1853.

CHLOROFORM INHALATIONS AND INJECTIONS OF AIR IN ILEUS.

By MERZ.

A girl, aged 27, up to the present time in good health, was suddenly seized with stercoraceous vomiting without obvious cause. After narcotics and mild drastic purgatives had been tried without avail, injections of air per anum were administered, with the effect of mitigating her distress. Then chloroform was inhaled so as to produce complete paralysis, when a rumbling or rolling of the bowels ensued, followed by discharge of fæcal-smelling flatus and copious evacuations; the patient recovered.—*Schw. C. Ztschr.*, 1853.

VERATRIN IN ACUTE ARTICULAR RHEUMATISM.

By TROUSSEAU.

Trousseau gave, in a case of general acute articular rheumatism in one day, gr. i., gr. ii., gr. iii. of veratrin.

After the second dose, nearly all the symptoms, with the exception of those indicating endocarditis, had disappeared. The pulse fell 24 beats.—*Gaz. des Hop.*, 1853.

FATTY CONDITION OF THE GREY SUBSTANCE OF THE BRAIN IN A DRUNKARD.

By J. T. H. ALBERS.

The body of a drunkard was examined twenty-four hours after death. The convolutions of the brain were of a pale yellow hue; the lateral ventricle was full of air; the cerebral substance was unusually tough. Under the microscope there appeared in the grey cortical substance large oil-globules and fatty granular matter, both upon the upper surface and at the base; the fibrous structure was faintly marked; the cerebral ganglia were small; there were many oil-globules infiltrated into the white substance; the brain smelt like must, and half a drachm of rectified spirit was distilled from it.—*Fror. Tagesb.*, 1852.

GENERAL CORRESPONDENCE.

ON THE USE OF LARGE DOSES OF OPIUM IN CASES OF MANIA AND DEMENTIA.

By RICHARD OLIVER, M.D.

[To the Editor of the Medical Times and Gazette.]

Sir,—I forward to you, by the permission of the writer, a letter addressed to me, containing an interesting account of the successful use of opium in very unusual doses, in cases of mania and dementia. I have no doubt you will deem it worthy of a place in your columns.

I am, &c. William A. Guy.

King's College.

Dear Sir,—I owe you an apology for having so long deferred to answer your inquiry respecting the extent to which I am in the habit of occasionally carrying the administration of opium in certain cases of mania and dementia; and I beg you to believe, that this delay has not arisen from any disinclination on my part to communicate the information you wish for, but simply from my want of time and opportunity to collect such facts as are scattered over the Journal of this Institution, and to place some of them before you in such a form as may best serve to elucidate the practice to which I here refer.

On looking at my reply to an official circular from the Commissioners in Lunacy, containing an inquiry respecting the treatment usually adopted by the superintendents of lunatic asylums in various forms of mental disease, and dated January 14, 1847, I find the following passage:—

"In some instances where the irritability has been excessive, I have found the employment of opium also to be indispensable; and I have sometimes given it in very large doses before it has succeeded in procuring sleep. In one case, where the patient was not previously accustomed to its use, I found that ordinary doses were quite unavailing, and that one scruple of solid opium was no more than barely sufficient for the attainment of comfortable repose. This quantity was given nightly, for a considerable length of time, and was rather abruptly discontinued, without detriment to the patient, after the tendency to pervigilium was supposed to be materially diminished."

I shall furnish you with the details, to a certain extent, of the case here alluded to, as well as with an account of one or two other instances in which opium was thus employed; in order that you may readily comprehend the nature of the circumstances under which a practice so unusual may be beneficially adopted.

It might perhaps be sufficient for me to content myself with the statement of plain practical facts; but I do not feel disposed to lose this opportunity of expressing my views respecting the nature of that pathological condition, which not only admits, but justifies, the adoption of a course apparently so hazardous.

On the 23rd of July, 1845, J. B., "a puddler," in the iron-works at Horsehay, Salop, was admitted into this asylum. At that time he was 36 years of age. He had gone from this part of the country some months before, in search of employment, and after various unsuccessful applications, and exposure to much disappointment and privation, he eventually found work at Glasgow. Adversity had not induced him to reform the habit of intemperance, through which he lost his work at home, and his first earnings were soon spent in whiskey. Becoming desperate, he made a resolute but unsuccessful attempt to commit suicide; was then taken to the asylum at Gartnaval, and was subsequently placed here.

At the time of his removal from Scotland he was much depressed in spirits, and averse to any conversation or company; but, beyond this, he did not then manifest any decided aberration of intellect; and after the lapse of a few weeks, having become willing to work out of doors, there was an evident improvement in his physical, as well as in his mental, condition. By the time that he began to inquire about his wife and children, he had grown considerably stouter; and on the 10th of November, 1845, having become able-bodied, active, and cheerful, he was discharged, recovered. He obtained employment at his ordinary business immediately after his discharge, and for about a month he followed his occupation very steadily: at the end of that time he took to drinking again, left his situation soon afterwards, and proceeded "on tramp" into Staffordshire. Living in a most irregular manner, on such casual and scanty earnings as fell in his way, he speedily manifested such symptoms of insanity as rendered it necessary that he should be no longer allowed to go at large, and he was taken into the union workhouse at W———. From that place he was brought here, and was re-admitted on the 11th of April, 1846. The change that had taken place in his condition and appearance during the period of his absence from the asylum, was exceedingly remarkable. In the shrivelled and emaciated figure which he presented on his return, it was not easy to recognise the same individual, whose appearance had been so sleek and comfortable at the time of the departure; and his conduct and deportment, which at the last-mentioned period were decent, orderly, and respectful, had also undergone a thorough change. There existed no wasting local disease to account for his emaciation; but there could be no doubt that the necessities of his system in the way of food had for some time been very imperfectly provided for. The circulating power, as in all such cases, was feeble; the general surface was cool, dry, and shrunken, while the temperature of the head was increased; the appetite was ravenous, and the odour of his excretions was excessively offensive. The most prominent features of his malady were watchfulness and violent delirium. On being placed in a room by himself, a very short time elapsed before he tore his night-dress to ribbons, and it became necessary to remove every article of furniture from the apartment. The coir-stuffing, and the tick of his mattress, soon shared the fate of his clothes; and every moveable thing within his reach was in a state of perpetual commotion. Immediately on his admission (about 8 p.m.), he was ordered a double ration of cold beef and bread, with a pint of strong ale. At 10 o'clock he took a grain and a-half of hydrochlorate of morphia, with a glass of warm gin and water.

About 2 o'clock in the morning of the 12th, it was discovered that he had wrenched the skirting-board from the wall, and had broken it into small pieces. The fragments were thrown into an imaginary gulph to feed a shoal of voracious fishes, which were otherwise bent on his destruction. It was soon ascertained that he was as filthy as he was violent, and it became necessary to watch him very closely, to prevent him swallowing his evacuations. Under the imperfect arrangements of the Institution, which was then unprovided with a regular night-watch, that was not very easily accomplished.

The voracity of his appetite, with the feebleness of his pulse, with other indications of anæmia, left no room for doubt that a regular supply of wholesome food was absolutely indispensable for his relief; and it was equally evident, from the exhausted energies of his nervous system, and the excessive agitation from which he was suffering, that sleep was no less necessary than food. He was at once put upon ample rations of meat, with a liberal allowance of ale in the course of the day, and a glass of spirit and water at bedtime.

At the commencement of his treatment, morphia or some ordinary preparation of opium was given in what is usually considered to be full doses,—such as two grains of hydrochlorate of morphia, or one drachm of tincture of opium; but after the lapse of between two and three weeks, during which, upon one occasion, a sickening dose of potassio-tartrate of antimony was administered, and upon another, three grains of calomel, without in any way tending to the mitigation of his excitement, a more decided course was resolved upon.

On the 28th of April, he took five grains of solid opium, with one grain of calomel at bedtime. In consequence of the inefficiency of this dose, seven grains of opium combined with three grains of calomel were administered in the morning of the 29th, and the same quantity of opium, without the calomel, was given to him at bedtime.

With some vague hope of inducing a perspirable condition of of the skin, the seven grains of opium were given in the morning of the 30th, as 70 grains of Dover's powder; and in the evening the quantity of opium was increased to ten grains, and combined with twenty grains of camphor.

On the 1st of May, seven grains of opium were taken in the forenoon, and ten grains at bedtime, each of these doses being combined with twenty grains of camphor. On the 2nd, twelve grains of opium were administered in the morning, and the same quantity was given at bedtime.

On the 3rd, the dose was augmented to fifteen grains in the morning, and this was repeated at bedtime.

In this way he went on until the 10th, when the morning dose was dropped, and sixteen grains were given in the evening. The same quantity was given on the 11th, but only once as on the preceding day.

On the 12th, it was thought advisable to increase the dose still further, and a scruple was administered at bedtime. The same quantity was given at the same hour on the 13th, and again on the 14th. On the 15th, fifteen grains were given in the morning, and this dose was repeated in the evening. On the 16th, 17th, 18th, 19th, and 20th, twenty grains were exhibited each night. On the 21st, ten grains were given in the morning, ten in the afternoon, and twenty at night. On the 22nd he took the same quantity of opium that he took on the 21st; but, as some tendency to constipation was now manifested, it was deemed expedient to give him four grains of calomel along with the night dose, and an ounce of castor oil on the following morning.

On the 23rd, he took twenty grains of opium at bedtime, and thus went on, with doses graduated according to the necessity for rest, generally taking a scruple of opium at bedtime until the 14th of June, when the dose was reduced to one drachm and a-half of tincture of opium in the shape of a night draught.

On the 28th and 29th of May, it appears that brandy and ammonia had been required,—most probably to relieve the distress produced by the ill-advised exhibition of calomel a few days before.

From a memorandum of the 21st of June, it appears that he had been two nights without his draught, and on that morning was excessively irritable and violent.

Continuing the regular use of opium, in a moderate dose, every night at bed-time, and, for a period of many months, taking it in combination with hydrochloric acid during the day, he went on for a great length of time, without exhibiting any decided improvement of "condition," but still comparatively comfortable, and suffering little from mere watchfulness.

More than two years elapsed before he entirely relinquished his destructive habits, and ceased to keep his mouth filled with pebbles, or with fragments of glass, or any kind of filthy rubbish he could lay his hands on; and, as may be easily supposed, during the whole of the time that he was in this condition, he was so intractable as to be very seldom capable of anything like regular employment, or of executing a rational purpose of any kind.

The main indications of treatment were still the same as at first:—Plenty of nutritious food, with the use of such means as were calculated to tranquillise the organic irritation which interfered with the process of its conversion into healthy blood, and the subsequent transformation of its plastic elements into the substance of the various tissues,—the necessity, in fact, for nutrition. Exercise and eventual employment, as much as possible in the open air, were chiefly depended upon for this purpose; but the aid of opium was still indispensable for procuring sufficient sleep.

In time the change, of which the progress was so gradual as to have been at first, and for a long period, imperceptible, became evident and decisive. A perpetual and indefatigable propensity to turbulence and mischief at length subsided into a fondness for mere playfulness and fun; the tunic and trowsers of stout sail-cloth—for a long time the only practicable means of dress—gave place to garments of less objectionable material and form. His will was not less active than it had been, but its dictates grew more rational as he became able, by degrees, to appreciate the relation between objects and their uses. It no longer seemed to be necessary, that he should tear his clothes to pieces, or destroy whatever else was permitted to fall within his reach, and the propensity here mentioned was finally superseded by a wish for active and useful employment.

Corresponding with the progress of this improvement in his mental condition was the gradual alteration of his physical health. From the returning clearness of his complexion, and from the wrinkling condition of the skin on his previously swollen hands and fingers, it was evident that the cutaneous capillaries had regained a much greater degree of activity than they had manifested for a great length of time before.

The fluctuating progress of his improvement may be traced in the occasional alterations and modifications of the remedies employed. In August, 1847, the administration of nitrate of silver shows that his appetite, even at that time, was depraved; and the exhibition of compound powder of ipecacuanha as an opiate at the same period, points to the still existing inactivity of the transpiration through the skin. Under these circumstances, warm bathing was a matter of course.

In July, 1849, he took decoction of cinchona with hydrochloric acid and opium, and subsequently iodide of potassium, in eight grain doses three times a day, instead of the acid; but both before and after the above-mentioned periods, he was almost constantly taking opium in combination with tonic remedies, until the 27th of June, 1850,—more than four years after the date of his admission into the asylum,—when the administration of opium was found to be no longer necessary. His bodily health had become vigorous; his feelings were tranquil; his perceptive faculties had acquired to a considerable extent their original accuracy; his temper had become mild, his habits industrious, and his conduct and deportment were without a fault. No positive evidence of his derangement remained, so that ever since that time he has seemed to be both sane and rational. This appearance, however, is not borne out by a closer examination of his condition. His acts are rational and consistent; but his foresight is limited to the immediate business of the day. After work hours he is not only capable of taking part in, but of enjoying, a game at bowls or at cards; while his sensibility is blunted, and an originally warm and affectionate regard for his wife and children has been superseded by apathy and comparative indifference. His will appears to be no longer under the influence of passion, emotion, or desire; so that the elasticity of his mental constitution—if I may be permitted to use the phrase—would seem to be lost, and his actions to be now prompted only by a cold sense of what is decent and becoming. His character in this respect is completely changed; and his friends express their wonder at this, more particularly on account of their not being able to detect anything like a corresponding amount of alteration in the state of his intellectual faculties.

I have thought fit to give you this general account of one case, because it was the first in which I was induced to employ this remedy in doses so much larger than are usual. I do not wish you to understand, however, that I would again employ opium in reduced doses after the acute symptoms of mania had subsided. Further experience has shown me the great advantage that results from persevering with the remedy in large doses, until the healthy state of the nutritive functions in such cases is completely re-established.

I might adduce evidence of the utility of this practice in a great number of instances, and in some where the quantity of opium administered was even much larger than that which I have mentioned. At the present moment, for instance, I have under my care a man who was admitted into this Asylum on the 17th of March ult., and who, without having been previously accustomed to its use, commenced taking opium on the 18th, in a dose of five grains. On the following day he took ten grains; on the 20th, twelve grains; on the 21st, twenty grains; and from the 22nd of March until the 2nd of May, he took twenty grains every morning and twenty grains every evening without the intermission of a single day. At the last-mentioned period the dose was reduced to ten grains; and, as he is fast regaining both his intellectual and his physical energy, there is every probability that he will soon cease to require it. It might, in fact, be dropped immediately in this instance without incurring any serious risk of a relapse; but I have always found it to be wiser in such cases to continue the administration of the remedy beyond the period at which it might seem to be safe to leave it off, than to desist from its use too soon.

It would be needless to multiply mere individual examples. The efficacy of opium in doses proportioned to the degree of constitutional depression ought not to be a doubtful thing; and it is only after much experience of the practice here referred to that I have deemed it advisable to make these observations.

It is impossible to dwell among the insane for any great length of time, without having the attention very frequently directed to the fact, that the phenomena of mental alienation are invariably associated with a deviation from the healthy state of the organic functions, and to the almost universal prevalence of that condition which may, perhaps, not unfitly be described as one of organic debility; and I think it will scarcely be disputed by any person who has had much experience in these matters, that this fact is the true groundwork upon which all arrangements for the treatment of the insane ought to be based.

That there is a necessity for the maintenance and augmentation of the physical health of such patients, is beyond a doubt; and it

is equally certain, that the moral regimen, or the provision for inducing mental tranquillity and comfort, tending, as it does, under favourable circumstances, to diminish the waste, and consequent want of organic power, which so prominently characterises almost every form of insanity, is merely a branch of the same sanitary process, and produces its beneficial effects in no other way.

Without wishing to encumber this statement by the admission of any theoretical arguments respecting the physiology of nutrition, I am not unsolicitous, that the practice to which I more particularly refer should be placed upon an intelligible and consistent footing; and it is upon this account that I would submit the following considerations to your notice.

I apprehend that manifestations of acute cerebral irritation; still more those of actual inflammation of the brain, leave no room for doubt, that the process of molecular transformation in the organ is more or less permanently and extensively interrupted or impaired; and that even in the tranquil forms of mental aberration there is almost invariably evidence of depression of the vital energies. The indications of atony, or defective innervation are, indeed, usually conspicuous throughout the system, and the character of the residuary products of the organic processes is generally such as might be expected under these circumstances. If the cleansing of the chamber utensils in any ward of a Lunatic Asylum is not particularly attended to, it may soon be perceived that the bottoms of most of the vessels become incrusted by an abundant deposit of "white sand." From this fact, it would appear, that the phosphatic diathesis commonly prevails among the insane; and from numerous other observations, I have reason to believe, that the supposition thus roughly formed, will be borne out by a closer scrutiny into this matter.

Bearing in mind the power which opium has over the secretory functions, and the influence which it must consequently exercise upon the constitution of the blood,—its well-known efficacy, for instance, in controlling those misdirected affinities which give rise to the formation of sugar in diabetes, and the still more frequently-witnessed benefit that accrues from its employment in all those affections which are accompanied by the presence of an undue proportion of phosphorus in the urine;—taking these circumstances into account, with the result of investigations which show that certain constituents of cerebral neurine (cerebric and oleophosphoric acids) exist most abundantly in the brains of adults, where the mental operations have been in full play, and least so in those of infants and idiots, whose faculties have never been developed,—it is certainly not unreasonable to suppose, that there is a direct physiological relation between the integrity of the intellectual functions, on the one hand, and the due supply and determinate appropriation of the materials here referred to, on the other. I do not mean to say, that the peculiar deviation from the healthy state of the organic functions, to which I have been directing your attention, is the exclusive proximate cause of mental aberration under all circumstances. My special object is to represent it as one of the leading general circumstances which are noticeable among the inmates of lunatic asylums; and, in attempting to establish this fact, I would hope to aid in correcting those false views which still unfortunately prevail far too extensively among medical practitioners respecting the nature of mental alienation.

In very many instances, the malady in its acute form is regarded as a purely local affection, and as controllable only by those means which are known to be efficacious in subduing phrenitis. The consequences of a practice founded on such views may be readily imagined.

Notwithstanding the sound opinions which are generally entertained respecting the character of that state of the nervous system which accompanies delirium tremens, the occurrence of acute delirium from any other cause than habitual inebriation is so liable to be ascribed to inflammatory disease of the brain, that I have known a case in which the vascular system had been almost emptied by profuse uterine hæmorrhage, and where the delirium occasioned by this inanition was treated by venesection and a strict antiphlogistic regimen. The mistakes made in this way are, indeed, very common; but the case to which I here refer affords so striking an illustration of this kind of oversight, that I cannot forbear mentioning it more particularly.

The patient, a very little woman, was brought to this institution on the 3rd of July, 1849. She was 26 years of age, and had borne six children. At the period of her admission, her skin was cold, and as white as marble; her circulation was exceedingly feeble; and she had with difficulty borne the fatigue of the journey here. The faintness thereby produced was such as to excite an apprehension among the attendants that she was going to die immediately. Her constitutional power was so nearly abolished that food and stimulants had to be administered by compulsion.

From a very imperfect statement of her case which was left by her friends during my absence from home, I learned that she had been delivered of a child, at the full period of pregnancy, about three weeks before; that she had suffered from profuse hæmorrhage from the womb about two months previous to that period, and again very severely at the time of her delivery. These circumstances led me to suppose, that the hæmorrhage had been caused by a presentation of the placenta; and it was not without surprise that I found a still unhealed puncture in a vein at the bend of the arm. On writing to inquire particularly respecting the circumstances of this case, I obtained the following account from the surgeon who attended her:—

"Her mind has never been perfectly correct since her confinement, which took place some three weeks before she came to you. She had placental presentation, and sustained considerable hæmorrhage at the time. The child was turned, and she was delivered without any great difficulty. As soon as re-action came on, she was treated with gentle salines and Dover's-powder at bed-time, and was bled about the eighth or ninth day from the arm to about eight or ten ounces. The hæmorrhage had been considerable at times for some time before she was delivered, which, I suppose, were the dangerous symptoms you speak of. For the last week before she came to you she had been taking tinct. cannabis ind. each night."

Any comment upon this statement must be unnecessary. It is quite clear that the practice adopted was directly the reverse of what it ought to have been. I must not omit to mention, that the sleep of this patient was at first reported to be moderately good, and for this reason it was not then deemed necessary to resort to the use of opium. Strong beef-tea and sherry were regularly administered, and twenty grains of citrate of iron, with one drachm of compound spirit of ammonia, were given three times a day. Under this treatment her condition underwent no material improvement, and, after the lapse of a fortnight, it was ascertained that her sleep had entirely forsaken her. She had acquired some little amount of strength, but she was still to be fed by the nurse, and was constantly crouching through the night near the door of her bed-room, and either raving or muttering incoherently. On the 17th of July, one drachm and a-half of tincture of opium was given to her at bed-time. Between that date and the 2nd of August, she took two ounces and six drachms of tincture of opium (or about a drachm and a-half every day); and between the 3rd of August and the 19th of October, she took two ounces and five drachms of solid opium, for the most part in a dose of one scruple every night at bed-time.

As in the instance first described, comparatively small doses were exhibited at the beginning, and the quantity was increased, but not with sufficient boldness, according to the apparent necessity for repose. Beyond the advantage afforded by the return of sleep, no decisive general improvement was visible until she had gone on for some time with the opium in scruple doses at bed-time, when she began gradually to acquire strength, self-control, and intelligence; and on the 3rd of November, just four months from the period of her admission, she was discharged recovered.

I have occasionally heard of her since she left the asylum, and always that she was going on very well.

I must not omit to state, that, after she began to take opium in scruple doses, she took no other medicine until the 13th of October, when compound iron mixture was prescribed for her. On the 21st, this was changed for decoction of cinchona with iodide of potassium. It was on the 19th that she ceased taking opium, and her last dose of it was twenty grains.

In concluding this letter, I must take care to correct any impression which you may have been led to form respecting either the infrequent occurrence of such cases as those to which I have referred, or the expediency of restricting the practice of which I have spoken to the acute forms of mania and dementia.

Besides other individuals who are taking opium in various forms and ordinary quantities, there are, at the present moment, in this asylum, not fewer than eleven patients, who are each regularly taking, on an average, between sixteen and seventeen grains of solid opium every day. With one exception only the symptoms of the malady in each of these instances are not at present of an acute character. Several of these are cases of intermittent mania, in which I have long known the advantage of employing opium in large doses, not only for the purpose of controlling excitement during the paroxysms, but for improving the tone and energy of the system in the intervals, and in that way diminishing both the frequency and the violence of the acute attack.

I have no desire to lengthen this communication, as I trust I

have made it sufficiently evident that the efficacy of opium depends much more upon its adaptation to the condition of the patient than upon any traditional maxim as to the limit of the quantity to be exhibited.

I am, dear Sir, very faithfully yours,

RICHARD OLIVER, M.D.

Salop and Montgomery Lunatic Asylum, June 11, 1853.

To William Augustus Guy, Esq., M.D., Professor of Forensic Medicine, King's College, London; Physician to King's College Hospital, etc. etc.

THE EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS, AND MR. GUTHRIE.

[To the Editor of the Medical Times and Gazette.]

SIR,—For some time past, great disgust has been felt by the medical students of this Metropolis at the very unceremonious manner in which they are treated during their examinations at the College of Surgeons. I allude more particularly to Mr. Guthrie, and to the mode in which he conducts his inquiries. Forgetting completely that the man undergoing examination is in a state of mental perturbation, that his ideas have, therefore, a great tendency to become confused, this gentleman amuses himself by putting all sorts of catch-questions, which are invented for the purpose, not of testing a man's knowledge or ability, but merely to make him feel uncomfortable and foolish, and by making facetious remarks upon his appearance, apparel, and so forth. We all know that, as age advances, testiness and eccentricity increase wofully; and I am sure that all would be willing to forgive many peculiarities in one of Mr. Guthrie's age and reputation. But when these aforesaid peculiarities become offensive, and tend to lower the character of the examinations which we undergo, we must most decidedly demand that they may be abandoned.

In fact, a great feeling of indignation is excited in all the schools at the manner in which men are assailed at the College by Mr. Guthrie. A friend of mine, of a very nervous temperament, "went up" some time ago, and was examined by Mr. Guthrie. He returned a correct answer to every question that was put to him; but the learned examiner nearly frightened him out of his wits, by saying continually, "Well, you had better say that you know nothing about it!" Luckily, he managed to pass, although so discouraged and cowed, that he was scarcely able to walk out of the examination-room. Is not this wanton cruelty to a man who knows that, upon the ordeal through which he is passing, may depend the welfare of his future life?

If Mr. Guthrie does not remember that his profession and standing give him the rank of a gentleman, still let him recollect that most of us move in society where no one deems obscenity, wit, or breaking the third commandment, humour. He has good examples of courtesy and politeness in most of his colleagues. It is lamentable to see that he is proud of being an exception to the rule of urbanity and gentlemanly feeling that so generally reigns in the Court of Examiners. I am, &c.

London. A MEDICAL STUDENT.

[We are not aware how far the above statements may be exaggerated; but, as the writer has sent us his name, and the subject is one of serious import, we feel it to be our duty to publish the letter. We have omitted some expressions which might offend, and could serve no useful purpose.—ED.]

DR. NEALE'S CASE OF SARCINA VENTRICULI.

[To the Editor of the Medical Times and Gazette.]

SIR,—Noticing a suggestion that Mr. Amyott kindly made, with reference to the case of sarcina ventriculi reported by myself in a late Number of your Journal, I wish to state, that the vegetable bitter was employed merely to cover in some measure the nauseous taste of the hyposulphite of soda. The patient had long taken such bitters alone, or combined with alkalis, without any real benefit; so that I thought the inf. quassiæ a better vehicle for the exhibition of the hyposulphite than any of the distilled waters containing essential oils, which might possibly have modified its action.

In the case reported, all the improvement appeared to myself to be entirely due to the hyposulphite.

If this letter is worthy of notice in your Journal, I shall be obliged by its insertion. I am, &c.

Ombersley, Droitwich. R. NEALE, M.B.

REPORTS OF SOCIETIES.

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. GREENHOW, Esq., President, in the chair.

SIR J. FIFE detailed the following case of

TRACHEOTOMY FOR THE EXTRACTION OF A PIECE OF GLASS.

A boy, aged 8, was brought hastily to the Newcastle Infirmary in a suffocating state, in consequence of a portion of broken glass having got into his wind-pipe during play. He saw him soon after admission; found by the stethoscope, from the distinct whistling sound, most evident a little below the cricoid, that the glass was impacted there, and had him immediately placed under the influence of chloroform. Tracheotomy was then performed, and the trachea slit downwards from the cricoid for about an inch, when a violent convulsive paroxysm of coughing expelled a piece of glass about half an inch long, with irregular edges, and about a quarter of an inch broad. The patient recovered without a bad symptom.

Mr. S. M. Frost exhibited a number of pessaries, formed of sponge, fixed upon stems of wood, and other materials of various forms, which he introduced as simple in construction and efficient and economical in use. He had found them very useful in cases where the usual pessaries had been insupportable from their hardness or other causes, and more especially in those cases of prolapsus where great discharges rendered it necessary to use astringent or other injections, in which the sponge formed a very convenient medium for the application of the lotions. He also exhibited some of considerably larger size, designed to act as plugs in cases of uterine hæmorrhage, for which purpose he considered they would suit admirably.

Mr. Denham related the following particulars of a case of

COMPOUND FRACTURE OF THE ELBOW.

R. K., aged 30, seaman at South Shields, fell from the mast-head on the rail, and thence between two ships. Mr. Young, surgeon, examined him, and found a fracture of the thigh and a compound comminuted fracture of the elbow-joint, requiring, in his opinion, amputation of the arm. Two other surgeons examined the joint, carefully removed several loose pieces of bone, and advised, that a chance should be given to the limb. A splint was afterwards applied on the inner aspect of the arm, and a long splint on the lower extremity. After a day or two, he came under my care; suppuration had then ensued, and Mr. Young kindly saw the patient with me from time to time. Various small spiculæ were washed out of the wound with an abundant discharge; at the end of five weeks matters were growing worse, and the joint felt like a bag of bones, and a sharp point was peeping out at a new spot, which looked like the fractured olecranon ulcerating its way out. Mr. Young concurred with me in the propriety of opening the joint, and clearing it out, which was effected by raising a flap from the back of the joint. The radius was uninjured; the olecranon was gone; the ulna was a little roughened where the fracture of the process had occurred; but the condyles of the humerus were ground to powder, and the fragments imbedded in the flexors of the fore-arm. I removed a small piece of the ulna, and about two inches of the humerus. The wound was then cleared of the pieces of bone, which proved very tedious, brought together by a suture and straps of adhesive plaster, and the arm laid on a pillow. On the third day some hæmorrhage was caused by the jerking of the muscles, which it required a splint to keep quiet. Inflammation of the humerus followed the operation; very profuse suppuration occurred, and appeared likely to exhaust the patient; the enormous secretion of synovia also very much retarded the man's recovery. Quinine, opium, and wine, with good diet, ultimately helped him round, so as to go into the hospital at the workhouse, where he remained till February, 1852, when he left for Yarmouth. The arm would be ornamental, though I fancy not very useful, as the muscles were so very adherent to the bone, and it was over straight for most purposes. His hand will enable him to write a little; but this is only a small advantage for all his suffering and the risk to his life.

Mr. Gibb exhibited a

UTERINE TUMOUR,

about five inches long, and of the thickness of the little finger, which had been removed in the Newcastle Infirmary by H. G. Potter, Esq., from a female patient, aged 56 years. The patient had been suffering acutely from the usual symptoms of polypus for the last six years, was much blanched from excessive hæmorrhage

and coloured discharges, and, although she had undergone much medical treatment, had not been submitted to any uterine examination until a few days before her admission into the infirmary. When examined after her admission, the polypus was found hanging from the interior of the uterus, projecting beyond the vulva to the extent of a couple of inches, where it was covered by an ulcer, and consisting of a soft, vascular structure. After slight preparatory treatment, the polypus was ligatured within the uterus by a modification of the ordinary double canula used for that purpose; and the ligature was so effectual as to cause its separation on the morning of the third day. She recovered her strength rapidly, and got well without a bad symptom, all discharge and trace of the tumour having disappeared soon after the separation of the ligature.

MEDICAL NEWS.

COLLEGIATE ELECTION.—At a meeting of the Council of the Royal College of Surgeons, on Thursday last, James Luke, Esq., the Senior Surgeon of the London Hospital, was elected President, and Robert Keate, Esq., Sergeant-Surgeon to the Queen; and Messrs. Guthrie and Lawrence, were elected Vice-Presidents of the College for the ensuing year.

THE ROYAL COLLEGE OF SURGEONS FELLOWS' DINNER took place on Thursday, the 7th of July, at the Freemasons' Tavern, W. J. Wilson, Esq., of Manchester, in the chair. Nearly 120 Fellows of the College sat down to dinner. The Chairman was supported on the right by the President of the Royal College of Physicians, and on the left by the President of the Royal College of Surgeons. Among the Fellows present were Messrs. Hey, Teale, and Nunnelly, of Leeds; Hey, of York; Toogood and Paget, of Leicester; Jordan, of Manchester. Dr. Conolly was the only visiter present, with the exception of Dr. Paris. After the usual loyal toasts, the Chairman gave a variety of professional toasts, which were responded to by Messrs. Green, Stanley, (who consented to act as Chairman, at the next Anniversary Meeting,) Lawrence, Owen, Paget, Jordan, Toogood, etc. Sir Benjamin Brodie, proposed the health of the Chairman, in an admirable speech on the independence of the Medical Profession, showing, that even the most exalted in station cannot at any time render services so great as we, in our turn, may render them.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at the meeting of the Court of Examiners on the 8th inst.:—

COLLINGE, JAMES, Manchester.
COWARD, JAMES EYRES, Tiverton, Devon.
JAMES, EDWARD, Exeter.
MARSHALL, JOHN INGHAM FEARLEY, York.
NORTHOVER, FREDERIC, North Brixton.
RUSSELL, FRANCIS M'MANUS, Quebec.
WILLIAMS, THOMAS ROBERT, Wincanton, Somerset.
YOUNG, LAKE, London.

The following gentlemen were admitted members on the 11th inst.:—

DUPREY, ARTHUR, Mauritius.
HUME, JOHN, North Shields.
SWANN, FREDERICK BELLINGHAM, Weedon.
TOMLINSON, THOMAS, Maldon, Essex.
WALLER, EDMUND, Chesterfield, Derbyshire.
WHITCOMBE, WILLIAM PHILIP, Wolverhampton.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 7, 1853:—

BOLTON, JOHN ADAMS.
HAVARD, JOHN EVANS, Llangolen, S.W.
MATTHEWS, JOSEPH BEAUCHAMP, Oxfordshire.
ROSE, HENRY COOPER, Canterbury.
SADLER, PETER LEIGH, Warrington.
SYME, JAMES, Cumberland.
THOMAS, JOHN HENRY, Llansamlet.

APPOINTMENTS.

MEDICAL.—Alexander Halley, M.D., elected Physician to the Blenheim-street Dispensary.—Portsmouth and Portsea Royal Hospital: Mr. Garrington, of Portsea, has been elected House-Surgeon, vice Mr. Girdlestone, who has received a Government appointment.—Dr. F. Armstrong has been elected Surgeon to the Westmoreland Gaol.—Mr. R. Leeming has been appointed Medical Officer for the Kendal Workhouse, and for Kendal, Kirkland, and Nethergraveship districts.—N. Henry Stevens, Esq., has been appointed Surgeon to the City of London and East London Dispensary.—Septimus Gibbon, A.B. and M.B. Cantab., Physician to the Metropolitan Free Hospital, and Lecturer on Natural Philosophy at St. Bartholomew's Hospital, was elected, on the 6th inst., Assistant-Physician to the London Hospital.

NAVAL.—Assistant-Surgeons: Joseph Coulter, M.D. (1845), from the Amphion screw-steam frigate, to the Edinburgh screw-steamship, at Portsmouth; H. R. Ley, to the Amphion, at Ports, mouth, vice Coulter; Edwin T. Watkins (1848) to the Antelope-iron paddlewheel steam-vessel, on the Mediterranean station; Dugald M'Ewan (1847) to the Magicienne, 16, paddlewheel steam-frigate, at Devonport.—Surgeon: J. Wilson.

MILITARY.—13th Foot: Assistant-Surgeon William Brown, M.D., from the Staff, to be Assistant-Surgeon, vice Woodroffe, who exchanges.—17th Foot: Assistant-Surgeon Theodore Gordon Bone, M.D., from the 97th Foot, to be Assistant-Surgeon, vice Hill, appointed to the 87th Foot.

Hospital Staff: Assistant-Surgeon Charles William Woodroffe, from the 18th Foot, to be Assistant-Surgeon to the Forces, vice Brown, who exchanges.

Memorandum: The Christian names of Assistant-Surgeon Porter, who was appointed to the Hospital Staff on the 17th of June, 1853, are "Joshua" Henry, and not "John" Henry, as previously stated.

MILITIA.—5th or Royal Elthorne Regiment: William Henry Cane, gent., to be Assistant-Surgeon.

DEATHS.

ABRAHAM.—Recently, M. le docteur Abraham, Member of the Academy of Medicine, Paris, at a very advanced age.

DEAKINS.—In June last, in Antigua, of yellow fever, in the 28th year of his age, R. P. Deakins, Esq., Staff-Assistant-Surgeon.

OUTLAW.—July 4, at Wellingborough, A. M. Outlaw, Esq., Surgeon; M.R.C.S., 1810.

TURNER.—June 30, at Briery Hall, near Stannington, in his 41st year, William Turner, Esq., Surgeon, of Percy-street, Newcastle-on-Tyne; M.R.C.S. Eng., and L.S.A. 1836; Certifying-Surgeon to the factories in the district.

WAINHOUSE.—June 29, at High-street, Halifax, Alfred Wainhouse, Esq., Surgeon, M.R.C.S. Eng., 1831, L.S.A., 1830. The deceased was without practice, of somewhat eccentric habits, and a bachelor. It appears, that on the Tuesday previous, while in a very depressed state of mind, he obtained two ounces of tincture of opium or laudanum, from Mr. Bancroft, a druggist. He wandered about, and at different times took the whole of the poison, and then went to bed. He died the following day, after being attended by Mr. Hodgson.

WRIGHTSON.—Feb. 13, at Sanger, on his passage from Calcutta to the Cape, on board the Alfred, Robert White Wrightson, Esq., Surgeon H.E.I.C.S.

PRINCE ALBERT.—His Royal Highness has passed favourably through the measles, and is now convalescent.

TRINITY COLLEGE, DUBLIN.—The honorary degree of M.D. has been conferred on Dr. J. Moore Neligan, of Merrion-sq.

TESTIMONIAL.—At a Board of Inquiry into the cause of the great sickness and mortality on board the Ticonderoga emigrant-ship, which sailed from Liverpool, in August, 1852, and arrived at Melbourne the following November, the first Surgeon-Superintendent, J. C. Sanger, M.D., was awarded a present of 50*l.*, in addition to his pay, in consideration of his extra services.

HEALTH OF THE TROOPS AT CHOBHAM.—The troops have been, hitherto, much more healthy than when in barracks. There have been only about 16 per 1000 in hospital since being under canvas, while in barracks the proportion varies from 30 to 40 per 1000.

CHOLERA IN RUSSIA.—The cholera report of July 1 shows 433 cases since the commencement; 54 new cases that day, 27 cures, and 22 deaths. The numbers for the last few days exhibit a slight decrease, but people here affect to think, that the official returns are from giving an account of all cases. The disease seems to exhibit itself in an unusually virulent form, and the patient is generally killed or cured in five hours. The disease is also raging in Moscow and Copenhagen. The following is a return of the number of cases of cholera during the years 1852-53:—

1852.	Attacked.	Recovered.	Deaths.
October ...	441	53	175
November	1,678	714	666
December	1,512	919	580
1853.			
January ...	1,160	929	487
February	476	369	206
March ...	769	337	358
April ...	1,344	590	554
May ...	1,636	830	710
June 22 ...	1,296	782	494
Total attacked ...		10,222	
Of whom recovered ...		5,523	
Deaths ...		4,230	
Remaining sick ...		469	
		10,222	

YELLOW FEVER.—In consequence of the ravages of yellow fever in Brazil, the Government have established an hospital for seamen in the port of Rio Janeiro.

A NEW STYPTIC.—A pharmacien in Rome, Signor Pagliare, is said to have discovered a liquid possessing an extraordinary power of coagulating blood. In addition to the other valuable qualities of the liquid, it is said to be totally devoid of poisonous agency, and easily prepared, as follows:—Take eight ozs. of gum benzoin, one pound of alum, and ten pints of water. Boil all together for the space of eight hours, in an earthenware glazed vessel, frequently stirring the mass, and adding water sufficient to make up the quantity of that lost by ebullition, taking care, however, to add the water so gradually that boiling may not be suspended. The liquid portion of the compound is now to be strained off, and preserved in well-corked bottles. It is limpid, like champagne as to colour, possessing a slightly styptic taste, and an agreeable odour.

DENTISTRY IN MADRID.—The authorities of Madrid have prohibited the drawing of teeth in the public streets, "because it is derogatory to the Dentist's profession."

DISEASE IN VEGETABLES.—From several localities we hear, that the potato disease is showing itself in its accustomed virulence. At the Canary Islands, the disease in the vines has appeared on several different points, and threatens to extend its ravages.

UNQUALIFIED PRACTICE.—A chemist in Wales (of the name of Moses) has had a verdict of manslaughter returned against him by a Coroner's Jury, for having administered eighteen grains of sulphate of zinc to a man who had complained of pain and difficulty of breathing, with palpitation of the heart, and inward debility. On the *post-mortem*, the whole of the viscera had a congested appearance; and Mr. Price, Surgeon, said, that the straining caused by the large dose of emetic was no doubt the cause of death.

MORTALITY NOTABILIA.—The Return for last week exhibits a favourable condition of the public health. The deaths registered in London in the week that ended last Saturday were 925; the weekly deaths in June averaged about 1000; the present decrease is therefore considerable. The mean weekly temperature has risen 6° in the same period. In the ten corresponding weeks of the years 1843—52 the average number was 919, which, with a certain proportion added for increase of population, becomes 1011. Hence the actual mortality of last week is less than the estimated amount by 86. The following numbers are attributed to the several diseases in the zymotic class:—6 to small-pox (of which 2 occurred to adults), 24 to measles, 25 to scarlatina, 44 to hooping-cough, 7 to croup, 6 to thrush, 34 to diarrhœa, 5 to dysentery, 1 to influenza, 1 to ague, 3 to remittent fever, 43 to typhus, 2 to metria (puerperal fever), 7 to erysipelas, and 3 to syphilis. Diseases of the respiratory organs, which have now fallen to the usual amount, number 84. Cancer destroyed 22 lives, gout 1, apoplexy 22, paralysis 20, delirium tremens 4, epilepsy 5, enteritis 16, disease of the liver 18. Four deaths resulted from intemperance. Six deaths occurred in the London Fever Hospital.

Military.—The deaths in the Royal Ordnance Hospital have been considerably above the usual average in the last quarter. Twenty-three were registered between 1st April and 30th June, 1853. A large number of recruits have joined the garrison recently, which will partly account for the increased mortality.

Births.—Last week the births of 709 boys and 735 girls, in all 1444 children, were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1253.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the last week was 29·883 in. The reading of the barometer decreased from 30·11 in. at the beginning of the week, to 94·74 in. by 9 h. p.m. on the 7th.; incresed to 29·89 in. by 9 h. p.m. on the 8th; decreased to 29·78 in. by noon on the 9th; and increased to 29.81 in. by the end of the week. The mean temperature of the week was 64·1°, which is 1.9° above the average of the same week in 38 years. The mean daily temperature was below the average on the first three days; on the three following days it rose 3°, 7°, and 6° above it; on Saturday it was still slightly above the average. The highest temperature occurred on Thursday, and was 81·7°; the lowest on Sunday, when it was 50·1°. The wind blew from south-west on the first four days; it afterwards varied from south to north-east.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending July 9:—

	Males.	Females.	Total.
Workhouses	42	34	76
Military and Naval Asylums..	5	...	5
General Hospitals	31	13	44
Hospitals for Special Diseases	7	...	7
Lying-in Hospitals	...	...	...
Lunatic Asylums	3	3	6
Military and Naval Hospitals	4	...	4
Hospitals for Foreigners, &c.	1	...	1
Prisons	...	...	...
	93	50	143

DEATHS *in the Metropolis for the week ending Saturday, July 9, 1853.*

CAUSES OF DEATH.	JULY 9. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	425	305	185	925	9189
SPECIFIED CAUSES	423	304	185	912	9118
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	161	40	10	211	2545
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	7	25	23	55	401
3. Tubercular Diseases	68	114	8	190	1839
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses	37	31	27	95	1067
5. Diseases of the Heart and Blood-vessels	2	17	11	30	281
6. Diseases of the Lungs and of the other Organs of Respiration	50	13	21	84	872
7. Diseases of the Stomach, Liver, and other Organs of Digestion	31	19	22	72	646
8. Diseases of the Kidneys, etc.	...	7	7	14	81
9. Childbirth, Diseases of the Uterus	...	7	3	10	94
10. Rheumatism, Diseases of the Bones, Joints, etc.	1	3	...	4	72
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	1	2	10
12. Malformations	3	1	...	4	27
13. Premature Birth and Debility	31	4	...	35	212
14. Atrophy	20	...	9	29	262
15. Age	...	...	36	36	430
16. Sudden	2	2	...	4	62
17. Violence, Privation, Cold, and Intemperance	10	20	7	37	217
CAUSES NOT SPECIFIED	2	1	...	13	

TO CORRESPONDENTS.

A. C., St. Mary's Hospital.—We have heard of the case in which the carotid artery was said to be tied, but in which the ligature was only passed round a portion of the thyroid gland: but we had rather not publish your letter. If the surgeon does not make the true state of the case known in the interests of science, we leave the task of doing so to others.

An Old Subscriber.—In London, Mr. Toynbee. In Dublin, Mr. Wilde.

Dr. Kennion has sent us a letter complaining of a late review of his work. He says, "My tract was not addressed to the Profession, it was addressed to the public; and it was written as a warning (see Preface and pp. 10 and 18), and to point out the evils which daily and hourly arise in this place from the injudicious use of its mineral waters. No one detests more than I do a medical work addressed to the public. In the case of mineral waters it is different. People do not go into a druggist's shop and help themselves at random to its contents; but they seem to think that medicinal waters are less dangerous tools to play with, and, when too late, they find out their error. A work written with this object in view must contain what to the Profession are truisms, and yet may be not unworthy of perusal by the Profession." He also informs us, that his brochure has met with the approbation of "Sir James Clark, Sir B. Brodie, Dr. Locock, and many others of the same class." Thus Dr. Kennion admits the justice of what we said about his writing for the public, and he does not say anything about the absurdity of recommending a spring for its *alkalinity* on account of its containing *one grain* of soda in a gallon of water. When the Author speaks of the approbation of distinguished individuals, he should remember how very difficult it is for any one, when asked for his opinion about a book, not to say something civil in reply. We hope we may also be able to do so when Dr. Kennion makes his next appearance in print.

Un Aspirante.—You can obtain all particulars by applying at the Office of the Army Medical Department, St. James's-place. About fifty assistant-surgeons are admitted into the army yearly. Fourteen of them are the most distinguished prizemen of different schools. A high professional character will do more towards obtaining a commission, than any extra-professional interest, however exalted it may be.

The publication of Dr. J. W. Ogle's (of St. George's Hospital) important series of Cases of Diseases of the Nervous System, shall be commenced next week.

Mr. Wallis's letter has been referred to Dr. Boon Hayes, and shall be answered next week.

Mr. Blackmore shall receive a letter.

Mr. Jabez Hogg's shall appear next week.

COMMUNICATIONS have been received from—

D. A. DEVILLE; A MEDICAL STUDENT; D. F. TYERMAN, Esq.; Dr. NEALE; A. C., St. Mary's Hospital; Viscount PALMERSTON; Dr. RUSSELL, Birmingham; Dr. G. JOHNSON; Mr. SKEY; Mr. BLACKMORE; JABEZ HOGG, Esq.; Dr. GUY.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON

CASES OF COLIC,

DELIVERED AT

King's College Hospital(a).

(July 22, 1851.)

By ROBERT B. TODD, M.D., F.R.S.

Physician to the Hospital.

Gentlemen,—The four cases of colic now in the house will afford us abundant material for a lecture to-day. All of these cases are good examples of the malady, and illustrate how it occurs in connexion with particular states of constitution, or particular diatheses.

Now, first, let us inquire, what is colic? It may be defined as a very painful affection, which comes on more or less rapidly or suddenly, and is caused by an abnormal action of the colon. The pain is not constant, but comes on in violent paroxysms, giving the patient the sensation of a twisting or writhing action going on in the upper part of the belly,—generally about and around the navel. A good example of this griping or colicky pain, in a minor degree, is found in that which few have not experienced in their own persons, and which is produced by the influence of certain purgatives. Thus senna will occasion severe griping in many persons; a large dose of calomel, or colocynth, or aloes, or croton-oil, will also cause the same. While the pain is severe, a distinct rumbling is heard and felt by the patient, denoting that the bowel is in active movement, struggling to get rid of its contents. Under these circumstances, flatus is generated in large quantities, distending the intestine in whole or part. When it is expelled, and fæces with it, relief is at once experienced; but the pain may return sooner or later with the generation of more flatus, or the accumulation of feculent matter in the bowel.

The operation of a purgative of this kind, illustrates the suddenness and the rapidity of the invasion of the attack of colic. The rapid distension of the bowel provokes it to forcible and spasmodic contraction, which is antagonised by the contraction of an empty portion of bowel, but more especially, and with generally great power, by the sphincter ani. Who has not felt the agony of that mortal combat between the expulsive power of the bowel, and the retentive force of the sphincter, on the issue of which hangs the safety of one's habiliment, and one's credit for propriety.

Now, very much the same powerful and painful action occurs in the bowel affected with colic. An obstacle arises to the onward passage of the intestinal contents. This is occasioned by an accumulation of matter within the bowel, or by a contracted or paralytic condition of some part of it, which, therefore, not only is unable to play its part in the general movement, but, by its failure, even creates an obstacle to the action of the bowel above, and thus excites in it forcible contractions, to overcome the obstacle. Colic, then, is a state of aggravated peristaltic action. The violent contractions of the intestine produce great pain, which will continue until the writhing action of the colon becomes sufficient to overcome the obstruction, or until the muscular action becomes so violent as to cause rupture of the bowel itself. The general event is, that the impediment to the onward passage of the contents of the intestine at length gives way; but cases have occurred where the violence of the action has been so great, and the obstruction so firm, that rupture of the colon has actually occurred, leading to extravasation of its contents into the peritoneal cavity, which soon causes death. Some years ago we had a man in the hospital labouring under symptoms of colic and obstruction of the bowel, and for some time we failed in our attempts to relieve the patient; but at length, by dint of the administration of enemata, the obstruction gave way, an evacuation quickly followed, and, upon examination, we were surprised to find that the stool consisted entirely of dried peas, which the poor fellow had been compelled to eat for want of better food.

Should the obstruction be overcome, of course all undue action of the bowel ceases, and the patient soon gets quite well; but, if the obstruction persists, then a very serious train of symptoms ensues,—the patient begins to vomit and to hiccough, and at length the bowel will empty itself through the stomach, and fæcal vomiting will occur. The contents of the bowel are forced down to the obstructing point, and, being prevented from passing further, a reflux takes place in the central part of the moving mass; and this may occur to such an extent, that a large quantity of the contents may be regurgitated through the intestine, and may ultimately reach the stomach, and be rejected by the mouth. This process is generally, but, as Dr. Brinton has ably pointed out, incorrectly termed *anti-peristaltis*,—a supposed condition, which certainly cannot be shown really to exist. What I have just described, takes place in every case of fæcal vomiting; and it is thus that this symptom occurring in connexion with strangulated hernia is explained. In some instances, owing to undue dilatation of the bowel above the point of obstruction, or perhaps sometimes to an inflammatory state of the muscular coat, there is not sufficient power to cause the reflux; and thus I have seen cases of complete obstruction lasting fourteen or fifteen days, with an enormously-distended abdomen, and yet without fæcal, or, indeed, any vomiting.

The most common cause of colic depending upon obstruction of the colon, is fæcal accumulation. The subject of it has perhaps had no evacuation from the bowels for days, or the bowels have been acting very imperfectly for some time previously; and, in consequence, a considerable accumulation of fæcal matter takes place, which at length reaches such an amount as to cause obstruction. The bowel takes upon itself increased peristaltic action above the point of obstruction, and the pain characteristic of colic occurs. This condition may be properly termed "simple colic." Another form of colic which is very commonly met with in hospital practice, (but happily much less frequently than formerly,) is that prone to occur in connexion with lead-poisoning, and hence known by the name of "lead colic;" also known by the names of "painters' colic," or "colica pictonum." It occurs among persons who are in the habit of using white-lead, or some other preparations of lead, in their business, such as painters, plate-glass polishers, etc.

In persons affected with gout, dyspepsia, hypochondriasis, or hysteria, we meet with another form of colic, which may be called "gouty colic," for it bears the same characters, whether it manifests itself in patients of one or other of these diatheses.

And now to revert to the symptoms of colic. Colic is characterised by the occurrence of severe abdominal pain coming on in paroxysms. The pain sometimes becomes very severe, and then gradually subsides for a time; soon, however, another exacerbation occurs, to be succeeded in the same manner by another period of comparative ease, which is again followed by another attack of pain. The pain is situated in the epigastric and umbilical regions; it is of a writhing, twisting character, generally accompanied with more or less rumbling of wind. If you make pressure over the seat of pain, you do not in general increase the

(a) Lecture XXXIX., reported by Dr. Beale.

sufferings of the patient. It is true, that pressure, suddenly or abruptly applied, will sometimes increase the pain; but you will almost always find, that, by moderately firm and gradually increased pressure, the pain becomes somewhat relieved. Sometimes, however, we do find, that, under even such pressure, the pain is aggravated; and this is more frequently the case when there is a tympanitic state of the abdomen. When this is the case, the pain is often very severe, and there is considerable abdominal tenderness; so much so, as to excite fear lest there should be inflammation of the bowel or of the peritoneum. Sometimes the pain is accompanied by vomiting; but this is neither a necessary nor a constant concomitant. The attack sometimes sets in with vomiting; but, in other cases, this symptom does not occur till late, when it must be regarded as a most alarming symptom, from which we should incline to the opinion, that the obstruction was of that kind which would not give way, and for the same reason we should be led to fear a fatal result. In the more violent cases, the abdominal muscles are thrown into strong contraction, and are apt to assume a rigid and knotted condition.

As I mentioned at the commencement of the Lecture, there are four cases of colic now in the house. One is a case of simple colic, two are cases of lead colic, and the fourth forms a good illustration of the gouty form of the malady.

The first case, that of simple colic, presented many points which, *primâ facie*, rendered the diagnosis a little obscure. The patient's name is John Selkirk, (Vol. XXXIV. A, p. 36.) The notes of the case have been kept by Dr. Maurice Davis. He is a native of London, and by trade a glasscutter. He has always had good health. He tells us that his bowels have always been regularly opened every day. A fortnight before his admission he began to feel a drawing pain, which extended from the sternum almost to the middle of the abdomen. He attributed the pain to indigestion, and took no especial notice of it. There is no evidence, either from his history or from his constitution, that he was gouty, and, indeed, he had not suffered from any illness but slight dyspepsia, prior to the present attack. The indigestion seems to have have been due to his having eaten freely of radishes. At seven o'clock p.m., on Monday, May 26, 1851, he began to feel very ill; the pain became more intense, and spread to the back, but did not reach lower than the umbilicus; he took half an ounce of castor oil. During the night he became worse, and in the morning the pain still continued very severe. About eight o'clock his bowels were relieved, but afterwards the pain became worse than ever, and the feeling of nausea, which he had felt from the beginning of the attack, became also aggravated. On the 27th, soon after his admission, while in a warm bath, he vomited some dark slimy matter, and the vomiting continued at intervals until the 29th.

In consequence of the vomiting, and the bowels not having acted for some time, the first step in my examination of the belly was made, with a view to ascertain whether any form of hernia existed. I cannot too strongly impress upon you the importance of satisfying yourselves early on this head, in every case where an intestinal obstruction exists. There was no evidence of hernia; but there was a tympanitic swelling and great pain in the region of the ascending and transverse colon, and also of the left groin. The pain was aggravated by pressure.

The diagnosis in this case was, at first, by no means perfectly certain, and we were willing, as you will often find it necessary in dealing with cases of abdominal disease, to draw upon the results of our treatment for aid in determining the precise nature of the attack. The vomiting and tenderness of the abdomen might have been due to peritonitis, or to some affection of the stomach. But the pain was of the writhing, twisting kind, which is so apt to occur in colic. There was not enough fever for peritonitis, (the pulse did not rise above 100,) nor was there any obvious cause for that inflammation, unless it might be an over-distended intestine. The pain was too severe for any affection of the stomach, excepting, perhaps, gout; but the tympanitis did not properly belong to the stomach, and, although he was dyspeptic and subject to attacks of flatulence, and his father had been so before him, there was nothing to prove distinctly that he was gouty. In the early treatment I rested chiefly on the diagnosis of colic, but, in consequence of the doubt, I did not use any more severe means to provoke the bowels to act than enemata.

The whole treatment of the case, then, was this; and I think the results of it justified the diagnosis of colic from obstruction. At first a warm bath, and a little brandy from time to time, in consequence of his prostrate condition; then a large enema of gruel, which brought away some lumps, and relieved the pain and vomiting for a little. Both soon recovered, and now twenty leeches and fomentations were applied over the painful region of the abdomen, and to relieve pain and sickness, twenty minims of tincture of opium were given every two hours. Enemata were now again administered, which brought away fæces in lumps in large quantity; after these evacuations, the pain and sickness disappeared, and did not return; and now calomel and colocynth were freely given, which acted freely on the bowels, and restored the abdomen to its natural state. He was admitted on the 27th of May, and on the 2nd of June he was convalescent.

An obstruction of this kind, suffered to go on, might, by distension, cause peritonitis. And in this case there might have been incipient peritonitis, although I think there was enough to account for the pain in the flatulent distension. However this may be, it was satisfactory to know that treatment such as that adopted, namely, the combination of opium and enemata was sufficient not only to relieve obstruction, but also to check the further progress of peritonitis.

We now come to our second case,—one of lead colic,—which affords a very good illustration of this particular form of the affection. The patient's name is Hammond, (Vol. XXXIII., p. 227;) he is a lead-melter by trade, and 32 years of age; he is a man of very intemperate habits, being, on an average, drunk for three days in the week. The notes of the case have been kept by Dr. Bridgewater. About eight years ago, he was in this hospital under surgical treatment for retention of urine, in consequence of a fall from a plank. Subsequently, he has had no indisposition, except an occasional feeling of weakness about his stomach, until three weeks ago, when the bowels refused to act for two days, and he passed little or no water during that time. He likewise suffered from considerable pain in the belly. The history of the case and the man's occupation would at once excite suspicion of the presence of this particular form of colic. Upon examination, we found a distinctly-marked blue line round his gums. This blue line, as you know, occurs in all those cases in which lead enters the system; and you may often see it form during the administration of the acetate of lead. The blue line is most distinct in those persons who have been exposed to the influence of some preparation of lead for a considerable period. It occurs on the free margin of the gum when a tooth or the stump of a tooth is present. You never find it in edentulous subjects, nor where a tooth has been lost. The presence of the blue line is an indication of the presence of lead in the system, analogous to that afforded by salivation in the case of mercury. And it is curious that neither the blue line nor the inflammatory and ulcerative process of ptyalism shows itself in the edentulous subject.

In other points, this case exhibited the usual features of lead colic. The pain in the abdomen came on after a confined state of bowels of two days' duration; this was relieved by a dose of castor-oil; but, the bowels becoming again confined, the pain returned, and was relieved in a similar manner. On its returning, a couple of days afterwards, with sickness of stomach,—which was, doubtless, partly due to a bout of drinking, which took place in the meantime,—he was admitted into the hospital on the 2nd of July, 1851.

In distinguishing the different forms of colic from each other, you must rely mainly upon the general history of the case. First, get a clear account of the colic, and then inquire into the previous history of the patient. If you feel certain of the presence of colic, and from the history you learn that the patient has been much in the habit of using white lead in his business, and especially if he have that valuable sign of lead-impregnation, the blue line, you may conclude that you have to deal with a case of lead colic; and this will be the more certain if, in addition to the blue line, you find that very characteristic form of paralysis of the extensor muscles of the forearm, which occurs only in persons affected by lead. In cases of lead colic, although the pain is generally severe, often agonizing, there is not usually any fever. The pulse of this patient never rose above 80,

and his skin was cool; after he had been in the hospital two days his pulse fell to 72.

This patient was treated at first with small doses of opium, to allay pain and sickness, and large enemata of warm water while in a warm bath, on the plan first suggested by Dr. Wilson, of the Middlesex Hospital. This was followed by free purging by means of colocynth and croton-oil. On the second day, he was sufficiently relieved to remove all apprehension respecting him; but the purging was kept up for some days, until all abdominal pain was completely removed.

Another case of lead colic is that of a man, named Rolt, aged 35, (Vol. XXXIV., p. 87.) This man is a gas-fitter; he uses white lead, and has to handle leaden pipes a good deal in his business. He was admitted June 30, 1851. From the history of the case—for the record of which I am indebted to my clinical clerk, Dr. Maurice Davis—it appears that he always enjoyed good health until two years before his admission, when he had an attack of gout. He had been twenty years following his occupation as a gas-fitter before any symptom which he could recognise of injury from lead-poisoning occurred. His first attack of lead colic was in March of this year (1851), and he was then treated in this hospital. During his convalescence from this, he was seized with gout.

Since the attack in March last, he has not been near the work-shop, nor at all exposed to lead contamination, but, in consequence of being out of work, he has lived badly. A week ago he was attacked with looseness of bowels, and severe griping pains, followed by constipation for four days. The severe pain continued, accompanied by a constant sensation of pressure across the chest. There was no tympanitis; the stomach was irritable; a well-marked blue line existed at the margin of the gums.

In this, as in the last case, the pulse, notwithstanding the severe pain, did not rise above 84. The patient was, immediately on his admission, treated by the warm-bath and enema, and he got two doses of calomel and colocynth, five grains of each, with half a grain of opium, at an interval of two hours. By this treatment the bowels were freely opened, and the pain was very speedily relieved, but it returned the next day (July 1) with considerable severity. The bath and enema were again resorted to, and colocynth and croton-oil were freely given. The bowels were thus freely opened, but the stomach became very irritable, and the patient was much troubled with nausea and vomiting. For these, and for the abdominal pain, which did not immediately subside, opiates were given, and fomentations applied to the abdomen.

On the fourth day of this treatment the bowels having been freely opened, and the abdominal pain relieved, gout showed itself in the right wrist and elbow, which became swollen and painful, and, in two days more, the left elbow and wrist were similarly seized. Under the continued use of opiates, blisters to the joints, and cotton wool around them, this attack subsided in seven or eight days, and in a few days more the patient left the hospital.

There are two peculiar features in this case. The one, that diarrhœa was the forerunner of the attack. It is not improbable that this diarrhœa may have been caused by an over-distended colon. The other is, the development of gouty inflammation of the joints just as the colic was passing off. Upon this latter affection I shall trouble you with a few remarks:—

Several years ago, in 1843, I directed attention to the liability of persons of gouty constitution, whether they had had previous attacks of gout or not, to the development of the gouty paroxysm, when reduced by some exhausting disease, or by some other cause. It is very common after lead colic. The intemperate manner of life of house-painters, who are the most frequent subjects of this form of colic, exposes them very much to the causes which produce gout. But you may see it in the stage of convalescence after fever, after severe accidents, after surgical operations, after pneumonia or pleurisy. When I first called attention, ten years ago, to the occurrence of gout under these circumstances, I adduced it as an argument against excessive antiphlogistic treatment, especially in persons of the gouty diathesis. And, in a large experience during the period which has since elapsed, I have had the fullest confirmation of my views.

You will have remarked, that Hammond did not very quickly lose his colicky pains, and that it was not for some days after the bowels had been freely acted upon that the abdominal symptoms gave way; not, indeed, until gout had fully displayed itself in the joints. It is not impossible that the gouty state of this man's constitution may have kept up the irritable and painful state of the colon.

Certain it is, that, in cases of gouty diathesis, where there is no contamination from lead whatever, colic is very apt to to occur; and our fourth case will serve as an illustration of this.

For good notes of this case I must again thank my clinical clerk, Dr. Bridgewater.

The patient, Richard Hall, aged 32, (Vol. XXXIII., p. 225,) a carpenter, was admitted July 2, 1851. He is a temperate man, and was always healthy, until four years before his admission, when he was attacked with gout in one great toe, which shifted rapidly from one foot to the other back again. Since that time he has had five attacks, the last six weeks ago. He had been only just out of this fit, when the bowels became obstinately costive, and remained so for some time, and from Friday, June 28, to July the 3rd, he had no evacuation whatever. He was admitted in this state of obstruction, suffering from severe writhing pain in the abdomen, referred chiefly to the region of the umbilicus. The abdomen here was slightly tympanitic; pressure increased the pain. The patient complained of considerable debility, and a sense of sinking; he had slight fever. P. 90. The ankles and soles of the feet were painful and weak, but not swollen. There being no hernia, and no symptom of any other abdominal mischief, the case was regarded as colic from obstruction, and so treated.

On the night of his admission (July 2,) he was placed in a warm-bath, and had a large warm water enema in the bath. Afterwards the belly was well fomented, and forty minims of tincture of opium were given. The enema returned without any feculent matter; but the patient was relieved for the night. Next day (3rd,) at noon, he took five grains of compound colocynth pill, and half a drop of croton oil; and enemata were administered every two or three hours. After the fourth enema a copious evacuation of old very fetid fæces took place, which was quickly followed by two more. The patient felt much relieved, although still complaining of pain on pressure. A night draught was given, containing thirty minims of tincture of opium.

From the 5th to the 11th the bowels continued to act daily without aperient medicine; but he still complained of a dragging pain in the umbilical region, and there was tenderness on pressure. On the evening of the 11th he began to complain of stiffness and soreness of the right wrist; and, on the 12th, gout had fully developed itself in that joint and in the hand. This yielded quickly to local treatment by cotton-wool and a blister. The abdominal pain and tenderness disappeared simultaneously with the development of gout in the wrist; and the patient left the hospital quite well in a few days.

In a former lecture I mentioned, that it is in cases of gout which exhibit a particular tendency to shift from one point to another, that the proneness to attack the hollow viscera or other internal organs is most to be feared. The attacks of gout, under which this patient laboured, appear to have been decidedly of this shifting character. The attack of colic followed closely upon one of these gouty paroxysms, and the affection of the bowel did not seem fairly to subside until the gout had become re-established in one of the joints. The gouty condition, by weakening the power of the muscular coat of the intestines, favoured the accumulation of matter in the colon, which gave rise to the attack of colic.

There is an interesting analogy between the colic which is associated with gout, and that connected with lead. In both, the action of the colon is impaired by the presence of a poison, which, doubtless, affects chiefly the muscular tissue, causing a more or less paralysed condition of it, and throwing increased work upon the bowel above. From the truly feculent nature of the evacuations, and the effects of treatment, especially the beneficial action of enemata, there can be no doubt that some part of the colon is that which is weakened by the poisonous influence, and that the augmented peristaltic action is to be found in the upper part of the colon, or in the small intestine, or probably in both.

The actual state of the bowel in these kinds of colic is a condition partly of paralysis, partly of augmented action. A portion of the bowel, we will suppose, becomes distended,

partly by solid matter, partly by gas, owing to a weakened or paralysed condition of its muscular coat. Now, the paralysed condition of even a small portion of the intestine is tantamount to obstruction, for the paralysed portion being unable to propel the contents further on, permits an accumulation to take place in this situation. If we open the abdominal cavity of an animal immediately after death, we shall find that the contents of the bowel are propelled by the successive contraction of small portions of the intestinal tube. One portion contracts, and forces the contents on to the next, which, in its turn, is immediately thrown into a state of contraction, by the application of its wonted stimulus, and so the food is transmitted down the whole length of the tube. A similar phenomenon may be seen through the abdominal walls in very thin, emaciated subjects with obstructed bowels. A certain amount of dilatation seems necessary, in order to excite contraction; but if the dilatation of the intestine proceed beyond a certain point, paralysis ensues.

Colic is of not uncommon occurrence in cases of gout, and the symptoms which are manifested are very similar to those we meet with in lead colic. The most satisfactory indication of the gouty nature of colic is to be found in the rapid transference of the influence of the gouty poison from the external to the internal parts, *or vice versâ*. Either gout begins in one or more joints and flies to the bowel, or there is a severe attack of colic, which ends in articular gout. But the occurrence of colic in a person of decided gouty diathesis places the disease in the category of a gouty affection. The fact of the association of the gouty diathesis with lead colic seems to show that the two poisons may co-exist in the same individual, and, in such cases, it would be difficult, if not impossible, to decide with certainty whether the colic result from the lead poisoning, or from the presence of the gouty poison.

With regard to diagnosis, it is important to distinguish colic from certain abdominal inflammations, and also to distinguish the different forms of colic from one another. Upon this latter point it is unnecessary for me to offer any additional remarks. The importance of a correct appreciation of the distinction between the different forms of colic will be more apparent when I come to the question of treatment.

To distinguish colic from various abdominal inflammations and other affections is, I need not say, of primary and paramount importance. You must distinguish it first from peritonitis, secondly from ileus, thirdly from gouty or other inflammation of the stomach, fourthly from obstructed bowel by a mechanical cause, as intussusception, and lastly from certain affections of the kidney.

As to the diagnosis of colic from peritonitis, we rarely meet with peritonitis without the presence of vomiting as a more or less prominent symptom; while this symptom is absent in the greater number of cases of colic, or, if present, only continues for a short time, appearing early, and going off or coming on late. Again, in peritonitis, the abdomen is tympanitic, and the tympanitis is general; while in colic the tympanitic state, when present, is confined to a portion of the abdomen. In peritonitis the pain is generally very much increased upon pressure, but that in colic is usually somewhat relieved by firm and gradually increased pressure. The presence of severe abdominal pain, with or without pressure, is almost a constant symptom in cases of peritonitis; although every now and then you will meet with cases of this disease in which this symptom is absent, or manifested in a very slight degree; still, as a general rule, the pain in peritonitis, augmented by pressure, is a most characteristic symptom. The haggard expression and shrunken features constitute another mark of this terrible malady, and the feeble voice often assists us to diagnose peritonitis. In peritoneal inflammation, we almost always meet with a small rapid pulse, and fever is invariably present; while in colic the pulse is but slightly affected, and there is little or no fever.

Perhaps the most important symptom of colic is the peculiar character of the pain,—a twisting, writhing, griping pain, not a burning or soreness, as in peritonitis, nor a sharp, shooting pain, fixed, and always referred to one spot. This writhing character of the pain should always be kept in view; it will especially help you in the diagnosis from ileus, from obstructed bowel, and from gout in the stomach. In the two former, the pain is often not at all a prominent symptom; it may occur early, and disappear, and the subsequent symptoms arise chiefly from the obstruction — namely, vomiting, swelled and tympanitic belly, complete stoppage in the action of the bowels. The pain of gout in the stomach is exquisite; it is distinctly referred to the stomach,—a fixed severe pain in that region, with more or less sense of distension, due to the accumulation of air in the organ, which may be clearly determined by percussion. The urgency of vomiting will, of course, excite suspicion of more serious disease than colic; and the results of treatment, the persistence of the symptoms, notwithstanding the use of means calculated to act on the bowels, will indicate ileus, or obstruction from some other cause.

Symptoms like those of colic often accompany renal irritation, either from calculus, or from acute inflammation. The diagnosis, under these circumstances, must rest on the history of the case, the state of the urine, and, in some degree, on the results of treatment.

And now let me conclude with a few remarks on the subject of treatment. Whether the case be one of simple colic, or gouty colic, or colic resulting from lead poisoning, you must endeavour to get the bowels to act freely. What you want is, to create a free channel through the intestine; and this you may effect by purging, and by the administration of enemata. The general plan of treatment which I commonly pursue with most cases of this kind in the hospital, is very much that which was suggested, some years ago, by Dr. Wilson, of the Middlesex Hospital. We commence by putting the patient in a warm bath, and, while he is there, a warm-water enema is administered; when the first enema is returned, a second quantity of warm water is forced up, so as to distend the colon; this is done several times in succession. Frequently a cure is effected by these means without any further treatment; but it is often necessary, in order to empty the bowels fully, to give a purgative. And that which answers best in these cases, is a combination of compound extract of colocynth and croton oil. A drachm of the former, and from one to three drops of the latter, are divided into twelve pills, and one pill is given every three hours until the bowels act. The stomach bears these small and frequently-repeated doses of the oil better than a full dose administered at once, and the operation of the medicine is more effectual. With respect to antiphlogistics,—the abstraction of a little blood sometimes does good in colic; but, as a general rule, you will find, that bleeding only prolongs the convalescence of your patient. Leeches, also, are occasionally beneficial, in cases where there is abdominal tenderness; but the majority will not require them. You will find great benefit from the careful use of opium, in the more obstinate and complicated cases. You may give it simply to relieve pain, when that is excessive; or, where there is great exhaustion, and the patient needs repose, you may give it freely to produce sleep; and, in administering it with this view, you will not find that your ultimate object will be retarded. On the contrary, the exhibition of opium often gives tone and power to the muscular coat of the bowel, and promotes the favourable action of purgatives. Moreover, opium is a valuable preservative against abdominal inflammations. Where you keep up a certain opiate influence, your patient will be less liable to peritonitis, or to enteritis. Opium also regulates and moderates the action of purgatives; and this is worth your always keeping in mind, for, in the use of purgatives, in cases of intestinal obstruction, it is often true, that, "the more haste, the worst speed."

The value of opium as an adjunct to other parts of the treatment is well illustrated in the first case which I related to you. There was so much pain and sickness, that we, at first, relied wholly upon opiates and enemata; and it was not for some days that purgatives were given. Without opium in this case, the patient would have but little chance, such was the exhaustion under which he suffered. After the opium, we found that purgatives acted well; and you may sometimes even combine opium with them, as with calomel and colocynth, or croton-oil and colocynth. For another reason I would caution you not to proceed too fast with purgatives in colic, or to trust to them exclusively,—namely, because possibly the diagnosis may not be quite certain, and you may find that your treatment is doing harm, and increasing the patient's distress. Enemata are perfectly safe, and may be given in all doubtful cases as a preliminary step, for, by this treatment, you are not likely to do harm, and you may often succeed in relieving the patient without having recourse to any other mode of treatment.

NOTES OF LECTURES ON SURGERY,

DELIVERED IN

The Theatre of the Royal College of Surgeons of England.

BY FREDERIC CARPENTER SKEY, ESQ., F.R.S.

Professor of Anatomy and Surgery to the College, one of the Surgeons of St. Bartholomew's Hospital, etc. etc.

LECTURE II.

It will be admitted by all authorities, that the contractile power of muscular fibre is far greater than the ordinary and daily duties of the individual muscles appear to require, although it may be difficult to guage this power with precision. Reverting to the biceps, I think we may reasonably infer, that the power exercised by Nature in raising any given weight may be less than that employed by art, but cannot be greater. It is highly improbable that the forces resorted to in the experiment with the pulley, are employed to the best advantage, or that they can exactly represent the muscles themselves. We may infer, therefore, that the two muscles—the biceps and brachialis anticus—in supporting a weight of 56 lbs. in the hand, act with a force of from 5 to 6 cwt.; and that their action, when exerted on the unweighted hand, is equal to 20 lbs. only. This is a large range of action, and demands, on all occasions in which these muscles are called into play, an exact adaptation of the requisite force, neither more nor less. But muscles, under disease, are liable to false applications of their power. These actions may become sudden, uncontrolled, and violent, as in the case of the fractured patella, or the ruptured tendo-Achillis. Let us suppose the larger power of the biceps to be applied, by the accident of spasm, or other deviation from health, to the lesser purpose,—what would be the result? Surely, fractured bone or lacerated tendon or muscle; for the bony organisation of the forearm is hardly competent to contend against a force of a quarter of a ton suddenly brought to bear upon it. In order to remove this liability, Nature has placed all such muscles under the influence of a controlling and regulating power, which we shall find in the antagonist muscles. I have always had faith in such a power; indeed, I have always taught it; but I have not till comparatively recently analysed it in detail. I think there can be no doubt of the existence of this power—a power which is called into action as the antagonist of every muscle in the body, which, like the biceps, possesses a large range of action, that will act with a force of 20 lbs., or a quarter of a ton. It is only such muscles that either require or possess antagonism. If the primary and sole function of a muscle be invariably large, it cannot act injuriously; and such muscles we find to be deprived of antagonistic power. Do we not observe some evidence in the condition of the muscular system of the living body? Examine the actions of the arm of a muscular man while in operation. If the hand be applied with pressure on the triceps, I think we shall observe something more than passive extension—some rigidity in its condition, which betokens more than mere elongation of the muscle. We have some illustration of this principle in the sculpture of the ancient Greeks. In examining any recognised figure which exhibits any forced attitude or position, representing the figure in motion, it appears to me that we may observe a condition of the two sets of muscles, whether flexors and extensors, elevators and depressors, to be very much the same; both appear in action, one or other set being more positively so. But I think we derive remarkable evidence from the body itself. I would go so far as to say, that Nature has formed and fashioned many of the muscles for this, as their primary purpose. If we find examples of individual muscles, possessing both size and leverage quite beyond their obvious requirements in the body, we must look beyond these requirements for a duty which alone can explain their size and power in the economy. We have a good example in those of the upper extremity, where we find the muscles of flexion and extension tolerably well balanced in size and in power; for we judge of the power by the leverage on which they act. The biceps is balanced by the triceps extensor, and the two flexors of the fingers by the extensor muscles at the back of the forearm. I will take as evidence of the antagonising principle, the extensor muscles of the fingers. Compared with the flexor sublimis and profundus, the common extensor and the two extensors of the index and little finger, are probably equal to something more than half the flexing power—*i. e.*, about four-eighths or five-eighths, judging from their relative size, and the form of their mutual leverage. Now, there can be no doubt of the great power possessed by the flexor muscles of the forearm employed in prehension or in grasping; in fact, they form an essential link in the chain of power by which the biceps and brachialis are enabled to contract with a force of more than a quarter of a ton. Under what circumstances do the extensors exhibit any approach to five-eighths of the same power in the act of extension? and, moreover, the act of extension is of too rare occurrence to account for the tonic and healthy condition of these muscles, when exposed by the knife of the dissector?

Take the triceps extensor cubiti. It is a muscle of large size; it is a lever of the first class; it is nearly equal in magnitude to its two antagonists, the biceps and brachialis. What are its functions in the economy? Extension of the arm only? It is employed in those actions of the upper extremity by which it is suddenly and forcibly extended in the act of striking a straight blow forwards, and is much cultivated by the school of pugilists. But we are not all pugilists; and, as we do not employ the triceps for such purposes, we must resort to the explanation of its size and power through its daily and hourly movements; and these I maintain to be perfectly inadequate to explain either its size or its leverage. It would appear, therefore, to possess some other function; and that may not unreasonably be assumed to be the requisite antagonism to the immense flexion power possessed by the biceps, etc., and by which the sudden and otherwise dangerous action of those two muscles is held in a wholesome check. Wherever we find muscles of a wide range of action, which, though employed for lesser, are equally competent to greater purposes, there we find a positive antagonism. We have, among the more palpable examples, the co-operative antagonism of the deltoid and pectoralis, conjointly with the latissimus dorsi, the above-named muscles of the upper extremity and forearm, the quadriceps of the thigh with the semi-tendinosus, etc.; and the gastrocnemius with the tibialis anticus, and the other agents of elevation of the foot and toes, so long as the gastrocnemius and soleus are employed as extensors of the foot, and not as elevators of the body. When the muscles of the calf are so employed, they have, and they require, no antagonism.

Desirous of ascertaining how far these views could be corroborated by examination of the living muscle while in action, I undertook—in conjunction with Mr. Savory, of St. Bartholomew's Hospital—a series of experiments on animals, while under the influence of chloroform. I bared the leg of a rabbit, and exposed the entire length of both flexors and extensors of the hind leg. On stimulating the agents of flexion, the extensor muscles were brought into immediate contraction. The experiment, however, was not conclusive. The second experiment I performed was on an ass. The animal was placed across a dissecting-table, which was supported on tressels sufficiently high to give free play to the hind legs. The muscles were then quickly exposed between the pelvis and the hock. The rectus muscle was selected, and was insulated, except at its extremities. The wires of a small battery, employed for medical purposes, were applied to this muscle, when the opposite muscles, consisting of those engaged in bending the leg, became instantly rigid. This state of the muscles continued so long as the wires were applied. Supposing it not impossible that the electric current might be diffused throughout the limb, and thus explain the phenomena. I repeated the experiment more carefully on another ass. The same plan was adopted with respect to the management of detail. The rectus muscle being exposed and insulated along its length, a piece of glass, of about four inches wide, was placed underneath and across it, employed as a non-conductor, and the wires were applied over that part of the muscle only, and with the same result as regards the instant contraction of the flexor muscles. The glass was then applied by its long diameter, about ten inches, and the wires separated nearly to that extent, but taking care to keep them within the length of the glass. The result was the same; the limb appeared to be agitated by the opposing actions of the two sets of muscles. I exposed the interior of these muscles, and the contraction of the fibres was apparent to the eye. I repeated these experiments again and again on dogs, but without any exceptional result. We obtain some additional evidence favourable to these views, if we notice the appa-

rent fact which I have already alluded to—that we only possess antagonism where it is required for the purpose of controlling what, without it, would be a dangerous engine of destruction to the organism. It is only found in muscles of a wide range of power. If the function of a muscle be limited to an invariably large duty, so that for the performance of that duty its fullest power of contraction is at once required, it is obvious that no sudden or morbid action of that muscle can prove injurious either to itself or to the bony structure to which it is attached. I will take the rectus muscle, or, rather, the entire group of the rectus cruræus, and two vasti, constituting the quadriceps, as an illustration. This mass of muscle is attached above to the femur (the origin of the rectus above to the pelvis is unimportant), and below to the tibia. It has two distinct actions, although it embraces one joint only. 1st. It extends the leg; 2nd, it elevates the thigh to the vertical position. On other muscles devolves the duty of raising the trunk also; but, in this second action the weight of the trunk adds enormously to the duty of the muscle. Now, when we compare the size of this immense mass of muscle, exerted as an agent of extension, with the weight of the leg, however disadvantageous may be the lever by which it acts, and consider how trivial is this duty, how inadequate to the full employment of the muscle, how rarely it is exerted even when acting on the leg, beyond the mere purpose of extending the leg in the ordinary exercise of walking, it appears obvious that such a function would never explain either the size or the power of this large mass; and we therefore look to its so-called secondary function, in order to explain it. *That* consists in raising the entire trunk at the remote end of a lever of some fifteen inches in length, for which the contractile power required is enormous. In the first of these actions the duty is an inadequate one; in the second, it is invariably large. In the first it has antagonism; in the second none. If this large muscle be employed for the purpose of straightening the leg it is controlled and regulated by the semitendinosus, semimembranosus, and biceps; while, as an elevator of the trunk from the sitting posture, these three large muscles co-operate with it by drawing the pelvis and trunk also upright. We have another example in the semitendinosus, semimembranosus, and biceps: they possess a power of contraction, even when employed as levers of the third class, largely beyond the mere act of bending the knee; and in this action, therefore, they require antagonism, which we find in the quadriceps. But, reverse their action, and they become levers of the first class, and their duty is enormous. On them devolves the function of elevating the body from the stooping posture—in which duty they have no antagonist. It is also important to recollect that, in the first action, as flexors of the leg, they act singly, and on one extremity only; whereas, in the second action, we have the double group of both extremities engaged. The gluteus maximus, also, is one of the large muscles of the lower extremity, which is destined to wield the trunk and alter its position. It elevates the body by converting the angle formed by the trunk and the thigh into a straight line, and it has no other function. The gluteus has no antagonist. I have alluded to the gastrocnemius (and soleus): its function is elevation of the body; but it is also an agent of extension of the foot. In both cases it acts as a lever of the second class; as an extensor of the foot it is antagonized by the tibialis anticus and peroneus tertius; while, in the capacity of an elevator of the body, it also has no antagonist. If these views be correct, we may infer that volition extends to any given muscle merely a preponderance of action over others. With the exception of the few muscles above alluded to, the muscular system, and more especially of the extremities, is invariably the subject of compound actions, by which several are brought into play for each movement, as by compound affinities, the force of the one muscle which most immediately effects the action required, being, for the occasion, supreme. The harmony of the muscles of a limb consists in their entire co-operation with the actions of each other, conducing to a general effect, and for which many muscles are required. When we assign any given function to a muscle we may be so far correct, that it is the chief agent by which a certain movement is accomplished; but the movements of individual muscles are concomitant with the movements, probably, of many others, by which its actions are controlled and regulated. We can no more test the value of the individual muscles than we can guage that of an Æolian harp by the sounds issuing from its single strings, but which, under the influence of its appropriate stimulus, produces sounds so loud, so infinitely diversified, so unlike those issuing from each individual cord, that we are lost in wonder and admiration at the marvellous combinations. In like manner the muscular system, to the end of producing a gradual or ordinary movement, may employ alone its single strings; but, in the more rapid and complicated movements of the body, exerts its functions in all its variety of compound and diversified action. In this complication, in this infinite variety, consists the true "harmony of action" of the muscular system.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. II.

ON THE TREATMENT OF ULCERS BY GALVANISM.

EXTRACTED FROM THE OFFICIAL JOURNAL OF

T. SPENCER WELLS, F.R.C.S.,

For H.M.S. Modeste, for the year 1852.

Since the year 1847, I have had repeated opportunities of observing the therapeutical influence of a single galvanic current upon ulcers and granulating surfaces. In this ship, several cases have occurred, in which this influence has been most remarkably beneficial. I have, therefore, drawn up, in the form of a series of propositions, the results of the whole of my experience.

The apparatus I have used has been of two kinds. The first is a single pair of plates,—namely, an oval plate of zinc from one to three inches in the long diameter, and a plate of pure silver of the same size and form, the two being connected by a silver wire soldered to the back of each plate. The second I have only used for about a year. It is Pulvermacher's electric chain, which I have used with six and eighteen elements. I shall first state the result of my experience with a single pair of plates, subsequently remarking upon the comparative influence of Pulvermacher's chain.

1. To secure the effects of the apparatus, it is necessary that the surfaces of the two metallic plates be perfectly smooth and clean, and that they should be applied to the body without intervention of any substance whatever. At first I believed that it was necessary to denude the cuticle; and accordingly, when I required to act upon an exposed surface, I applied one plate upon it, and made a small puncture in some neighbouring part, upon which the other plate was applied. I soon found that this was unnecessary, and that it was only necessary to moisten the cuticle to insure the passage of the current. When moistened by vinegar, or an acid solution, the effects were quite as rapid as after denudation of cuticle.

2. If two slight excoriations, two ulcers or suppurating surfaces, upon a limb or any part of the body, be acted on by the pair of plates, the zinc being applied upon one, the silver on the other, the surface beneath the silver rapidly cicatrizes, while that beneath the zinc is in two days converted into a superficial eschar. If the plates be still kept applied, the eschar extends to the subcutaneous cellular tissue, and presents all the characters of a slough produced by caustic potash, except that the dead tissues are a little less compact. After the separation of these sloughs, cicatrisation under ordinary applications is very tardy, but is much hastened by the application of the silver plate, the zinc being fixed on some neighbouring part. So long as the zinc plate remains upon an exposed surface, a copious exudation of fetid serum goes on from it, and a dark, soft, spongy

slough is produced, which does not clear away for two or three days after the zinc is removed. After the separation of the slough, an excavation is left, and the granulations are healthy. They reach the surface level much more quickly when the silver plate of the apparatus is employed, than under any other treatment. That this good effect is not due to mere pressure of the metallic plate, I have become convinced, after comparative trials of the application of the silver, with and without connexion with zinc. I have made numerous trials of the methods of Baynton and Scott, of water and dry dressings, of elastic bandages, and various other accepted modes of treating ulcers, and have found no means so capable of uniformly producing a rapid growth of healthy granulation as galvanism.

3. I have often been astonished at the change effected in twenty-four hours in the condition of ulcers. At one dressing they are seen to be deep, cup-like excavations. At the next the granulations have nearly reached the surface. On the third day the surface level of the skin and granulations is often uniform, the well known marginal blue rim announcing the commencement of cicatrization. When this point is attained, it is better not to apply the apparatus again, but to employ simple water-dressings, or, if there be any tendency to flabbiness in the granulations, dry lint, and a strap of adhesive plaster. When I was Assistant-Surgeon in H. M. S. Hibernia, a form of contagious circular sloughing ulcer was very prevalent. We used to destroy the diseased surface by undiluted nitric acid, and apply the galvanic apparatus as soon as the slough separated. The men were often allowed to walk about, and suffered no more impediment from the apparatus than from a simple bandage. Much trouble was spared in dressing, as the apparatus was only removed once in twenty-four hours. In that very obstinate form of ulcer, naval surgeons are so frequently called upon to treat, called by the men "a burn a with rope," in which coils of rope, twisted round a limb, destroy a ring of integument, fascia, and perhaps muscle, the slowness of the natural process of repair under any variety of ordinary treatment is quite peculiar. I treated a case of this kind when Surgeon of H. M. S. Trafalgar. The integuments, fascia, with some portions of muscle, were destroyed all round the calf of the leg; the tibia and fibula being laid bare. The slough separated, and an annular ulcer remained nearly two inches in breadth. The man was a long time on the sick list before I applied the galvanic apparatus. Scarcely any signs of a reparative process had appeared when I applied the silver plate of the apparatus to a portion of the ring; and it was quite extraordinary to trace the daily effects as the plate was moved around the large ulcerated surface; the spots where the silver had been applied for only twenty-four hours being far above the level of other parts, and consisting of small conical granulations, in place of the flat, flabby surface which had formerly existed. Cicatrization afterwards took place as readily as in ordinary cases.

4. When the zinc plate is applied upon the superior portion of a very large ulcer this portion alone improves in appearance, while the inferior portion degenerates; but if the plate be applied upon the lower portion only, the whole surface of the ulcer improves equally.

5. In cases where several ulcers exist upon a limb, and the zinc is applied to a superior, the silver to an inferior one, all the ulcers situated in a direct line between the two plates improve in appearance, become healthy sores, and cicatrize, while those on either side of the current remain unaltered, and sometimes degenerate.

6. When the silver plate is applied upon the extremity of a fistulous sore the effect does not extend beyond the edges; but if a projecting portion of the silver be carried to the bottom of the fistula, granulation rapidly follows. It is very easy to perforate the silver plate by a screw, the point of which is smooth, and adapted in size and shape to that of the fistula. I found this plan answer admirably in a case of perineal fistula, which persisted long after perfect dilatation of a stricture of the membranous portion of the urethra. In cases of open bubo, with burrowing sinuses, I have introduced a small silver chain to the bottom of the cavity, and connected it, either with the plate of the single pair or with the copper end of Pulvermacher's chain. The result has been invariably satisfactory. I saw a case in H.M.S. Scourge, of a man who had been eight months on the sick-list from a bubo in this state; yet he was well after the chain had been used for one week only, in the manner I have described, by my friend Dr. Davidson, Surgeon to the ship.

7. In several cases, normal innervation has been restored in paralysed parts under the use of this apparatus, the zinc being placed superiorly, and the silver inferiorly, so as to include as nearly as possible the whole of the paralysed part. Disordered function of particular nerves has been also remedied, by so placing the two plates that the nerve lies between them.

8. Whether the single pair of plates, or Pulvermacher's hydro-electric chain, be used, a much better imitation of the natural currents of vital electricity is afforded than by the batteries in common use. The action of the latter is powerful, and only susceptible of temporary application, while that of the former is mild, uniform, and continuous, an electric current circulating continually in the same direction from one plate, or one end of the chain to the other, through any part of the body which is between the two poles. The single pair of plates never causes any pain or uneasiness to the patient, never producing more than slight itching or numbness, while in many cases where the action is very evident, no sensation whatever is felt. When Pulvermacher's chains are used, the sensations vary with the length of the chain, and the strength of the acid in which it is soaked before application. That I have most commonly used has been only eight links, and soaked in distilled vinegar. Itching or tingling sensations are felt for an hour or two, and are renewed as often as the chain is soaked in the vinegar, but nothing approaching to pain is complained of. With a chain of twenty-four links, soaked in the same acid, the tingling sensation is sometimes so acute, as to be troublesome, but still not painful. With regard to the relative advantages of the chains, or the single pair of plates, my present experience would lead me to prefer the plates in ordinary cases of ulcer, where they could be applied without producing painful or injurious pressure. I have found, that even where a chain of eight links was only moistened with water, the current has been too strong, and made an ulcer irritable. On the other hand, the chains have great advantages over the plates when ulcers are situated over bones, or are too sensitive to bear metallic pressure. They are also to be preferred in cases of indolent ulcers in weak persons, as, in such cases, the current of the single pair of plates is too feeble to excite any very speedy influence.

I shall conclude this paper by some short notices of some cases in which the plates or chain have been applied during the year in this ship.

Case 1.—J. B., aged 18, grazed the right shin by a fall. Three superficial ulcers followed, and he was put on the list on the 15th of October. Water dressing was used until the 20th, but no change for the better took place. Pulvermacher's small chain, excited by vinegar, was applied on the 20th, kept constantly fixed, and only removed to be soaked again in the vinegar in the evening. On the following day, the ulcers were so nearly cicatrised, that it was not thought necessary to re-apply the chain. Water-dressing was used, and the sores again degenerated. On the 3rd of November, the chain was applied again near the sore, but, from the slipping of the upper end, in such a way that the current did not pass through it. On the following day, no change had taken place, but the chain was re-applied, so that the current should pass through the sore. On the 5th, it was very nearly healed. Chain kept applied. On the 6th, cicatrization was perfect, and he was discharged to duty on the 7th.

Case 2.—C. H., aged 17, received a wound below the left external malleolus, which was followed by an indolent ulcer. He was put on the list on October 15, and treated in various ways until the 26th without any benefit, when the single pair of plates was applied. On the evening of the 27th, no change having taken place, Pulvermacher's chain was applied. On the 28th half the ulcer was quite filled up and cicatrized, the other half nearly so. On the 29th, the chain having been constantly applied, cuticle had formed in the centre of the ulcer at the exact spot where the metal had been in contact. In order to determine if this were accidental, or owing to the galvanic current, the chain was discontinued, and simple dressing applied. The boy got his feet

wet with salt water, and the sore again assumed an indolent, unhealthy appearance. On the 16th of November, the chain was applied, but wetted with water only. On the 17th not much effect had been produced, but the surface appeared more healthy. Continue. 18th.—Slight improvement. Wet the chain with acid. 19th.—Cicatrization nearly complete. Continue. 20th.—Cicatrix quite perfect. He returned to duty on the 22nd.

Case 3.—E. H., aged 27, applied on the 3rd of January, with an unhealthy sloughing ulcer on the foot, with inflamed edges. Poultices were first used, but no improvement followed. On the 5th, the single pair of plates were applied. 6th.—Sore cleaner. Continue. 7th.—Slough separated. Wet compress only used. 8th.—The wound had again degenerated, and continued to do so until the 10th, when the plates were again applied. On the 11th, the surface appeared healthy, but there was a deep, excavated, cup-like ulcer left, which did not appear to fill up. On the 14th, Pulvermacher's chain was applied. On the 15th, the sore was much contracted in circumference. Continue. On the 20th, the granulations being level with the surface, the chain was omitted, and water dressing used; cicatrization afterwards proceeding naturally.

Case 4.—G. W., aged 19, applied on the 9th November with an open bubo in the right groin, which he had concealed as long as possible. It had opened spontaneously. The edges were inflamed and undermined, the whole surface appearing very unhealthy, with a bloody sanious discharge. Black wash was first applied, then a lotion of diluted nitric acid, with solution of opium, but no improvement whatever had taken place up to the 14th. On that day Pulvermacher's chain was applied, the copper end being connected with a metallic plate which covered the whole exposed surface. It was kept constantly applied during that and the following day. On the 16th there was an appearance of commencing granulation, which, on the 17th, was much more distinct. The chain was still continued. The granulations had reached the surface by the 20th, when it became necessary to open a long narrow sinus, which extended downwards and inwards, and on the 23rd another, which extended outwards. Simple water-dressing was used until the 26th, but no healing process began. On that day the single pair of plates was applied. From this time granulation and cicatrization went on rapidly, the plates being kept constantly applied; but he was not sent to duty until the 20th of December, owing to an attack of diarrhœa.

Case 5.—Mr. D., aged 20, had suffered on the coast of Africa, with an obstinate ulcer on the leg over the middle third of the tibia, and, after being four months on the sick-list of his ship, had been invalided. The ulcer healed in England, but left a large, thin, red cicatrix adherent to the surface of the bone. This gave way when he was in the Vengeance on this station, and he was again several months on the list before it healed. On any slight injury to the cicatrix, it broke down. He wore a padded metallic plate for protection, but he applied to me on the 30th of April, the old cicatrix being then completely converted into an ulcer three inches in length and two in breadth, with a livid soft surface, and fetid sanious discharge. Various simple and stimulating applications were used without effect. The single pair of plates was applied, but the pressure on the tender surface of the ulcer could not be borne. Pulvermacher's small chain was applied, and produced a good effect, but so slight that the large one of twenty-four links was used. After this very rapid improvement took place, and he returned to duty after having been thirty-four days on the list, the ulcer, according to his own statement, having been in a worse condition than when he had been several months on the list on former occasions. He was again on the list in June, September, and November, with the same ulcer, which had been reproduced once by the kick of a horse, and the other twice by blows received on board. On each occasion, the inutility of ordinary applications was proved, and the great benefit derived from the long chain of Pulvermacher was most obvious. The average stay on the list on these three occasions was twenty-two days. The cicatrix is now much firmer, harder, and less adherent to the bone than when he joined this ship.

I might narrate many other cases, but the foregoing appear sufficient to illustrate the statements I made as to the therapeutical efficacy of galvanism in the treatment of ulcers.

H.M.S. Modeste, January, 1853.

OBSERVATIONS ON EMPHYSEMA PULMONUM;

OR, AN ATTEMPT TO PROVE THAT IT IS ESSENTIALLY A BLOOD DISEASE IN ITS ORIGIN.

By GEORGE CORFE, M.D.

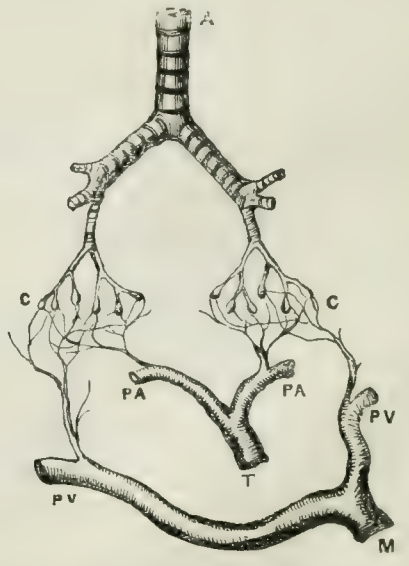
If any medical practitioner had constantly attended the wards of our large hospitals during the late severe winter, and had witnessed the various groups of patients suffering from emphysema pulmonum and bronchitis, in their several degrees and stages, and if he could have traced the source and commencement of this fatal disease, I feel assured, that in a great majority of instances, he would be compelled to seek for another explanation of the origin of this intractable malady, than that which is, even now, but indistinctly defined by modern pathologists.

It appears, that in the greater number of those cases of emphysema of the lungs which sprang up at the ages of 40 or 50, the disease had occurred in those persons especially who had been ill fed, and who thereby had become anæmic and weak. Thus, charwomen, after having been out of employment for many weeks or months, and who had lived chiefly on tea, bread, and vegetables, when they obtained a few hard days' work of washing, were seized with dyspnœa, cough, and expectoration; in other words, they were found to have emphysema of one or of both lungs.

Among labourers and navigators, also, who had been out of work for a long period, and had been unable to procure animal food for many weeks, when they returned to the use of the spade, pickaxe, or stone rammer, found oppression at the chest, wheezing, dyspnœa, and cough, etc., the fruits of incipient emphysema. But let me first state the physical condition of those fluids which are more immediately concerned in the production of this disease, viz., the air and the pulmonary blood.

The specific gravity of a cubic inch of air is ·185, that of water is 1000, and that of blood 1050. Forty cubic inches of air weigh about 12·980 grains; the same amount of blood weighs about 10,653·3 grains. Thus, the latter fluid is somewhat 865 times heavier than air; or, as ·185 is to 1050. The amount of air, as it passes into the lungs, is opposed by a column of blood coming from the heart, in the proportion of one inspiration to four pulsations of the right ventricle. Each inspiration carries into the pulmonary cells 40 cubic inches of air, and the average number of inspirations in an adult is 20 per minute. Each ventricular contraction throws two ounces of venous blood into the pulmonary cells; and, as there are four contractions to one inspiration, about eight ounces of blood is therefore dispersed through the pulmonary capillaries, from minute to minute.

Let the subjoined outline of the air and blood circulation explain this fact.



The air, passing down at A (trachea), is as ·185; and at the points C C, (pulmonary cells), meets with a fluid comingfrom T (tricuspid valve), through PA (pulmonary arteries), of the relative weight of 1050, and, having become oxygenated, passes through PV (pulmonary veins) to M (mitral valve).

The ordinary amount of atmospheric pressure on the human body, at the level of the sea, is about fifteen pounds on every square inch of surface; but the air which pervades the body balances and counteracts this pressure from without; so that the elasticity of the air within and the external weight of this fluid over the whole body are exactly and equally poised; and thus it is that we are not conscious of any pressure. But, if there should occur any diminution of weight in the columns of air which we breathe, this equipoise is altered—these opposing forces are unequal—the even balance is destroyed, so that one is relatively stronger, and the other is relatively weaker, than each was before any alteration took place. The effect of such diminution of weight in the air is experienced by those individuals who have ascended into a more subtle and rarefied atmosphere, as aëronauts and visiters to Mont Blanc, etc.; in such cases, the resisting power of the blood in the lungs has not been counterpoised by an equally heavy column of inspired air; so that the pulmonary capillaries have given way, the cells have broken, and blood has burst forth, and has been freely coughed up. But, in order to follow up our present inquiry, let us reverse the change, and consider the effects which may ensue upon an alteration in the other fluid, namely, the blood. This vital fluid in health contains from 778 to 853 of water, and from 57 to 78 of albumen, and from 1·360 to 2·236 of dry fibrine in every 1000 parts. In order, then, for an individual to continue in a robust and healthy state, it is needful that the blood should be duly supplied with a given quantity of albumen and of fibrine. This supply is exclusively derived from azotized substances such as animal food, etc. If this supply is deficient, the blood loses in weight and in vigour, its watery elements are increased, and its solid contents are decreased, and thus the absolute specific gravity of this fluid approaches nearer to that of water than it does to that of healthy blood. Under these changes, it cannot act as a resisting medium to a given quantity of inspired air; for if its specific gravity is reduced, for example, from 1050 to 1025, and a column of air charged with an unusual amount of moisture is respired, the resisting force is unequal to support the weight, the air-cells burst, and the foundation of inter-lobular pulmonary emphysema is immediately established. The sense of dyspnœa now begins, and, from a small spot of such breaking up of pulmonary vesicles, an entire lobe may shortly become emphysematous. The fact, that this disease ordinarily sets in at the margins of the lower lobes, and not in the centre of the upper lobes, will further explain the mode in which emphysema occurs, namely, from the feeble resistance which a column of blood, spread over the area of the pulmonary cells offers to the increased weight of the columns of air. Dr. Goodfellow informs me that emphysema pulmonum is very common among the coalwhippers in the east part of London. These men drink largely of porter, and eat animal food sparingly. When they raise the coal from the hold of the ship, they fill their lungs by a forced deep inspiration, grasp the rope, and leap from the steps to the deck, and then as suddenly expel the air from their over-inflated lungs. This action mechanically breaks down the delicate pulmonary areolæ, just as we should burst a thin paper-bag, by forcing a large column of air into it. This fact is mentioned in order to show that, if undue force is brought to bear upon the areas of the pulmonary cells, and that force is not met by an equal antagonistic resistance from within, the cells must necessarily break down.

When a confirmed state of emphysema pulmonum is established, dilatation of the right chambers of the heart eventually comes on. When this change is superadded to the pulmonary disease, the attacks of dyspnœa will usually be most severe at the turn of the night, *i. e.*, from twelve to two. The circulation is then at the minimum of its twenty-four hours cycle; and the delay which a lung, bloated with pent-up air, causes to the flow of blood through it, also produces a tardy supply of blood to the left side of the heart, so that the ventricle is not roused to action by a due amount of arterial fluid. The patient now will be suddenly awoke by a sense of impending suffocation; he sits up in bed, gasping for breath, and is often many hours struggling in this distressing paroxysm, until, at length, the pulmonary circulation has become poised, the left ventricle duly supplied with blood, the cardiac muscular fibres soothed, and the dyspnœa gradually assuaged, and he once more falls into a doze.

These few observations have been founded on the pathological facts connected with the onset of emphysema pulmonum; and the practical deductions which may be made from them are the following:—

1st. That, in the majority of such cases which occur in our large towns, in overcrowded localities, or, indeed, in any vitiated atmosphere, and where the artisan or labourer is insufficiently nourished with a generous animal diet, it is a blood disease in its origin, and that this form of toxæmia is further asthenic in its character; the amount of fibrin, albumen, and red globules of the blood, is below the average standard of robust health.

2nd. That the disease is not remedied by antiphlogistic treatment, nor by blood-letting, expectorants, etc. etc., but that it is relieved by small doses of iron, quinine, and tonics, together with a generous diet of animal food and porter. Among the most useful forms of steel, that of the sulphate seems to rank the first, one grain of this salt and one of quinine in the compound infusion of roses, with syrup of ginger, is as valuable as any I know of in this distressing malady. Dry cupping between the shoulders, the inhalation of creosote in the proportion of twenty drops to a pint of boiling water each night, the occasional use of a stramonium cigarette, or twelve drops of chloric ether, have severally been known to ward off an attack of nocturnal dyspnœa. The fumes from a slip of lighted nitre touch-paper have long been a favourite remedy in the wards of this hospital for cutting short an attack. A gentleman of my acquaintance is always greatly relieved by a large dose of the hydrochlorate of ammonia, which he takes as soon as he feels the paroxysm approaching.

I trust that your readers will be induced to take this view of the disease now under consideration, as I feel convinced that it is founded on well-established facts in pathology, and with a fervent desire that it may please Him in whose Almighty hands our breath is, and in whom we live, and move, and have our being, to bless the efforts which are made for the relief of the sufferings of our fellow-creatures under this and other painful diseases.

Middlesex Hospital.

NOTE UPON THE NERVES OF THE UTERUS.

By M. le Docteur LUDOVIC HIRSCHFELD.

There is no question which has been more discussed, and with such different conclusions, as that of the nerves of the uterus.

These questions present themselves successively:—Do nerves exist in the uterus? and, if they exist, are both the body and the neck supplied? Are these nerves small or large? Does their volume augment under the influence of gestation? I have already replied to these questions in the eighth number of my work,(a) where I express myself thus:—

"Every one knows the discussions which have arisen in late years among the most distinguished anatomists upon the existence of nerves in the uterus. Dr. Robert Lee has exhibited a nervous plexus distributed even to the os tincæ.

"M. Jobert (De Lamballe) maintains that he has never encountered nerves in the vaginal portion of the neck of the uterus. Since the labours of these anatomists opinions have been divided. Some admit, while others deny, the existence of nerves.

"If, in the midst of these scientific dissensions, I may be permitted a conclusion from my own researches, I should say, that the neck, as well as the body, of the uterus is provided with a nervous system, emanating from the nerves of organic life and those of animal life, but principally from the first. As to the augmentation of volume of uterine nerves during gestation, maintained by Dr. Robert Lee, and denied by M. Jobert and his partisans, it is at this moment a settled question, and admits of no discussion. In fact, every nerve which has been submitted to a prolonged maceration augments in volume. Under the influence of pregnancy, all the liquids being determined to the uterus, which becomes the centre of fluxion, the uterine nerves are subjected to a veritable maceration, and become enlarged. This increase of volume is not in the nervous tube itself, but in the neurilemma (nervous fibres of Remack,) which is

(a) Neurologie; ou, Description et Iconographie du Système Nerveux et des Organes des Sens de l'Homme. Par M. Ludovic Hirschfeld, M.D. Paris, 1850. "A work of remarkable perfection and value."—*Translator.*

proportionally largely developed in the nerves of the grand sympathetic, in which it is an essential element, an integral part."

To the opinions that I cited four months since, I would add that of M. Velpeau, who affirms, that the neck is sensitive, and that of M. Depaul, according to whom, if the neck is not sensitive in certain cases, it is in others, under the influence of particular pathological modifications. In the preparations made on the occasion of the last concours for the Prosectorship, we exhibited the nerves of the body, and the neck of the uterus; but, in some specimens, the nerves are numerous and voluminous; in others, they are small and fewer in number. Finally, according to Dr. Snow Beck, the nerves of the uterus are very few and very small.

These discrepancies on the part of observers equally skilful, result, it seems to me, from their not using the same modes of dissection, or that they were swayed by certain physiological preconceptions, or they may have given different interpretations to the results which they have obtained.

Long before examining the preparations of Drs. Robert Lee and Snow Beck, I had dissected these nerves in subjects not infiltrated, in women infiltrated or deceased in child-bed, and in preparations which were macerated for three years in nitric acid, diluted with water.

In a female adult, not infiltrated, the nerves of the uterus, freed from the cellular tissue and vessels which cover them, have a pearly white appearance like the hypo-gastric plexus from whence they emanate; and to an inexperienced eye resemble fibrous tissue. If the specimen is macerated in water for twenty-four hours, in order to disgorge the venous plexus of the blood which fills it, the nerves are more distinct and slightly augmented in volume; then plunge the same specimen in dilute nitric acid, the neurilemma becomes more brilliant and more voluminous; the fasiculus of the nervous tube becomes yellowish, without any appreciable increase of volume, and is perceived by transparence in the midst of the neurilemma.

If you dissect the nerves of a woman infiltrated or deceased in child-bed, you see, on comparing them with the preceding preparations, that without having been immersed in nitric acid, they are larger.

Upon preparations that I have macerated during three years, I have proved,—in connexion with my honourable colleague, M. le Docteur Robin,—that the augmentation of volume appertained principally to the neurilemma, and that the fasciculus of the nervous tube appeared in the centre of the neurilemma like a very small yellowish thread.

These observations prove to me satisfactorily, that, under the influence of pregnancy, or of any species of maceration whatever, the uterine nerves undergo an augmentation of volume, especially at the expense of the neurilemma.

In theory, I should even go further, and say, that, in the same circumstances, the fasiculi of the nervous tubes ought also to increase in size; barely appreciable, it is true, yet really so.

When one compares the dimensions and the weight of the uterus in the normal and abnormal state—(in the normal state, length 2½ to 3 inches, breadth 1¼ inches, thickness ¾ inch, weight 1½ to 2 oz.; near the ninth month, length 13 to 15 inches, breadth 10 inches, thickness 9 to 10 inches, weight 38 to 60 oz.;)—and when one considers that the enormous development to which this organ is subjected is borne by all its anatomical elements, by its serous and mucous membranes, which are extended and thickened; by its peculiar tissue, of which the fibres are invested with a character really muscular; by its vessels, which, instead of becoming straight in lengthening, present still more numerous flexuosities and an enlargement of calibre, why should the nervous tubes alone make an exception, and not become more voluminous, inasmuch as they have a much more extended distribution, and as their envelope, the neurilemma is very sensibly increased? Besides, are the uterine nerves of the embryo, or of a fœtus, as large as those of an adult? Do not these organs augment in volume with the gradual development of the individual? Why then, under the influence of pregnancy, should not the uterus and its nerves develope simultaneously, especially when one observes that the hyperthropy of the anatomical elements has occasioned the increase of their properties, remaining until then in a sort of latent state? Thus, the muscular fibres have become contractile; the sensibility of the neck of the uterus, scarcely existing before, has augmented to such a degree, that women are perfectly conscious of the sensation produced by the touch when this organ is explored.

If the dissections do not exhibit an appreciable augmentation of volume in the fasciculi of the nervous tubes, it is because they enlarge so very slowly; the nervous tubes of a child only enlarge by little and little as it advances in age, and does not develope as rapidly as other parts of its body. It is not surprising, then, that, under the influence of a partial enlargement, and with a duration so limited, their augmentation of volume may not be sensible.

This exposition allows the conclusions that I have already declared, inasmuch as the facts that I have chosen, and upon which I rely, are perfectly in harmony with those observed by Dr. Robert Lee.

One sees, in the preparations which he has deposited in the Museum of St. George's Hospital, at London, numerous nerves of considerable volume; only they have a uniform pearly-white appearance, owing to the liquid in which they are preserved, which is little suited to show the nervous tubes properly.

Dr. Snow Beck has two specimens, in the preparation of which he employed eight months, removing, from day to day, with forceps and needles, (as he told me himself,) not merely the cellular tissue, but the neurilemma even, so that he has left only the fasciculi of the nervous tubes. It seems to me, that the work of this anatomist ought not to be appealed to, when the subject of the volume of the nerves of the uterus is agitated, for they only present the nerves deprived of one of their constituent parts,—the *neurilemma*.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

CARTILAGINOUS TUMOUR WITHIN THE UPPER PART OF THE FIBULA.—EXCISION OF THE UPPER THIRD OF THE SHAFT OF THE BONE.—RECOVERY.

[Under the care of Mr. LLOYD.]

Cartilaginous tumours, although infinitely more common between the periosteum and bone, do, as is well known, occasionally form within the medullary cavity itself. When this occurs in the long bones, it appears to be almost always in or near the middle of the shaft. Mr. Paget, in his "Lectures on Surgical Pathology," has the following remark:—"It is extremely rare, I think, for a cartilaginous tumour to grow within the articular end, or the medullary tissue near it, of a large long bone." There is, in St. Bartholomew's Hospital Museum, a specimen in which it occurred in the lower end of the fibula, in a patient under the care of Mr. Langston Parker. The cartilaginous portion of the tumour was, however, mixed up with the structure characteristic of fibro-plastic growths. Another example of a cartilaginous tumour within the upper end of the fibula, may be found in the Hunterian Museum; in this case it has undergone ossification. The following one, in which the tumour was a circumscribed mass of unossified cartilage, and situated, if not in, very close to the upper articular extremity of the fibula, is probably without its exact parallel on record.

Ann B., a very robust little girl, aged 6, was admitted under the care of Mr. Lloyd, on account of a deep-seated hard swelling in the right leg, which had formed painlessly and without any known cause. It was only a few months since her mother had first observed it, but it was at that time nearly as large as at the date of admission. There was a very visible bulging of the upper and outer part of the leg, and on handling it, great enlargement of the upper fourth of the fibula was discovered. The swelling was of extreme hardness, and not in the least tender; it was greatest above, and gradually tapered off below, and although not possessing an overhanging margin like most exostoses, yet, its surface was distinctly marked into large nodules. The question of diagnosis seemed to regard osteo-sarcoma, exostosis, and enchondroma, and as the entire absence of pain or tenderness, its extreme hardness, and the good health of the patient, seemed to be opposed to the other two, the general opinion, though adopted with much hesitation, appeared to be, that it would prove a flat-based extostosis extending around the shaft of the bone. With the view of allowing the superjacent muscles and other structures to decrease in size, Mr. Lloyd had the patient kept quiet in bed for three weeks

before undertaking the proposed operation. This measure was quite successful, for, although the child's general health had in no way suffered, yet, disuse had so wasted the muscles of the calf, that the boundaries of the tumour were very much more superficial and easily ascertained than before. The operation, during which the patient was under the full influence of chloroform, consisted in making a longitudinal incision over the tumour, from the head of the bone downwards, and then dissecting aside the integument and muscles, so as to expose the enlargement. This done, the latter was found to involve the entire shaft of the bone, the whole of which it was, therefore, necessary to remove. Mr. Lloyd, accordingly, having further freed the tumour from its connexions with the surrounding structures, cut through the shaft of the fibula, with bone-forceps, immediately below its articular head, and again just at the commencement of its lower third, including between these points the whole enlargement, which was now quite separated. Several small arteries required ligature, after which the wound was covered with a piece of wet lint, and left open to heal by granulation. The tumour had, in one or two parts, had its surface cut into during the operation, and at these parts there was nothing to distinguish it from an exostosis covered with a layer of cartilage; on further examination, however, its lower two-thirds were found to be encased in solid bone. A longitudinal section having been made, its true nature was at once apparent. The walls of the fibula had been expanded out into a mere shell, in some parts of such extreme thinness, that it had been cut through without being recognised; and within this was lodged an irregularly egg-shaped mass of dense glistening cartilage, the size of a large plum. This growth cut crisply, and its surface was of the bluish-white, semi-transparent appearance, exactly resembling the articular cartilage of a joint.

The patient did remarkably well after the operation, progressing, in fact, without a single bad symptom. She is still an inmate of the Hospital, the wound being, however, all but healed.

We mentioned, a fortnight ago, (*Medical Times and Gazette*, for July 9, 1853,) a case in which, on account of an exostosis of the tibia which had grown behind the fibula, pushing it forwards, and expanding it into a thin shell, Mr. Lawrence found it necessary to remove a considerable length of the entire shaft of the latter bone. This patient, a boy, aged 8, has since left the hospital. It will be matter of great interest, both in his case and in that above recorded, to ascertain how far nature is capable of repairing the injury by the production of a new shaft. In each case, at least three inches, periosteum and all, have been removed. The patients are both of them young and healthy, and there may perhaps be some chance of reproduction; should it not occur, it fortunately happens that the bone is not a very important one.

THE LONDON HOSPITAL.

LARGE FIBRO-CELLULAR GROWTH IN THE ANTRUM.—REMOVAL OF THE SUPERIOR MAXILLA (OPERATION BY SINGLE INCISION).—RECOVERY.

[Under the care of Mr. ADAMS.]

A very instructive case of soft polypoid growth in the cavity of the antrum maxillare of such size and having produced so much disorganisation of the surrounding parts as to render necessary the excision of the greater part of the upper jaw, has recently been operated on by Mr. Adams. We proceed without delay to bring its particulars before our readers, and, in doing so, avail ourselves for many of the facts connected with it of the notes taken by Mr. Streatfield, one of the house-surgeons.

Jeremiah Robins, aged 43, residing at Truro, in Cornwall, a farm labourer, of ruddy and healthy aspect, was admitted on June 23, 1853. He stated, that until the present affection he had never been ill in his life, but that he had frequently suffered from toothache, on account of which many teeth had been extracted. Eighteen months ago he had a molar tooth removed from the left side of the upper jaw, which had ached at times severely for several months, and, after the extraction, he supposed that he had "taken cold in the face," as the pain became increased rather than otherwise. After enduring it for about six weeks, he had the last remaining tooth (a sound molar) on that side removed; soon subsequent to which he observed a swelling between the gum and cheek. This swelling increased in size, and the cheek shortly after began to protrude. He consulted a surgeon in the neighbourhood, who made a puncture with a lancet at a part where fluctuation was apparent, just external to the gum. The patient describes the fluid evacuated as of a transparent, glutinous character, so thick and stringy that it was not easily made to flow out. In quantity, he thinks it was about two tea-spoonsful. At intervals of from a fortnight to a month, the incision was repeated in the same part for eight or nine times, and on each occasion with the same result, much temporary relief being afforded. The wounds always healed at once without suppuration. The pain suffered had not been very acute, but of a dull aching kind, and much aggravated in the stooping posture. The left nostril had for some time been quite closed; for six or eight months his sleep at nights had been interrupted, and for five months he had been prevented following his employment. His appetite had always been good, and he believed himself to be as stout and of as good colour as ever he was in his life. At the time of admission, the tumour formed a very considerable bulging in the left cheek; it distended the left gum, and projected downwards between that part and the cheek; into the left nostril also it protruded so far as to cause its complete occlusion. On placing one finger on the cheek, and another on the swelling between the gum and cheek, a pretty distinct sense of fluctuation within dense walls was communicated. Pressure did not occasion any pain. Mr. Adams made a free incision into the softest part of the swelling just within the cheek, but no fluid escaped. From the symptoms just detailed, it appeared evident that the antrum was distended by some solid growth, which had escaped through both its internal and external walls; and, judging from the patient's history, it did not appear probable that the disease would prove to be of a malignant nature. Mr. Adams, accordingly, determined to attempt at once the extirpation of the tumour, and, if found necessary, of the bone from which it grew also.

June 29.—*Operation.*—The patient was seated in a chair; chloroform was not administered. An incision was commenced a little below the left external angular process of the frontal bone, and carried in a curved direction across the cheek, terminating by a vertical cut through the lip, about three-fourths of an inch to the left of its central commissure. The flaps were then dissected up, and as the malar bone was found to be displaced forwards by the tumour, its lower portion was cut away, and the swelling thus more effectually exposed. An incision was next made through the thinned wall of the antrum, on which about half a drachm of jelly-like fluid escaped, and the tumour which, by its upward pressure, had produced absorption of the floor of the orbit, was found to be of a dense fibrous character, and adhering so intimately to the palatine processes of the superior maxillary and palate bones, that it was impossible to remove it without removing also those bones. This was accomplished by the customary sections with strong bone forceps, and in this manner, though not without difficulty, on account of the crumbling of the thinned bones under pressure, the entire mass was removed. In consequence of hæmorrhage, three or four ligatures were required, and the gap having been filled with cotton wool, the flaps were brought into apposition, and retained by the aid of sutures. Nothing unusual has transpired since the operation, everything having progressed satisfactorily. The incision in the cheek united almost entirely by the first intention.

The tumour, a large lobulated mass, proved to be a rather firm variety of the common fibro-cellular polypus, and had evidently had an extensive attachment to the interior of the antrum, more especially to the palatine process of the superior maxilla, from which it appeared to have grown. In most parts its meshes were infiltrated with serous fluid, but in others it had a more dense, almost cartilaginous structure, while in one or two small spiculæ of bone had been deposited.

We cannot leave this case without briefly alluding to a very interesting one, on which we witnessed an operation by Mr. Lawrence, in St. Bartholomew's Hospital, a few months ago. The patient, a very cachectic young man, gave the history of painful tumour, apparently implicating the right antrum, which had existed for about a year. Mr. Lawrence, anticipating the existence of a solid growth, and contemplating the possible necessity for removal of the upper maxilla, made a free incision through the cheek, dissected up the flap, exposed the protuberant front of the antrum, and cut away a portion of the bone. The antrum was found to be much enlarged and distended by a large collection of solid pus, of the consistence of putty, and intolerably fetid. The whole of this having been scraped out, the wound was closed, and the patient recovered well, and soon afterwards left the hospital. The case was evidently one of abscess in the antrum, in which all the fluid parts of the pus had been removed by absorption, and is an example of an extremely rare event.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

ALBUMINURIA AND CHRONIC DISEASE OF THE HEART.—GENERAL DROPSY.—DEATH.—AUTOPSY.—CONGENITAL ABSENCE OF THE RIGHT KIDNEY.

[Under the care of Dr. PEACOCK.]

The following case presents some features of very unusual interest, and we accordingly hasten to bring it before our readers:—John Ditcham, a tall, well-built man, aged 43, of temperate habits, and, during the greater part of his life, in comfortable circumstances, died of general dropsy, after about a years' illness. During six months of that time he had been under observation at this hospital on account of symptoms of cardiac disease. No abnormal murmur had ever been detected with either sound, but the heart's impulse was heavy and thumping, and its action very irregular; the extent of præcordial dulness was increased. His urine was, from time to time, repeatedly examined, and, on every occasion, found to be loaded with albumen to such an extent that often almost half the fluid appeared to coagulate. Its specific gravity was generally about 1010. On several occasions, great relief had been afforded by purgative treatment, Elaterium being the drug found most serviceable. Under its use he had more than once so far recovered for a time as to lose his dropsical symptoms, and be able to leave his bed-room, and take out-door exercise, frequently to the extent of several miles a day. During the last week of life he suffered from extreme dyspnœa, attended with great depression of the vital powers. There was dulness posteriorly over the lower lobes of both lungs, more especially the right, and fine crepitation, so closely simulating the crackling of pneumonia, that, excepting from the absence of the other symptoms of that disease, it would have been impossible to distinguish it.

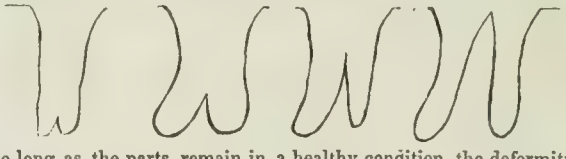
Autopsy.—Thorax: In each pleural sac there was found about twelve ounces of clear yellow serum. The lungs contained no tubercle; their upper lobes were freely crepitant; lower ones less so; not much congested, but sodden and loaded with serum, which ran out plentifully on cutting them. The pericardium contained about half an ounce of fluid, and was covered by a very thin layer of recent lymph, which could be easily stripped off, leaving a smooth serous membrane. The heart was large, weighing ℥xviiss. The left ventricle was hypertrophied and dilated, and the aortic and mitral valves were opaque and slightly thickened. At the apex was a small cavity, containing a mass of partially decolorised fibrin and some creamy fluid, which, when placed under the microscope, was seen to consist of granular matter, with some larger nucleated bodies, much resembling pus globules. The external parietes of the ventricle displayed a very obvious projection at the part opposed to this cavity. *Abdomen:* Liver congested, and of large size; not otherwise diseased. Spleen turgid with blood, and greatly enlarged. In the right lumbar region no trace whatever of a kidney or ureter could be found. After a very careful search there was discovered among the cellular tissue a soft reddish body, exactly resembling a small supra-renal capsule; and, on examining the corresponding side of the abdominal aorta, it was found to give off in that direction only one branch, and that a very minute one, not so large as a pin (supra-renal?) The left kidney was in its proper situation, and of natural shape, but a full half larger than ordinary. It was much congested; the capsule was easily stripped off; the cortical structure was of good depth, and only in a few parts presented a somewhat granular appearance, from being interspersed with small grey specks. The bladder was removed, and afterwards carefully dissected, but no trace of the right ureter or its orifice could be discovered.

It must be borne in mind, that the above is, in all probability, an example of the congenital absence of one kidney, an abnormity very much more rare than that of solitary kidney, produced by the fusion of the two organs into one. Of the latter, in which the connexion is usually formed by a broad belt of renal tissue, extending across the spinal column, from the apex of the one organ to that of the other, producing what is termed, from its shape, the "horse-shoe kidney," (ren unguliformis,) we lately saw a very well-marked example, which had been removed from a patient in the dead-house of St. Mary's Hospital.

While on the subject of congenital abnormities of the kidneys, we will just allude to a very remarkable case, at the *post-mortem* examination of which (in private practice,) we chanced to be present some time ago. It was that of a full grown male fœtus, born dead at the natural period of gestation, and of which the death had seemingly occurred either during, or a very short time before its birth. The presentation had been natural; but, after the head and shoulders were born, the accoucheur had experienced very considerable difficulty in delivering the rest of the body. Having ascertained that the delay was occasioned by a large soft swelling in the child's abdomen, he laid hold of the head and shoulders, and, by exerting considerable traction upon them, succeeded in dragging out the impacted body. At the autopsy, on the following day, the obstruction was found to have been occasioned by the enormous size of the kidneys, each of which was fully as large as two adult fists. They occupied the whole length of the abdomen, bulging out as firm, prominent masses on each side. The left was, perhaps, a little the larger; but, in structure, they corresponded, and the description of one may apply to both. To the touch it was flabbly and œdematous-feeling; when cut through the capsule was easily stripped off, with, however, much laceration of the subjacent tissue. The cortical portion was extremely deep, and the tubular structure was increased in dimensions in a relative proportion. The bundles of tubules composing the latter were separated from each other by interstitial serous effusion, as also was the case, though to a less degree, with the component elements of the cortical layer. Excepting a few small scattered cysts, containing clear fluid, there did not appear to be any disease of the viscus beyond equable hypertrophy of all its parts, and the general infiltration of a vast quantity of serum.

BIFID UVULA.—EXCISION OF THE UVULA, ETC.

Among the numerous patients whose throats are daily inspected at this hospital, with a view to topical medication, there has lately been presented quite a series of examples of a curious but usually very unimportant congenital abnormity,—the double, or bifid uvula. As to extent, the lesion has exhibited all possible degrees, from a mere notch in the tip of a rather thick organ, to a fissure extending through its entire length, and a little into the border of the soft palate.



So long as the parts remain in a healthy condition, the deformity does not seem to occasion any inconvenience; but, should the fauces become inflamed, and the uvula swollen, elongated, or œdematous, its bifid condition appears to enable it to occasion a double amount of irritation, and the operation of excision may come to be required.

In one case in which this has been done with great relief, the examination of the amputated portion showed two distinct bundles of muscular fibres, each occupying the centre of its part of the organ. The patient, a married woman, under the care of Dr. Birkett, has a daughter, aged 19, who remarkably resembles her mother in temperament and in physical conformation, and whose uvula exhibits even a greater degree of the same bifid condition.

While on this subject, we may remark, that several very instructive illustrations have recently occurred of the benefit sometimes derivable from the practice of excising portions of enlarged uvulæ. A man came under the care of Dr. Peacock having suffered from a most troublesome cough for many months, the seat of the irritation producing which he referred to the upper part of the throat. On inspection, the uvula was seen to be elongated, and its extremity bulbous, from loong-continued œdema. Dr. Peacock directed the lower half of the organ to be removed, and an almost complete cure of the cough resulted.

Treatment of Aphonia. — In cases of aphonia dependent on chronic inflammation of the fauces and larynx (not tubercular) the treatment by means of a strong alcoholic solution of iodine (℥j to ℥j) painted very freely over the throat, externally, has appeared to be extremely successful. The cases which we have especially observed have been under Dr. Bennett's care; and in some of long-standing this form of counter-irritation has seemed to be very superior to that by blistering. In the class characterised by a thickened and mammillated state of the pharyngeal mucous membrane, although the iodine is still useful, yet the topical application of a solution of the nitrate of silver is also and more especially indicated.

ROYAL LONDON OPHTHALMIC HOSPITAL.

CASES OF MYDRIASIS.

[Under the care of Mr. BOWMAN.]

Among the various affections of the eye, mydriasis, or preternatural dilatation of the pupil, independent of other appreciable disease, and in that sense idiopathic, is one of the rarer, and, with respect to its causes and treatment, least understood. By English observers, too, but little attention appears to have been paid to it; and although its diagnosis is a very simple matter, yet among those not much experienced in ophthalmic medicine, it is not improbable but that eyes affected with mydriasis only are often set down as amaurotic. We have recently watched with interest the progress of some examples of this disease, under Mr. Bowman's care, and have also availed ourselves of that gentleman's kind permission to look through, in his Clinical Case-book, the notes of other cases which have occurred in former years. The following, illustrating, as they do, important features in the natural history, symptoms, and treatment of the affection, have appeared well worthy of publication. With regard to treatment, the reader will find that we have not to record the adoption of any novel or specific plan; two lessons, however, the cases appear to teach—first, the importance of an early diagnosis, and secondly, the necessity for a careful unravelling of the various circumstances connected with the history of each particular case, with the view, if possible, of detecting the latent cause of disease. We shall have to show, that those cases which came earliest under treatment, were the most easily curable; and those the most difficult in which the affection had long existed, and had appeared without recognizable cause.

Case 1.—SINGLE MYDRIASIS, WITH RHEUMATIC HISTORY.—RECOVERY.

Mary Jones, aged 26, a married woman, of sanguine temperament, applied for advice, on the morning of April 28, stating, in great alarm, that she had just discovered that she could scarcely see at all with her right eye. No pain, or other unusual sensation, had been experienced in the organ, nor had it been subjected to any injury. The pupil of the affected eye was seen on examination to be dilated to almost the utmost possible extent, the iris being rolled up to little more than a thick rim, and quite motionless, while that of the opposite eye was of natural size, and moved readily. The sound eye being closed, she had full perception, but could not distinguish near objects, on account of the mist and haziness which appeared to surround them, and was quite unable to read the largest print. She could, however, see things across the street with tolerable distinctness. A piece of card, with a small round hole in the centre, being held close before the eye (an artificial iris), it was found that on looking through it, she could read almost as well as ever. The woman was suckling: she stated that she usually enjoyed good health, with the exception of suffering frequently from rheumatic pains in the joints, which, during the two previous days, had been unusually severe. Guided by this history, Mr. Bowman expressed an opinion that the disease was probably connected with rheumatism (rheumatic neuritis, and consequent paralysis); and encouraged the patient by stating that he thought it would probably pass off in a short time.

℞ Haust. magnes. sulph. c. vin. colch. ʒj. n. et m.; empl. lyttæ pone aur. dextr.

May 1.—The pupils are of equal and natural size, and the patient can see as well as ever. The diagnosis as to cause is further confirmed by the fact, that the medicine has acted freely on the bowels, and that the rheumatic pains in other parts are much relieved.

Case 2.—MYDRIASIS OF LEFT EYE.—RECOVERY.

John Templar, aged 51, a stout healthy man, admitted February 10. While working a month ago, his left eye was struck by a small bit of iron; there was no visible wound, and on the following day the eye was quite well, and the vision continued perfect until four days ago, when he noticed that everything looked misty, and found that he could not read the largest type. There has been no pain in the eye or head, but the light dazzles somewhat. The pupil of the affected eye is fixed and widely dilated; he can see distant objects, and near ones also on looking through a pinhole aperture. There was apparently nothing in the condition of his general health to account for the disease, and Mr. Bowman accordingly prescribed for it as one of simple paralysis. Empl. lyttæ reg. supra-orbit. sinistr. The raw surface to be sprinkled with the sixth of a grain of powdered strychnia on the following morning.

February 14.—Two applications of the strychnia have been made without any unpleasant result.

℞ Rep. empl. lyttæ et strychn.

17th.—There is much improvement both in vision and in the mobility of the pupil. He states, that he has several times felt giddy "as if he had been drinking;" no twitching of the muscles has however occurred.

Rep. empl. lytt; applic. pulv. strychniæ o.m.

21st.—On the day after last note he had a severe rigor, and has felt giddy and ill ever since, and, in consequence, the strychnia has been applied but once. He is now feverish, with furred tongue, and violent pain in the forehead.

℞ Mist. salin. ʒj. ter die; omit. omnia alia.

24th.—Is still giddy, very pale, and feels ill. Pulse small; tongue thickly furred; great pain in the forehead. No improvement in sight since the 17th.

Mist. gent. co. ʒj. ter die.

28th.—Is better, the pupils act well, but the sight continues dim. Every morning about 1 a.m., he is regularly awoke by severe frontal headache attended with fever, which after a time gives place to perspiration, and about 8 o'clock the pain usually disappears.

℞ Haust. quin. ʒj. ter die.

March 9th.—Pain much diminished, and the febrile paroxysms have ceased to occur.

16th.—The iris is freely moveable, but the pupil does not contract to quite it proper size. He can see well, and is improving in health.

April 13.—Excepting that the left pupil is still a little larger than the right, the affected eye is in a perfectly natural condition. The man has quite regained his health.—Discharged.

Case 3.—MYDRIASIS ATTENDED WITH MENTAL AND PHYSICAL DEPRESSION.—RECOVERY UNDER TONIC TREATMENT.

Henry Peller, aged 30, a bookbinder, admitted June 29. He is a cachectic man, and twice during the last four years has been subjected to a course of mercury, for the cure of syphilis. With this exception he considers that his health has been good; but, for several months, he has been out of spirits, and subject to melancholy. He is married, but not living with his wife; states, with regard to venereal indulgence, that he does not have connexion oftener than once a week, and is occasionally subject to involuntary seminal emissions. Confesses to frequent masturbation. The day before yesterday he could see as well as ever, but during the morning he found, whilst at work, that his right eye was as if covered with a film, and on mentioning it to his fellow-workman, the latter informed him that the black part of the eye was much larger than on the opposite side. The pupil of the left eye is now perfectly natural, but that of the right is motionless, and twice the size of the left; pulse 80, feeble: bowels open, appetite good; is restless, and sleeps badly. In addition to advice in respect to his habits, Mr. Bowman prescribed—Extract. hyoscyam. gr. v. o. n.

℞ Am. sesquicarb. gr. vij.; infus. gent. co. ʒj.; tinct. lupuli ʒss., ter die.

July 20. He is in much better health; but the condition of the eye remains nearly the same, the iris being, however, a little more mobile. Rep. mist. sine ammon.

27th. The iris acts much better. Pt.

Aug. 7. Pupil of natural size, and iris fairly active. Vision is very much improved, but still a little misty. To continue the medicine.

Sept. 7. Discharged quite well.

Case. 4. — DOUBLE MYDRIASIS — RECOVERY — RELAPSE THREE YEARS AFTERWARDS.

M. B., aged 46, a man in somewhat weak health, overworked, and who had recently suffered from carbuncle, applied on account of mydriasis of both eyes, which had existed for about two weeks, attended with all the usual symptoms, excepting that when looking through a pinhole aperture he could not see perfectly unless a convex lens were added. The affection was already passing off in the left eye, but not so with regard to the right. Under a tonic regimen the disease was quite well in both in about four days; but the patient remaining weak, nervous, and occasionally subject to double vision, Mr. Bowman ordered him into the country for a few weeks, where he soon regained his health. The chief feature of interest in the case was, that he stated that he had suffered a precisely similar attack three years previously, for which he was under the treatment of the late Mr. Dalrymple.

Case 5.—MYDRIASIS, WITH RHEUMATIC HISTORY—RECOVERY.

M. M., aged 40, a man of hale-looking aspect, but considering himself in scarcely average health, was admitted on April 3. Three weeks previously he had found that the sight of the right eye

was misty, and a few days before admission he noticed, on examination, that the pupil was much enlarged. He stated that he had been subject to rheumatic pains in various parts; had had no head symptoms: and there was no visible disease about the eyeball other than a fixed and widely-dilated pupil. He could see distant objects well, and with the assistance of a perforated diaphragm near ones also.

Ung. antim. pot.-tart. supra-orbit. reg. infricand.

℞ Pil. hydr. gr. v., ext. acet. colch. gr. j. Ft. pil. alternis noctibus sumend. Haust. cath. ℥iss. p. r. n.

The patient lived at some distance in the country, and was not seen again for three weeks.

May 21.—The pupil now acts with tolerable promptness, and on exposure to light contracts to a moderate size. Vision is much improved. This patient afterwards recovered perfectly.

Case 6.—DOUBLE ALTERNATING MYDRIASIS.

We must allude to the next case very briefly; its sole peculiarity was the change of the affection from one eye to the other. Eliza Santon, aged 25, married, a nervous, very anxious woman, subject to confusion in the head; she has very misty and indistinct vision with the left eye, the pupil of which is fixed and dilated. The affection commenced ten days ago in the right eye, and, after a few days, changed its seat and attacked the left; the right is now quite healthy; pulse 80; bowels open; tongue furred and clammy. Under the use of stomachics and counter-irritants the patient recovered.

Case 7.—MYDRIASIS WITHOUT APPARENT CAUSE.—FAILURE OF TREATMENT BY THE ERGOT OF RYE.

Charles Church, aged 24, applied on account of uncomplicated mydriasis of the left eye, attended with all the usual symptoms, and of three weeks' standing; no cause could be detected. Mr. Bowman made trial of the ergot of rye, a remedy formerly reputed to possess a specific power in inducing the iris to contract. The powder was first used as a snuff, then the tincture was administered in half-drachm doses three times daily, and lastly the powder in ten grain doses. None, or if any, the least possible improvement resulted, and the medicine had ultimately to be discontinued on account of headache. Mr. Bowman informed us, that in the numerous trials he had made with the ergot, he had never been able to prove its possession of any remarkable virtues in regard to this disease.

Case 8.—MYDRIASIS AFTER SYMPTOMS OF CEREBRAL DERANGEMENT.

William Shuttleworth, aged 32, a foreman in the docks, for six months subject to occasional tinnitus aurium, admitted June 10. A fortnight ago, while engaged in writing, he became dizzy for a short time, and never since has been able to see clearly with his right eye. There is no morbid appearance, excepting that the pupil is fixed and motionless. The left is healthy, and contracts quickly on the admission of light to the right, thus proving the retina of the latter to be unaffected; vision with the right eye is misty, not dark; distant objects are clearly seen, and near ones by using a perforated card; he has had no pain; general health good; is accustomed to live well; motion of lids perfect; bowels open; tongue thickly furred with a yellow coating.

℞ Pulv. purg. gr. x. o.n. Empl. lyttæ pone aur.

15th.—Much the same; bowels freely open.

Gutt. belladonnæ occul. dext. bis die applicand.

22nd.—Complains of pain in the temples; condition of eye the same.

Omit the belladonna. ℞ Pil. purg. gr. v., o. n.; hausti quin. ℥i. bis die.

29th.—No improvement.

Rep. med. A blister is to be applied over the eyebrow, and dressed with powdered strychnia.

July 13.—The blistered surface has healed. The pupil is certainly less dilated, and the vision is more distinct.

Rep. empl. lyttæ.

17th.—Pupil yet smaller. Pt.

20th.—Condition of eye stationary.

℞ Strychniæ gr. 1-16. ter die sumend.

This patient improved greatly subsequent to the last note; but was not well at the time when he ceased to attend.

Case 9.—MYDRIASIS COMPLICATED WITH PTOSIS, ETC.—RECOVERY UNDER THE USE OF MERCURY.

The following case is one which may seem not to come within the definition of mydriasis, since there was evidence of disease of other parts of the ocular apparatus besides the iris. That disease, however, stood in relation to it of a complication, and not a cause. The case differs, probably, from one of simple mydriasis solely in the circumstance, that the affection of the nerve-trunk, instead of being placed immediately before its ultimate distribution in the iris, was situated much nearer the brain, perhaps within the skull, and involved a larger and common trunk, thus producing paralysis of the iris, but also of something more, viz., all the structures supplied by the third nerve. That disease was probably organic, consisting of effusion, either hæmorrhagic or inflammatory.

Elizabeth Martin, aged 37, single, in good health, was admitted August 9, suffering from complete ptosis of the right eye, with fixed and dilated pupil, and being also unable to rotate the eye inwards, or turn it easily either upwards or downwards. The dilatation of the pupil was attended by the usual symptoms; everything appeared misty and indistinct when the sound eye was shut, and, on attempting to walk, she turned giddy, and almost fell; yet, by the aid of a perforated diaphragm, she could see distinctly. She stated, that, about a month previously, she one evening perceived suddenly a mistiness coming over both eyes, which induced her to rub them rather forcibly; the left soon recovered, but about an hour and a half afterwards she noticed, that the right lid was completely dropped. She had no headache, but thought that she might possibly have taken cold, having been sitting in an open window. Had since been under medical care, and treated with blisters and purgative medicines.

℞ Calomel. gr. ij.; pulv. Doveri gr. vi., o. n.; empl. lyttæ pone aur. dextr.

16th.—There is increased power of elevating the lid. Pt.

19th.—Not much improvement; gums just beginning to be slightly sore.

℞ Calomel. gr. j.; pulv. Dov. gr. vj., o. n.

23rd.—Can raise the lid almost as well as ever; but the iris and the recti muscles remain almost powerless. Rep. empl. lytt. et pulv.

26th.—Increased power over the recti; but the pupil, although somewhat smaller, is not mobile; gums less sore. Rep. pulv. cum cal. gr. ij., singul.

30th.—Iris more active; sight much improved; can read small type. Rep.

Sept. 2.—Pupil little above natural size, freely movable; mouth very sore. Rep. pulv. cum calomel. gr. j., tantum singulis; haust. quinæ ℥j., bis die.

13th.—Further improvement; ptyalism has subsided.

Oct. 18.—The eye is quite natural in its condition in every respect. Discharged.

Case 10.—SINGLE MYDRIASIS, WITH RHEUMATIC HISTORY,

is chiefly noteworthy of occurring without other apparent cause in a strong young man, aged 22, who had been frequently subject to rheumatism. The symptoms were well marked, and were relieved by anti-rheumatic medication.

Summary.—To resume, then, the comparative examination of the 10 preceding cases, we find that, in 2, the disease affected both eyes, in 1 of which it remained much the longest in the left; in 6, it affected the right only; and in 2, the left only. The patients were, in 7 cases, males; and in 3, females; and in 5, the age was between 20 and 30, none being younger than 22, or older than 51. In 3, a history of liability to rheumatism was made out, and the belief, that the affection was dependent on that diathesis, was borne out by the success of the treatment resorted to. In 3 cases, the patients were markedly cachectic; in 2, they were in perfect health, and no assignable cause could be discovered; and in 2 others, the affection was complicated by other disease of the nervous system. Of course, we have no intention of endeavouring to attach much importance to generalisations founded on so small a number of cases; they are, however, of interest, in the prospect of adding them, at some future time, to the results of further observation.

ST. GEORGE'S HOSPITAL.—The builders are busy adding a new wing to this hospital, which will provide wards for the accommodation of thirty-five additional beds, and thus raise the total number to 355. The museum will also be considerably augmented, indeed we doubt whether it will not, when completed, be the largest hospital museum in London. A certain number of beds in the new wards are to be apportioned to diseases of women, and, we believe, to lying-in cases. Dr. Robert Lee, the Midwifery Lecturer of the School, will, of course, have the appointment of Obstetric Physician. We are glad to hear of these additions, as they were imperatively called for in this Institution, which, from the number of its beds, may justly be called the Great West-end Hospital.

To the Medical Officers of the Army, Navy, and East India Company's Service.

In the New Volume of the Medical Times and Gazette, *the first number of which appeared July 2, the publication of a series of Extracts from the* Official Reports *made by the Medical Officers of the Public Services to the Chiefs of their respective departments was commenced. One paper from the more important and interesting of these documents will appear weekly. Thus Subscribers from the commencement of the New Volume will have the series complete, in addition to the* Lectures *by* Dr. Johnson, *at the College of Physicians, and* Professor Skey, *at the College of Surgeons; the first Lectures of both of whom have also appeared since July 2. The valuable Series of Lectures on* Organic Chemistry *is continued by* Professor Hoffman. Dr. Budd's Lectures *on the* Diseases of the Stomach, *and* Dr. Boon Hayes *on the* Microscope, *will be completed; and occasional Lectures on special subjects will be given by* Lawrence, Fergusson, Bence Jones, Todd, Burrows, Peacock, *and others of the most eminent teachers of the Metropolitan Hospitals.*

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Medical Times & Gazette.

SATURDAY, JULY 23, 1853.

THE GENERAL BOARD OF HEALTH AND THE CROYDON FEVER.

If the father of our genial friend Pisistratus, the amiable Mr. Caxton, should ever complete his immortal work, the "History of Human Error," the mistakes of the General Board of Health will furnish him with materials for a curious and instructive chapter. Erroneous in constitution, and promulgating erroneous theories, no one can be surprised at the series of quarrels and cabals, the general ridicule, and the disastrous consequences which have followed the practical operation of unsound principles under an incompetent direction. Fortunately for society, however, one of the last of their mistakes has led to a Parliamentary inquiry; and it may be seen from a report we published last week, that a Government announcement was made in the House of Commons, to the effect, that the "constitution of the General Board of Health will terminate next session, when a general reconstruction of the Board will come under consideration." The event which has contributed to lead to a "consummation so devoutly to be wished," demands something more than a passing notice.

In Croydon, since last August, there have been, in a population of 16,000, about 1,800 cases of fever, with a mortality of about 60, and very numerous cases of diarrhœa and dysentery, with a mortality of about 10. All this has happened since the establishment of new works for draining and the supply of water, and the inhabitants are naturally led to believe that these works had been influential in producing disease. Lord Palmerston thought it necessary to institute an inquiry, for the purpose of ascertaining whether this belief was founded on reasonable grounds, and directed Dr. Arnott, and Mr. Page the Civil Engineer, to examine the works and report upon them. The conjoined general Report of these gentlemen states, that the result of their investigation "is a conviction that the operations of the plan for the sewerage have been influential in producing the disease, and that the absence of proper provisions in that plan for some of the general requirements in town drainage, and the especial requirements of Croydon, has been productive of misfortune to the inhabitants."

If any one could doubt that the sewerage and the disease stood in the relation of cause and effect to each other, he has only to look at the admirable Medical Report of Dr. Arnott. He will there find numerous instances in which disease immediately followed exposure to the malaria diffused during the execution of the new works, by the opening and emptying of cesspools, the cleansing of old drains and open ditches, and to the foul gases forced into the houses when any obstruction took place in the drain-pipes. Such a body of evidence upon the local origin of epidemic disease, should be received with peculiar gratitude by a Board which has hitherto most sedulously excluded the possibility of disease being produced by any other cause.

It will also appear, that the plan adopted did not include "some of the general requirements in town drainage," inasmuch as the channels were too small, and the joinings of the pipes so imperfect, that water found admission into them, occupied the whole pipe, and thus not only obstructed the passage of the sullage water, but also that of all foul air, which was, therefore, necessarily left in or about the house. Besides this, the disgusting part of house sullage was admitted to the River Wandle, until the complaints of the inhabitants on the banks became too loud, when it was sent into the ditches of the adjoining fields, and caused a nuisance almost equally offensive.

The ventilation of the drain-pipes was also so ingeniously arranged, that any one of the fifty stoppages of main drains recorded in the books of the Town-hall, converted all the sewers and house-drains into a great closed vessel of foul gas; and if the plan of the Board of Health had succeeded, this vessel would have been impermeable, and the evils which did occur greatly exaggerated. As it was, Dr. Arnott says, "Every gallon of water that entered through any one of the closets or sinks, would drive out nearly an equal volume of air at the weakest or least resisting trap or traps of the set; and thus any person, without being aware

of the fact, might be forcing foul air into a neighbour's house, and a shower of rain might at once empty into many houses of a neighbourhood the confined air of many drains." The tubes, however, were not so impermeable as the Board intended, and this evil, though very great, was lessened, but at the expense of the others we have shown to have arisen from this unexpected permeability. Permeable or impermeable, was only a choice of evils.

Thus, the imperfections of the system, and the evils that its adoption produced, are too clear and notorious to be denied. The question then arises, Who is responsible for them? Sir William Molesworth said, in the House of Commons, that "he had been instructed by the General Board of Health, that they would not consider themselves responsible for the defects in the drainage works at Croydon." Mr. Evelyn very properly replied, that the works were done under the orders of the General Board of Health, and they were held responsible for their works by the inhabitants of Croydon. We really cannot see on what possible ground the Board can escape the responsibility. In 1849, the inhabitants adopted proceedings, the result of which placed the town under the powers of the Act for the Public Health. The Local Board of Health was appointed in August, 1849, and caused Mr. Donaldson and Mr. Cox to lay down plans for drainage and water supply, which was done, and the plans were forwarded to the General Board of Health in February, 1850. The General Board appointed an engineer of their own, to report upon the plans and estimates; and they only gave their sanction to the plans upon the adoption of alterations suggested by their own engineer. It will be seen, that the failure of the plan, and the consequent evils, may be, in a great measure, fairly attributed to these very alterations. The size of the pipe sewers was reduced from six and nine inches to four and six inches; and instead of disposing of all the sullage for irrigation and agricultural purposes, the principal part of it was conducted to a filter-house, where some of the solid parts were retained, and the remainder was then discharged into the river Wandle. Thus, the river became the receptacle and subsiding bed for constant accessions of filth,—the most offensive odours were emitted from the stream,—the cottagers could not use the water, or, if they did, they suffered from diarrhœa,—and the inhabitants of the whole valley were injured by the disgusting discharge of the concentrated filth of 10,000 people into one small stream at one spot.

Then upon one meadow alone the fæcal matter of 4500 people was daily poured, so as to convert a field of seventeen acres into an enormous cesspool, within half a mile of the town, which was to be poisoned by the offensive exhalations from it.

It was the Engineer of the General Board who altered the plan adopted by the Local Board. It was he who diminished the size of the pipes, he who introduced the plan of the filter-house and the discharge of the sullage into the river. The Board approved the plan of their Engineer, and must fairly be held responsible for its failure. It was an entire mistake throughout. The pipe sewers were too long, too small, and too fragile; they were not provided with the necessary openings for examination; all means of ventilation was neglected; private property and domestic comfort were unjustifiably interfered with by adopting the system of back drainage, thus exciting the indignation of the inhabitants by the reflow of filth into their houses, although they were coolly told that it was *not more than three inches deep*. The gradations of the inclinations of the pipes were not regular; brick sewers were avoided when they would have been advantageous. Instead of disposing of the sullage in a way to make it useful, a disgusting nuisance was created near the town by an objectionable process for separating its solid portions. The river was polluted; irrigation, by sullage-water, was practised too near the town, and the land drainage was insufficient.

This long series of mistakes was approved by the Board, and the Board must necessarily be held responsible for the disastrous consequences which followed the execution of a mischievous system, which, while working admirably on paper, and causing great self-gratulation in the offices at Whitehall, was dealing out disease and death among the unfortunate people submitted to it. Well might Mr. Evelyn inform the House of Commons, that the inhabitants of other places in Surrey, "regarded with dismay the probability of similar works being executed against their desire." It is high time that this dismay should be pacified, and that the people of England should be convinced, that no Government Board can go on for ever blindly rushing from one ignorant blunder to another; but that the commission of such dangerous errors must lead to a reconstruction upon an entirely new basis.

THE MEDICAL APPOINTMENTS IN THE EAST INDIA COMPANY'S SERVICE.

There is one principle embodied in Sir C. Wood's India Bill, which, for the sake of our Profession and of science generally, we trust will remain untouched in Committee. We refer to the principle of public competition for the civil appointments in the Company's Service. For the last two years the Directors, with a generosity quite accounted for by an impending event, have dropped from time to time the rich prize of an assistant-surgeonship among the eager candidates at our larger metropolitan hospitals. This unwonted distribution of individual patronage we did not fail to notice at the time, and to ascribe to a desire upon the part of the Company to acquire the best men for their service, at the expense of their personal interest. The Bill under discussion in Parliament, however, proposes to convert what was only a favour scantily bestowed into an incontestable right,—to throw open to the world the broad doors of the East, through which simple merit shall be the passport, instead of interest in Leadenhall-street. In many points of view the establishment of this right will prove an epoch in the history of Medicine, and it will also confer an infinite service upon the cause of science in general.

It cannot be doubted that the certain yearly distribution of Medical appointments in the Company's service will lead to a special training of the candidates for such appointments, and to a very severe and increasing competition for them, which must result in the production of a much higher class of Medical Officers than could possibly be obtained by the Company under a system of favouritism. Who can estimate the good which must result to science generally from the sending forth of a body of trained observers—trained not only in their own particular Profession, but in the collateral sciences—into the very heart of the East—a region in which Nature seems as prodigal in distributing the different varieties of man as in scattering the infinite links of the animal and vegetable chain? How many of the pages of the great book of nature in that wondrous land yet remain to be turned by the scientific observer. Loudly, however, as science demands that we send only our best sons forth to our Eastern Empire, humanity still more imperatively calls upon us to see that none but able Medical Officers shall be

put in charge, in a remote country, of thousands of our fellow-countrymen and subjects. The Indian army consists of some 300,000 soldiers. Over this multitude Medical men have, so to speak, the power of life and death. Neither the European soldier, nor the Sepoy in India, can, like the civilian, change his Medical attendant, and even, had he the choice—choice there is none—any one of the thousand men posted in the remote districts is as completely at the mercy of an incompetent surgeon and his assistant, as he would be at the word of his commander, bound and blindfolded before the levelled muskets of a company. Any third cousin of an influential director must bungle through the business as he best may, nor hope for the assistance of a Brodie or a Fergusson, for the poor patient can no more shrink from the murderous knife of the unskilful surgeon than from the sword-cuts of the enemy. It may be said, we are putting an extreme case; but let our reader ask himself, what can be expected from a young man, tested only by the superficial test of the College, who is drafted into a new country and a strange climate, and placed suddenly among a thousand men, with full power of the knife, and all because his aunt married a director of the Company! In private practice, the transformation of the *passed* student, even into the competent Surgeon, is a long and tedious process; but, by the old system of nepotism existing in this Company, the young Surgeon was, in many cases, only able to perfect himself in his art upon the writhing bodies of his patients.

Directors may excuse themselves by the plea, that the incompetency of those on whom they have bestowed their patronage is no affair of theirs, but of the Examiners. This is not strictly true. The practice, in India, is a special practice, with which the College has nothing to do. Students have to undergo a further examination at the India Board; and it is this Board which is responsible for competency. We know that of late years their examinations have been most admirably conducted, and that the ability of the candidates has been proved far more severely than was formerly the case. The consequence has been, that men have come up better prepared, and that a great improvement has been observed in the professional character of the Medical Officers admitted into the Company's Service.

But, whether the examination be given at the Board, or at the Colleges or Universities, a very much more stringent one than is now given is demanded,—not a mere answering of questions, extending over twenty minutes, but a practical examination, dissecting knife in hand, over the dead body. In addition to which, public competition in our hospitals would insure the best men in many other points. Students are severe judges of each other, and only the best men are allowed to take the first places.

Another great good which must result from the establishment of competition is, that the Queen's services, both the Military and Naval, will be forced to imitate the Companies' regulations, and thus every Military and Naval surgeon will be lifted in the scale of attainments, and in consequent social position. It would be impossible for the Admiralty to admit half-educated men into their service, in the face of the improved regulations in the Company's establishment. And highly-educated men once in the Navy, as a universal rule, the noise of the cockpit would soon, out of very shame, be changed to quarters more worthy of a learned Profession.

If we may say one word in conclusion, without giving offence to our Northern neighbours, we would rejoice at the proposed equable distribution of the patronage of the Company over the hospitals of the *three* Kingdoms. The Rose and Shamrock will, we trust, in future, stand an equal chance with the favoured Thistle in the distribution of the good things of the Profession. A partition of the appointments among the principal hospitals of London, Edinburgh, and Dublin, and perhaps more sparingly among the larger provincial hospitals, would afford fair play for all parties, and enable the Company to command the best medical assistance for their servants.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Thursday, the 14th, Petitions were presented by Sir G. Grey, signed by 643 Physicians, Surgeons, and Medical Practitioners in the Metropolis, expressing deep sympathy with the working-classes, and praying that no measure may be sanctioned to authorize the opening of the Crystal Palace or its grounds for gain on Sunday. By Mr. Alcock, from the South-Eastern branch of the Provincial Medical and Surgical Association, against the Bill for promotion of vaccination; by Mr. Collier, from members of the Medical Profession residing at Devonport and East Stonehouse, calling attention to the grievances of the junior Assistant-Surgeons in the Navy, and praying that their position and condition be improved.

NAVAL ASSISTANT-SURGEONS.

On Friday, 15th, Mr. Brady asked the Secretary of the Admiralty if it was the intention of the Board of Admiralty to make any further provision on board Her Majesty's ships for the better accommodation of the Assistant-Surgeons in Her Majesty's Navy, in accordance with a Resolution passed in that House on the 8th of April, 1850.

Mr. Osborne, in reply to the hon. and learned member, had to state, that in consequence of the Resolution of the House to which he had referred, the Board of Admiralty had issued directions in a circular, dated July 17, 1850, to the effect, that Assistant-Surgeons who had passed their examination more than three years, should be allowed to mess with the ward-room officers, and, in cases where the space would admit of it, that separate cabins should be assigned to them.

Mr. Brady wished to understand if the condition of the junior Assistant-Surgeons would be the same as it had been heretofore.

Mr. Osborne (as we understood) replied, that the condition of those officers had been improved since the year 1850.

On Monday, Petitions were presented by Sir R. H. Inglis, from the Royal Hospital of St. Bartholomew, praying either to be exempted from the operation of the Charitable Trusts Bill, or to be heard by counsel against it; by Captain Scobell, from medical gentlemen of Bath and its vicinity, praying that the superior medical officers of the Navy may be placed on a footing with those in the Army, and that the Naval junior Assistant-Surgeons may have improved accommodation.

VACCINATION EXTENSION BILL.

On Wednesday, Sir J. Pakington, in moving the second reading of the Vaccination Extension Bill (which had been sent from the House of Lords), stated its object, which was to render vaccination compulsory, under pecuniary penalties, and showed the unsatisfactory results of the voluntary system. The mortality from small-pox was greater in England than in almost any other country in Europe. A regard for the public welfare, therefore, demanded some improvement of the law; the machinery of this Bill for carrying out the pecuniary penalties, he admitted, required alteration; but all that the House was now called upon to sanction, was the principle of compulsion.

Lord Palmerston said, Sir John had produced irrefragable proof, that some measure was necessary, the more so on account of circumstances inseparable from the subject. The object was to prevent a fearful disease by timely foresight and precaution; and the classes most in need of this protection were the poorest and most ignorant—those least likely, by their own impulse, to adopt precautions. He was prepared, therefore, to assent to the principle of the Bill, agreeing with Sir J. Pakington, that its machinery required considerable alterations.

Mr. Brady thought it was not a compulsory measure which was required, but a measure which should meet the sympathies of the people, and which the people would assist in carrying out, The Bill was imperfect and inadequate for its purpose. The Pro-

fession to which he belonged was not treated with due respect; a system of vaccination by way of contract was calculated to make it lukewarm. So long as the system was under the Poor-law Board there would be imperfect vaccination, their treatment of the Profession being unwise and derogatory to Medical men. Remarking, in passing, that differences of climate influenced skin diseases, and that, unless that were taken into the calculation, it would be unfair to contrast the mortality arising from small-pox in England and on the Continent, he pronounced the Bill a most imperfect one, a most unjust one, and one that could never be carried out in principle. The Bill made no provision for the proper supply of vaccine matter. There were various grounds of detail on which he thought the measure objectionable. By this Bill, any person might go to Dr. Bright, Dr. Babington, or to the most eminent Medical men, compel them to vaccinate her child, and not pay a farthing. By this Bill, also, children were brought into the district vaccinating places, thence to spread epidemic disease through the country. He should feel himself bound to move, that the Bill be read a second time that day six months, but was prepared to suggest a plan by which vaccination might, in his opinion, be better promoted.

Sir G. Strickland objected to the principle of the Bill. Compulsion might be carried too far; and he was always, where it was possible, a friend to the voluntary principle. It was a sufficient reason for not assenting to the Bill that the deaths, which had been 116 out of 1,000 from small-pox, had, under vaccination, been reduced to 16 out of 1,000,—a fact which showed that vaccination was working wonders, and working well. With the advance of education the small-pox would almost be rooted out, if vaccination were left to the voluntary principle. But there was too much resort to compulsion. One little measure was taken from Saxony, another from Austria, another from Prussia. There could not be one law for the rich, another for the poor. The mother must be compelled to vaccinate; but, in a rich man's house, that was impossible. The House was going to force every one to give up prejudices against vaccination. If they acted more on the old English principle, and left people to the voluntary principle and to their own good sense, the object would be more rapidly and successfully attained.

Mr. Frewen opposed the Bill. It contained extraordinary provisions, such as that children should be vaccinated within three months after birth, under a penalty.

The Bill was then read a second time.

REVIEWS.

Notes on Pericarditis, Endocarditis, and Organic Disease of the Heart and Aorta. By C. Morehead, M.D., Professor of Medicine, Grant Medical College, Bombay. 8vo. Pp. 105. 1852.

This essay contains notes of twenty-five cases of pericarditis and endocarditis, and twenty-four cases of structural disease of the heart and aorta, as observed in the clinical ward of the Jamsetjee Jejeebhoy Hospital at Bombay. Dr. Morehead had two objects in view in publishing these notes —"one, to add to our clinical knowledge of an important class of disease; the other to correct the erroneous impression which seems to exist, that acute rheumatism in India is rarely associated with pericarditis or endocarditis."

Some time ago, we gave an abstract of a very interesting essay by Dr. Morehead, written to prove that Bright's disease is as common among the natives of India as the inhabitants of Europe. From the present paper it appears, that, although acute articular rheumatism is less common in India than in Europe, yet that pericarditis and endocarditis, with consequent organic disease of the heart, are as common accompaniments and results of acute rheumatism, when it does occur, in Bombay, as they are of the same disease in Europe.

"I hope, moreover," writes Dr. Morehead, "shortly to show, that pneumonia is a far more common disease in the hospital-frequenting class of the natives of Bombay than hepatitis; that phthisis pulmonalis is very common; and that the impression sometimes given to English students of medicine of the inutility of the stethoscope in India is very inconsistent with fact."

From a numerical analysis of his cases, Dr. Morehead has arrived at several very interesting results in regard of various points connected with the diseases in question. These he has arranged under the following heads:—

1. *The proportion of cases of Pericarditis and Endocarditis, and of both combined.*

In seven cases the pericarditis was unaccompanied by endocarditis; in six cases the co-existence of the latter was doubtful. In four cases endocarditis was unaccompanied by pericarditis; in three of the four the mitral valve only was affected, and in one the tricuspid.

In eight cases pericarditis and endocarditis were combined; in seven of these eight, the pericarditis took precedence of the endocarditis; in the remaining case the endocarditis was first observed.

2. *The result of the cases.*

Dr. Morehead's experience confirms that of the late distinguished Dr. John Taylor, as given in his celebrated paper on pericarditis, continued in the "Transactions" of the Medico-Chirurgical Society,—namely, that in pericarditis, associated with rheumatism, the prognosis is much more favourable than under other circumstances in which this disease arises. Nine of the twenty-five cases proved fatal. In five of the cases recovery was complete, no trace of cardiac disease remaining. In one of these five cases only was endocarditis present.

3. *Relation to difference of sex.*

4. *The proportion of cases in the different castes.*

It appears that there is about an equal liability to pericarditis and endocarditis in the Hindoo and native Christian populations, while they seem to be more than twice as common among Parsees, and not one-fourth so prevalent among Mussulmen. In all the Parsees they were associated with acute articular rheumatism. As to the cause of the frequency of these diseases among the Parsees, and their infrequency among Mussulmen, Dr. Morehead offers no explanation.

5. *Classification with reference to Age.*

6. *The different occupations of those affected.*

7. *Relation to habits of Life.*

8. *The months of the year in which most prevalent.*

9. *Relation of the disease to Rheumatism, Cachexia, and and Pulmonic Inflammation.*

In regard of these points, Dr. Morehead's observations exhibit no essential difference between the diseases as they occur in Europe and India.

10. *The Leading Symptoms and Signs observed.*

Passing by the general symptoms and some of the physical signs present, we find the following interesting remarks with reference to two cases of pericarditis in which death occurred while friction-sound was yet present.

"In one case there were eight ounces of reddish serum in the sac of the pericardium, and flakes and shreds of lymph were deposited on the surfaces; in the other, twelve ounces of clear fluid were found in the sac of the pericardium three hours after death,—this fluid coagulated spontaneously into a gelatinous mass when removed from the body, but there were no flakes of lymph deposited on the surfaces, and no vascularity of the serous covering of the heart or lining of the pericardium was observed."

Dr. Morehead is inclined to think that the friction-sound in this case was introduced by the movement of the liquor sanguinis (the fibrin as yet in a liquid form) between the serous surfaces of the pericardium. About eight ounces of spontaneously coagulating fluid, similar to that contained in the pericardium was removed from the cavity of the arachnoid of the same subject. In two of the fatal cases in which the friction-sound was distinctly audible, death took place several months afterwards, in one from cholera, in the other from pulmonic disease. In both, opaque patches were found on the surface of the heart, but no adhesion between it and the pericardium.

15. *On the Treatment of the Disease.*

The constitutions of the patients admitted into the Jamsetjee Hospital were too asthenic to admit of general blood-letting.

Local blood-letting was of considerable use; blisters were applied with advantage. As to the influence of mercury, Dr. Morehead writes referring to his analysis of his cases,—

"In this statement we have no striking proof of the efficacy of the mercurial treatment of pericarditis and endocarditis; yet my impression is distinctly in favour of its cautious adoption in suitable states of the constitution."

And, speaking of the action of mercurials generally, he observes:—

"My present belief, then, is, that mercurial influence, in some forms and stages of inflammatory disease, is an efficacious remedial means; but, at the same time, I entertain a firm conviction, that its indiscriminate and excessive use has done much more harm, in the treatment of disease, than its rational use has effected of good. I allude chiefly to disease in India."

The notes taken of the twenty-five cases of pericarditis and endocarditis are given at length.

The second part of the Essay is devoted to a consideration of twenty-one cases of Structural Disease of the Heart, and three cases of Aneurism of the Aorta.

The facts noted in reference to these cases are considered in the same order as those noted in reference to pericarditis and endocarditis; and the cases themselves are given briefly, and to each are appended a few judicious remarks.

We regard this paper to be, like Dr. Morehead's former Essay, a valuable contribution to practical medicine.

On the Nature and Treatment of the Deformities of the Human Frame; being a Course of Lectures delivered at the Royal Orthopædic Hospital in 1843. By W. J. Little, M.D., etc., etc. Pp. 402. 1853.

This work may be considered as a third edition of Dr. Little's well-known Treatise on Club Foot, with a reprint of his Lectures published in 1843, in addition to a quantity of new matter introduced into the text between brackets, and a number of notes. He treats,—1. Of Deformities in General; 2. Of Deformities from Wounds and Diseases of Joints, Accidents, Rheumatism, &c.; 3. Of Deformities from Spasm, Paralysis, Burns, Habitual Retention in One Position; 4. Of Deformities from Rickets, Weakness and Curvatures of Bones; 5. Congenital Distortions, Club Foot, Club Hand, &c.; 6. Congenital Malformations, Monstrosities; and 7. Distortions of the Spine.

Looking upon the book rather as a new edition, than as a new work, we must content ourselves with extracting some judicious remarks on the treatment of anchylosis by forced extension, which may be well considered in conjunction with a valuable paper on this subject we are now publishing among our Original Communications, by Dr. P. Frank, a Medical Student of the Manchester School, who has passed some years in Berlin as Clinical Assistant to Professor Langenbeck, and obtained the degree of Doctor of Medicine of the University of Berlin:—

"The art of surgery has, however, recently received an invaluable addition to its means of usefulness, by the discovery of the anæsthetic properties of ether and chloroform; and orthopædic practitioners have not been slow in availing themselves of the assistance these means are calculated to render in the cure of deformities. Hence the employment of forcible extension with the aid of chloroform or ether. By chloroformisation, the two great obstacles to the employment of force adequate to straighten or bend a contracted limb,—namely, pain and voluntary muscular resistance,—are removed. As soon as these impediments disappear, the hands of the single operator, and his single mind, applied to the parts, encounter the physical resistance only of the deformed parts; comparatively gentle manipulations now acquaint him with the nature and amount of difficulty; he can feel his way in the application of greater force; feels and perceives the resistance of parts successively overcome, in an anatomical order; if greater rigidity still oppose, a few movements of the joint backwards and forwards prepare the way for a more extensive yielding; and often the practitioner has the satisfaction of being able to effect every natural movement of the joint, and satisfy himself that a cure is obtainable.

"Chloroformisation, with manipulations, and the use of a certain degree of force, is often of great service as a means of diagnosis; by it the practitioner is enabled to ascertain what proportion of the deformity is due to shortening of soft parts, and how much mischief the articular surfaces may have undergone. He may have reason to conclude, from the amount or nature of the resistance, and the change of articular surfaces, that restoration of the form and functions of the part is impracticable, and thus save much time, which without chloroform might have been uselessly expended in an attempt to straighten the part.

"After straightening or bending the limb, as the case may have required, by means of this forcible procedure, the part should be lightly secured in a retentive instrument or upon a common splint, adjusted so as to maintain the position more favourable than that which obtained before the operation, though not in the new position, *i. e.*, the entirely straight or bent position into which the hands of the surgeon may have brought it. For, as soon as the effect of the chloroform upon the sensorial system disappears, the patient will arouse to the conviction of the violence which may have been employed, the part may be acutely painful, and incapable of sustaining the pressure of a tight bandage or ligature.

"The author has usually contented himself with the increased knowledge obtained of the nature of the case, with the satisfaction of knowing that the part could be improved in form and function, and that as the resisting parts had once yielded, that they would afterwards oppose less resistance to cure; whether the means subsequently employed should be simple manipulations, the use of mechanical apparatus, or repeated administrations of chloroform, and 'forcible extension.' The surgeon who should attempt the forcible binding down of a long-deformed limb immediately after 'forcible extension,' would betray a lamentable ignorance of the pathological condition of the living parts in the immediate vicinity and within the diseased articulation. Although the muscular structures may have yielded under chloroform, and indurated fasciæ and old adhesions may have been overcome by tearing, it will be remembered, that much adaptation on the part of nerves, blood-vessels, and absorbents to the altered position of structures needs to be accomplished. The author has found that, by taking moderate means of retaining as much improvement after the forcible extension as can be borne by the sufferer, by unsparing use of lotions of spirits of wine, no inflammation of joints thus straightened has supervened. He has witnessed no untoward accident; and, by employing the ordinary means of gradual extension, and repeating once or twice the chloroform, and complete extension while the patient lay under its influence, he has restored cases, the relief of which would have required many months of ordinary treatment, or would otherwise have constituted very mediocre cures."

This extract will give a good idea of the useful and practical manner in which Dr. Little's book is written. It is a handsome volume, well illustrated by 160 woodcuts, and will form a valuable addition to the library of any one who may be called upon to treat deformities of the human body.

The Sophistry of Empiricism. Pp. 84. London. 1853.

This book is a very good one, and, if duly perused and pondered over, it is calculated to open the eyes of many victims to the chicanery which it exposes and denounces. It is written in a calm, argumentative spirit, and is by no means tinged with dogmatism. It attacks quackery *en masse*, and groups together Mesmerism, with its subdivisions of Phreno-mesmerism and Clairvoyance; Homœopathy, Hydropathy, Coffinism, Herbalism, Bone-setting, etc., as so many species belonging to a single genus, Empiricism, the origin of which is to be traced to the love of the marvellous and the supernatural, inherent in the human mind, the success of which is in exact proportion to the credulity of the dupes and the unscrupulousness of their deceivers.

It is lamentable, in the present age, which boasts to be one of peculiar enlightenment, to be compelled to expose fallacies so palpable as those contained in the published works of the empiric. Notwithstanding the general diffusion of the Baconian philosophy, and in spite of the universal taste for the exact sciences, it appears as if the principles of sound reasoning were only inapplicable when applied to that science which concerns man most nearly,—namely, that which regards his own health. But we are not in despair for the cause of legitimate medicine, which will still triumph when the absurdities of quackery are consigned to the shadows and the oblivion of the past.

The author of "The Sophistry of Empiricism" need not have been ashamed to avow his name, for he has written a work which does him very great credit, and bears internal evidence of having been composed by a member of our Profession, of which he has proved himself altogether worthy, by the soundness of his views, the liberality of his mind, and the cogency and closeness of his arguments.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

CURE OF AN ANEURISM OF THE SUBCLAVIAN ARTERY BY MEANS OF THE EXTERNAL APPLICATION OF THE CHLORIDE OF ZINC.

By M. BONNET, of Lyons.

[A Letter addressed to M. Lallemand, and read before the Chirurgical Society of Paris, June 15, 1853.]

M. Bonnet announces the complete cure of a patient suffering from subclavian aneurism, seen by M. Lallemand upon the fourteenth day of the treatment of the disease by successive applications of the paste of chloride of zinc. The chloride of zinc, penetrating by imbibition into the deeper parts of the tumour, produced complete coagulation of the blood, which was detached from the walls of the aneurismal cavity without any hæmorrhage. The patient quitted the hospital three months and a-half from the commencement of the treatment. He could at that time take a walk for half an hour at a time, and presented, as the only trace of his disease, a superficial ulceration, which was nearly healed. The clot, which came away with the eschar, was forwarded to M. Lallemand by M. Bonnet.

The patient, aged 25, had received in the left supra-clavicular region a blow with a knife, which, dividing the whole brachial plexus, and touching either the subclavian artery or one of its branches, was followed by profuse hæmorrhage, and subsequently by the formation of an enormous aneurism. The rapid enlargement of the tumour, and the frequent discharge of blood from the wound, threatened the life of the patient, and rendered immediate assistance necessary. The application of a ligature between the inner border of the scaleni muscles and the aorta was rejected both by M. Bonnet and by his colleagues, as too dangerous and too difficult. The galvano-puncture was also negatived, because it was impossible to suspend, even for a moment, the pulsations and the *bruit de souffle* in the aneurismal pouch. The injections of the perchloride of iron were not then known, (January 2); and, possibly, the enormous size of the aneurism, its proximity to the heart, and the impossibility of compressing the artery which conveyed the blood to it, would have counter-indicated its employment. In this difficult position, M. Bonnet determined upon cauterisation by the paste of chloride of zinc.

The first eschar was produced in the centre of the tumour. Every two or three days, Bonnet removed, with a bistoury, the superficial layers of the slough, and for five weeks he continued a series of applications of the paste, which penetrated daily both in depth and extent. Upon the fourteenth day, the pulsations and the *bruit de souffle* ceased; at the end of the second month, the eschar began to detach itself without any hæmorrhage. The clot came away with the eschar. Bonnet affirms, that modern authors are wrong in attributing this method of treatment to Ambrose Paré, Guattani, or Marcus Aurelius Severinus; in none of the original works is it mentioned. The ancients knew nothing of the chloride of zinc, which was introduced into practice by M. Canquoin.

Bonnet first thought of employing this escharotic in the treatment of aneurism, by observing for the last ten years its power in coagulating blood and arresting hæmorrhage. He found, 1837, that it got rid of varicose veins without the occurrence of the bleeding which frequently ensued after the application of potassa fusa. Both he and his colleagues—MM. Barrier, Bouchacourt, Desgranges, and Vallet—have often taken a firm coagulum from vessels exposed to its influence. He has seen it entirely remove hæmorrhoids, varicoceles, and erectile tumours, by penetrating into the vessels by imbibition, coagulating the blood, and rendering the whole tumour firm. That it arrests arterial as well as venous hæmorrhage, was shown by its action upon goitre, as stated by M. Philipeaux, in a memoir founded upon some of Bonnet's linical lectures.

The eschar separates about eight days after the application of the paste; it can, therefore, be easily retained by successive applications for a month, or even longer.

MM. Bonnet and Gensoul have lately proved that the chloride of zinc may cure the disease known as aneurism by anastomosis. A tumour, occupying the summit of the head, an inch in thickness, and of rounded surface, about half a foot diameter, (15 centimetres,) consisted of an immense number of anastomosing arteries, pulsating with a loud *bruit de souffle*, and nourished by seven large trunks coming from the frontal, the temporal, and the occipital region, each about the size of the brachial artery. Injection was insufficient and impossible; pressure, continued for a year, failed, and the surgeons were talking of tying the two carotid arteries. The cauterisation by the paste of the chloride of zinc effected the separation of the tumour without any hæmorrhage whatever, from each of the nutritious arteries. The result of the case, not yet complete, is to be communicated at a future meeting of the Society.

REPORT ON CASES OF DEATH BY CHLOROFORM.

[Communicated to the Chirurgical Society of Paris by Dr. Vallet, Surgeon to the Hotel-Dieu of Orleans.—Continued.]

The next case is that of M. Barrier, Surgeon-in-Chief at the Hôtel-Dieu of Lyons, published 1849 (*Gaz. des Hôpitaux.*)

A youth, aged 17, of lymphatic constitution, but in fair health, entered the hospital to undergo a minor operation, January 24, 1849. A light compress was held in front of the face, and chloroform was poured in drops upon that part opposite the aperture of the nares. After four or five minutes the patient was still conscious; in a minute more he became agitated. He did not inhale twenty grains of chloroform; the pulse beat regularly. Of a sudden, the patient raised his head and moved his limbs for about a quarter of a minute, when an assistant announced the cessation of the beats in the radial artery. The handkerchief was immediately removed.

The expression of the face was changed; the heart's action was imperceptible; respiration irregular and slow; it ceased in about half a minute. Every possible measure was adopted to restore animation, but without avail.

Examination of the Body, 72 hours afterwards.—The liver and the spleen were slightly congested; the heart, of normal size, was flaccid and empty; the ventricular walls were only moistened by a faint red froth, giving the idea of blood which had been whipped like cream by the carneæ columnæ. The vena cava and vena portæ were distended by a large quantity of dark blood. There was no aeriform fluid, either in the heart or in the great vessels; lungs retracted; brain healthy; sinuses full of non-coagulated blood.

The next case, also reported in the *Gazette des Hospitaux*, 1849, occurred in the practice of M. de Confévron, Physician of the Hospital at Langres.

A lady, aged 33, who had once before been etherised, took chloroform to avoid the pain attendant upon the extraction of a tooth. The physician put a handkerchief in front of the patient's face, as in the preceding case; in ten minutes there were twitchings of the eyelids. The operation was on the point of commencement, when the patient, who had had experience of the effects of the ether, pushed away the dentist's hand, in the belief that she was not yet sufficiently insensible, and made four or five deep and rapid inspirations. The handkerchief was then withdrawn, and the operator had scarcely time to lay it upon a neighbouring table, when he observed the face become pale, the lips discoloured, the features altered, the eyes turned up, pupils dilated, and jaws firmly fixed. The pulse had disappeared; and, after a few irregular sighs, she expired.

Upon examination of the body, it was found that the veins at the base of the brain were full of blood; so also the sinuses. The small arteries of the cerebral substance seemed fuller than natural; there were many bubbles of air mixed with the blood within the skull. The heart contained no clot; the blood, in its interior, was mixed with air. The large veins of the body contained much fluid blood of dark colour. The abdomen was distended by gas. Another case, quoted by M. Villet, is from the pages of this Journal, 1851. (To be continued.)

GENERAL CORRESPONDENCE

IMPROVED FRACTURE APPARATUS.

[To the Editor of the Medical Times and Gazette.]

SIR,—While a student at King's College, London, I invented an apparatus for reducing fractures of the lower extremity, and published a description of it in the *Medical Times* for 1850.

Mr. Fergusson, in the third edition of his valuable work on "Practical Surgery," kindly mentions the invention, but remarks, that "the expense (of the apparatus) would be more than practitioners in general would care to incur." Since I left London, however, I have considerably improved it; and it will now be found less complicated, less expensive,(a) and of easier application. A reference to the accompanying drawing will explain both the machine and its principle of action.

Two tension-rods, *a a*, extend, one on either side, and unite in a curve at one end; on these are slides, *b b**, which support two iron plates, *c c**, so bent as to present two sides at right angles with the floor; the one, *c*, being designed for counter-extension, can be moved to any given point, and there fixed with a check-pin; the other, *c**, by means of which extension is to be made, is mediately attached to a screw, *d*, which pierces, in a central line, the tension-rods at their point of junction. On this screw is a nut, *e*, by whose action against the rods the requisite extension and counter-extension forces are obtained.

Within each bent plate, *c c**, are two pressure-pads, one on either side *f f**, which are moved towards each other by means of a nut and screw, as shown in Fig. 2, and thus made to embrace the limb.

A back-piece, or floor, *g*, on which the limb is to be placed, extends nearly the whole length of the apparatus; it is fixed to the bent plate, *c*, but merely rests on the one *c**, at the opposite end; so that, when extension is made by turning the nut *e*, the bent plate *c** is drawn to a greater distance from the other.

Connected with the bent plate *c** is a movable foot-piece, *h*, intended only to keep the foot in a proper position, except when the fracture involves the malleoli. The back-piece and foot-piece are to be supplied, each with a separate pad, as shown in the drawing. The apparatus being suspended by four straps from an iron cradle, a swinging motion of the limb is enjoyed by the patient.

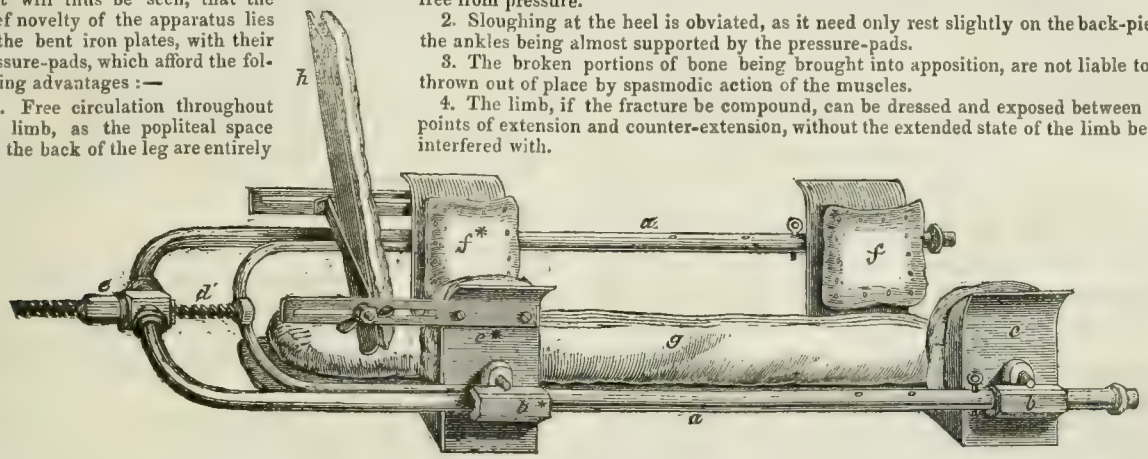
It will thus be seen, that the chief novelty of the apparatus lies in the bent iron plates, with their pressure-pads, which afford the following advantages:—

1. Free circulation throughout the limb, as the popliteal space and the back of the leg are entirely free from pressure.

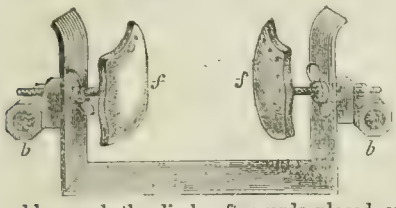
2. Sloughing at the heel is obviated, as it need only rest slightly on the back-piece, the ankles being almost supported by the pressure-pads.

3. The broken portions of bone being brought into apposition, are not liable to be thrown out of place by spasmodic action of the muscles.

4. The limb, if the fracture be compound, can be dressed and exposed between the points of extension and counter-extension, without the extended state of the limb being interfered with.



The following is the mode in which a fracture should be treated when this instrument is used:—A doubled piece of sheeting, about four feet in length and nine inches wide, should be thrown across the back-piece in the space between the bent plates, and its ends allowed to hang equally on either side. A flannel roller should then be applied with some degree of firmness around the foot and ankles, and the limb afterwards placed on the back-piece, the distance between the two bent plates having been first regulated according to the length of the limb. The pressure-pads, with any extra padding which may be required, should now be firmly fixed, the one pair, *f*, against the side of the leg, just below the knee; the other pair, *f**, a little above the ankles. An assistant should then make extension by turning the nut *e*, the surgeon at the same time adjusting the broken portions of bone. That being done, the foot-piece must be placed against the sole of the foot, and be slightly bound to it by a turn or two of a bandage, merely to keep the foot in a natural position; and the ends of the sheeting before mentioned, folded up smoothly, and laid against the sides of the limb, are to be there retained by means of straps, as is usually practised in such accidents.



When a fracture involves the malleoli, the pressure-pads, *f*, having been brought to bear firmly on the limb, the foot-piece with its pad should be firmly attached to the sole of the foot by means of a bandage, and then fixed. Extension should next be made by turning the nut *e*; and the fractured portions of bone being adjusted, the pressure-pads, *f**, may be brought slightly in contact with the ankles. The remaining treatment is as before described.

In some instances, it may be found necessary, if there be much swelling, to dispense with the sheeting, in order to use fomentations, etc.; but if there be little or no swelling, a many-tailed bandage may be applied from the ankles to the knee, after the fracture is adjusted.

I am, &c.

Plymouth. HENRY GREENWAY, M.R.C.S., &c.

P.S. Soon after my first description of the apparatus appeared in print, my attention was called to various mechanical contrivances, invented by others for the attainment of the same end. They were all framed on the principle of extension and counter-extension; but they differed from each other, and from mine, in the mode by which these forces were to be employed. On the mode, however, depends the value of the machine; for it must be obvious that extension obtained by means of pressure, which impedes the circulation in the limb, would be highly objectionable and dangerous—an evil which my apparatus avoids, while it fulfils all the conditions necessary to the successful treatment of the fracture for which it is designed.

(a) A mechanic in this town considers it might be made, with cradle complete, for about 2*l.* 10*s.*

THE COLLEGE OF SURGEONS EXAMINATIONS AND MR. GUTHRIE.

[To the Editor of the Medical Times and Gazette.]

SIR,—I read last night, at the College, during a moment of leisure, the observations directed against me in your Journal; and shall take the opportunity of offering a few remaks, not on the letter of your correspondent, but on myself, which I could not well do hitherto.

I beg, then, through you, to remind your readers, that the devil is not always as black as he is sometimes painted; and to assure those students who may appear before me, that I am not absolutely an Ogre, ready to swallow them whole, but a very good-tempered person, on whom they may depend for a greater degree of real kindness than they have any expectation of receiving from one in my situation.

However severe they may suppose my examinations to be, they never pass the bounds of the commonest anatomy, which every student in his second year ought to be well acquainted with; and however insufficient the answers may have been, I have rarely decided against the individual. In all cases of doubt, I have been a principal intercessor for all. In fact, I am desirous of adding to the stock of bad ways, summed up by your correspondent, by

acknowledging that I have often failed in my duty to the public, through a little soft-heartedness, I confess, I am ashamed of, but which I have not been able to refrain from showing towards students, many of whom were in unfortunate circumstances, but who now, through that forbearance, fill situations of importance, with credit to themselves and satisfaction to their neighbours.

I have no wish, however, that careless students should understand they will not be told, by me, that they have not attended to their studies, although I have always assented to the proposition of the negro to his master,—"Massa, preachee or floggee; but no preachee and floggee too."—and have acted upon it; not that I am unacquainted with the more ancient maxim, which I do not often practise—"That when you think it necessary to demolish a man, there is nothing like doing it civilly; and cut his throat with a smile on your countenance." I have hitherto preferred the negro proposition, but I have no objection to adopt the other.

If any one should, nevertheless, have some misgivings that the devil may be blacker than I have painted him, I would suggest his calling about ten in the morning in Berkeley-street, when, if he can show he is a deserving person, he will be sure to make a friend of your very obedient and humble servant,

4, Berkeley-street. G. J. Guthrie.

THE CASE OF LIGATURE OF THE CAROTID AT ST. MARY'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the last number of your Journal, under the heading "To Correspondents," I find the following:—

"*A. C., St. Mary's Hospital.*—We have heard of the case in which the carotid artery was said to be tied, but in which the ligature was only passed round a portion of the thyroid gland: but we had rather not publish your letter. If the surgeon does not make the true state of the case known in the interests of science, we leave the task of doing so to others."

As the only case admitted into St. Mary's Hospital requiring a ligature to the carotid artery was under my care, I beg to state, that there is not the slightest ground for the assertion, that "the ligature was only passed round a portion of the thyroid gland." In the case alluded to, the operation was performed in the theatre of the hospital, in the presence of some thirty or forty witnesses. The artery was exposed, and the ligature passed round it without the slightest difficulty. The patient unfortunately died two months after the operation, and the *post-mortem* examination was conducted in public. The preparation, which is a very interesting one, is now at the hospital, and I shall be most happy to show it to any of your readers who may be desirous of seeing it. Lastly, you are also in error in supposing that the case had not been published.

I am, &c.

1, Grosvenor-place. Samuel A. Lane.

[This letter shows that we exercised a wise discretion in declining to publish the report alluded to in our first notice. We were assured in it, most positively, that the artery had not been tied, and that it was proved not to be so at the *post-mortem* examination; and further, that the account of the case published in another Journal was a false one, so far as regards the ligature on the artery. Our estimation of the report was shown by the refusal to publish it.—Ed.]

CHARING-CROSS HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

Sir,—I should prefer to follow the good example of those who take a very deep interest in the welfare of the students of Charing-cross Hospital, in treating certain quarrelsome gentlemen among us with the silent contempt they richly merit, if, in my own opinion, a wrong construction might not be the inference of our friends, from the false statements put forth.

Permit me, therefore, to occupy a corner of your valuable space, to reply to the communication in your last week's journal from a Mr. Taperell.

In the first place, allow me to explain the peculiar claim of Mr. Taperell to consider himself one of the students of this school; it is necessary that I should do so, as we frequently have among us many pupils from other schools, who merely enter to a part of the course, and then leave us for some other school.

This gentleman is evidently one of that class, having merely taken tickets for one session of materia medica and anatomy, and the surgical practice of the hospital; the other part of his studies he is doubtless pursuing at another school, where I dare say he is equally entitled to raise a commotion, sow dissension, and reap derision. I would ask this gentleman, if he has not already received the full instruction from lectures he has paid for. If so, he is clearly very much exceeding the bounds of propriety in sending to you the communication he has done. On the other hand, if he has not, whether he was not one of the first who uttered loud complaints against the mode of teaching anatomy?

Will he venture to deny, that, at the first meeting of the students, he actually seconded a resolution condemnatory of the teacher of anatomy, which, after much noisy disputation, was negatived for a milder resolution, as given by himself in his communication, but of which he also wished to become the seconder, thus supporting both sides of the question? I beg leave to deny his imputation with regard to there being "a dispute between the Medical Committee and the students;" for both are of the same opinion, viz., that the Demonstratorship must be put into competent hands before another session begins.

I most emphatically deny Mr. Taperell's statement with respect to there "not being a single word of complaint raised against Dr. Smith;" on the contrary, complaints were becoming so frequent, that I, for one of his friends, thought it my duty to communicate with him respecting them. In conclusion, I deny that the Committee have "told the students, that, if they do not approve the course they are pursuing, they may take themselves off to King's College, or any other place;" this is a fabrication.

I feel sure Dr. Smith, after reading Mr. Taperell's letter, must be led to exclaim, "Save me from my friends!"

By giving insertion to these few remarks, you will much oblige,

Yours, &c. Jabez Hogg.

Gower-street.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 15th inst.:—

Clark, Wm. Falconar, Cunningham-place, St. John's Wood.
Corner, Matthew, Whitby, Yorkshire.
Gillam, George Jules, North Leigh, Oxfordshire.
Goold, Francis, Dublin.
Heys, John, Liverpool.
Langhurst, A. E. T., Kirk-by-Mallary, Leicestershire.
Lewis, Thomas, Gronger, Llandilo, Carmarthenshire.
Patterson, Samuel A., Downham Market, Norfolk.
Sutton, John, Kegworth, Leicestershire.
Wright, William, Lincoln.

The following gentlemen were admitted members on the 18th:

Abbott, Frederic Tydd, Nenagh, County Tipperary.
Asbury, Edward Jacomb, Enfield, Middlesex.
Diplock, Thomas Bramah, Chelsea.
Hodgson, Decimus Filius De, Carlisle.
Jackson, Charles Julian, Macclesfield, Cheshire.
Loe, James Scarborough, Leeds, Yorkshire.
Modlin, Robert, Castleside, Durham.
Moore, Frederic William, Charlmount-terrace, Dublin.
Roe, Charles James, Greenock, Scotland.
Smith, John, Coseley, Staffordshire.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 14, 1853:—

Cogan, Cecil Calvert, Royal Mail Steam Packet Service.
Greenwood, Major, Wakefield-street, St. Pancras.
Griffith, Griffith, Saltrenddyn, Merionethshire.

Apothecaries' Hall.—Preliminary Classical and Mathematical Examination, held on Tuesday and Wednesday, the 19th and 20th of July, 1853. The names of gentlemen who have passed the above examination:—

Adams, H., Lymington.
Alcock, John, Staffordshire.
Austin, M., Exeter, Devon.
Austin, S., Exeter, Devon.
Bannister, A., West Brompton.
Bogg, E. B., Louth, Lincolnshire.
Brooks, A. D'Oyley, Henley.
Brown, A., Wandsworth.
Brown, R. C., Preston, Lanc.
Bruce, S. N., Camden-square.
Bury, John W., Coventry.
Cannley, H., Hull.
Cawell, G., Ipswich.
Cheek, G. N., Welshpool.
Cotton, Thomas, Spalding.
Cunningham, C. C., Hailsham.
Currie, T. H., Budgham, Norfolk.
Davies, J. R., Birmingham.
Davies, J. W., Blackwood.
Drake, C. H., Kingsclere.
Duke, Allen A., Chichester.
Edwards, H. J., Bampton, Devon.
Edwards, H. J., Tutbury.
Elliott, C. H., Artillery-place.
Entwistle, Joseph, Bedford.
Everet, W., Stepney-green.
Ewen, A. B., Long Sutton, Linc.
Fernie, E., Wellingborough.
Fulham, J., City-ter., City-road.
George, J. W., King's College.
Gisburn, J. J. W., Hunslet.
Hadlow, H., Jewry-street.

HARDY, S. W., Highbury-crescent.
HARVEY, H. O., Bedford.
HAWTHORNE, H. J., Uttoxeter.
HAYWARD, E. J., Whitchurch.
HONEYWILL, T., Hammersmith.
HUGHES, R., Bala, North Wales.
JAKINS, W. V., Osnaburgh-st.
JEAFFRESON, H., Framlingham.
JOHNSON, D., Tipton.
JONES, T. EYTON, Merionethshire, Corwen's.
JORDAN, R. J., Streatham-park.
KERSHAW, B., Rochdale.
KER, C. S., Barnsbury-place.
KING, K., Maidstone, Kent.
LACY, DYSON, Newark.
LANGDON, T. C., Bampton, Devon.
LIDDON, W., Taunton.
LYS, F. D., Lymington.
MEREDITH, S., Westbourne-park.
MORRIS, W. H., Studley, Warwickshire.
NICHOLLS, A. C., Bourne.
NUSSEY, T. J. N., Cleveland-row.
OLDMAN, JOHN, Gainsborough.
PAVEY, G., Reading, Berks.
PENBERTHY, JOHN, Redruth.
PHILIPSON, G. H., Newcastle-on-Tyne.
POOLE, G., Newland, Monmouth.
PROCTER, W. O., Stoke-on-Trent.
READ, R. B., Guildford-place.
RICHARDSON, W. H., York.
SADLER, FREDERIC, Hull.
SHARPIN, EDWARD, Bedford.
SHIRTLIFF, E. M., Chiswell-street.
SLAUGHTER, C. H., Farningham.
SMITH, C. S., Artillery-place.
SMITH, F., Pentonville.
SOUTHBY, E. R., Bulford-house, Wilts.
STARKEY, T., Congleton.
STILWELL, HENRY, Uxbridge.
THOMAS, R., Seacombe.
THOMAS, H. O., Seacombe.
TOMLINSON, E. D., Wakefield.
TURNER, E. W., Deddington, Oxon.
WILLIAMS, DAVID, Northside.
WOOD, EDWARD, Leeds.
WRIGHT, H. J., Sheffield.
WYNTER, H. B., Bedford.

APPOINTMENTS.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL, WOLVERHAMPTON.—Mr. Arthur Stretton has been appointed House-Surgeon to this Institution.

NAVAL.—Acting Assistant-Surgeon Thomas Murray, M.D. (1853), to the Victory, flag-ship, at Portsmouth.

MILITARY.—10th Lt. Dragoons.—Assist.-Surgeon Alexander Mackay Macbeth, from the 33rd Foot, to be Assist.-Surgeon, vice James Macbeth, who exchanges. 33rd Foot.—Assist.-Surgeon James Macbeth, M.D., from the 10th Lt. Dragoons, to be Assist.-Surgeon, vice A. M. Macbeth, who exchanges.

HOSPITAL STAFF.—John Ogilvy, M.B., to be Assistant-Surgeon to the Forces, vice Henry Carr Lucas, deceased.

DEATH.

LEACH.—July 18, at 13, New Dorset-place, Clapham-road, James Leach, Esq., Surgeon, late of Vauxhall, aged 57. M.R.C.S. Eng., 1818; L.S.A. 1818.

QUEEN'S UNIVERSITY IN IRELAND.—ELECTION OF EXAMINERS FOR THE ENSUING YEAR.—On Saturday, the 16th instant, the Senate of the Queen's University in Ireland, at their Annual Meeting, elected the following gentlemen as Examiners in their respective departments:—

Greek.—Charles M'Douall, A.M., Professor Queen's Col., Belfast.
Latin.—Bunnell Lewis, A.M., Professor Q. C., Cork.
English Literature.—G. L. Craik, A.M., Professor Q. C., Belfast.
Logic and Metaphysics.—Rev. William Fitzgerald, D.D., &c.
Natural Philosophy.—George F. Shaw, F.T.C.D., Professor Q.C., Cork.
Mathematics—John Mulcahy, LL.D., Q.C., Galway.
Chemistry.—Edmund Ronalds, Ph.D., Professor Q.C., Galway.
Anatomy and Physiology.—C. C. King, M.D., Professor Q.C., Galway.
Zoology and Botany.—George Dickie, M.D., Professor Q.C., Belfast.
Modern Languages.—Rev. J. G. Abeltshauser, LL.D., Professor T.C.D.
Mineralogy, Geology, and Physical Geography.—Frederick M'Coy, F.G.S.L., Professor Q.C., Belfast.
Jurisprudence and Political Economy.—D. C. Herm, A.M., Professor Q.C., Galway.
Law.—James Anthony Lawson, LL.D., etc.
Civil Engineering and Surveying.—S. Dowing, A.M.
Agriculture.—Edmund Murphy, A.B., Professor Q.C., Cork.
Celtic Languages.—John O'Donovan, LL.D., M.R.I.A., Professor of Irish, Q.C., Belfast.
Medicine.—John T. Banks, M.D., M.R.I.A., King's, Professor of Physic.
Surgery.—James G. Hughes, M.D., F.R.C.S.I.
Materia Medica and Pharmacy.—Aquilla Smith, M.D., M.R.I.A.
Midwifery.—H. F. L. Dwyer, A.M., etc.

SIR ASTLEY COOPER'S CLINICAL PRIZE.—The prize of 300*l.* has just been awarded to Henry Grey, Esq., of St. George's Hospital, for his Essay on the Spleen. We are further given to understand, that the Council has offered to print the essay, at its own cost, to mark their sense of its excellence.

AT PROME, by the last advices, the troops were suffering severely from dysentery.

THE YELLOW FEVER.—SOUTHAMPTON, July 18.—The total number of cases of yellow fever on board the Orinoco, which arrived from the West Indies, on Sunday evening, was 48, of which 14 proved fatal. The first case made its appearance on the day after the ship arrived at St. Thomas, and during the remainder of her stay, while waiting for the intercolonial steamers, no less than 33 cases occurred. These were confined to the seamen and stokers, with the exception of a midshipman, Mr. Hey, and 3 engineers. After leaving St. Thomas there were 15 fresh cases, among whom was the servant of a French gentleman. The fore peak of the steamer was fitted up and used as a hospital during the time the ship was in harbour at St. Thomas; but on her leaving, the heat being excessive from the closing of the ports, the medical officer of the ship, Dr. Finlay, suggested the removal of the sick on deck, and Captain Hast immediately ordered a double awning to be spread on the fore part of the spar deck, where, after their removal, the sufferers soon felt the benefit of the change, which was attended by a diminution of the sickness. The passengers and ship's company feeling that they were greatly indebted to Dr. Finlay for his kindness and humanity, presented that gentleman with a very flattering address. It appears that Dr. Finlay performed not only the immediate duties of his office, but also those of nurse and constant attendant on the sick, night and day, during the awful ravages of the scourge.

CONTAGION AMONG ANIMALS.—There is a new provision in a Bill before the House of Commons, just printed, imposing a penalty, not exceeding 20*l.* on persons bringing glandered horses, &c., into market, or turning them out on unenclosed land. The Act 11 and 12 Victoria, c. 107, is to be continued to the 1st of September, 1854, to prevent the spreading of contagious or infectious disorders among sheep, cattle, and other animals.

CONSUMPTION OF OPIUM.—From an official report just published, it appears that during the last five months the enormous quantity of 63,354lb. of opium have been imported into this country; the quantity for the last month was 9,699lb.

MORE ROTTEN MEAT IN THE NAVY.—Recent letters from the squadron in China state that 50,000 lbs. of this carrion had been thrown overboard.

PROCURING ABORTION.—At the York Assizes on Friday, the 15th, Margaret Simpson, 33, was charged with having feloniously caused Mary Fielding to take a noxious drug, with intent to procure her miscarriage. The young woman having formed the acquaintance of a young man (Moore) at the commencement of the year found herself *enciente*. She made known her condition to him, when he advised her to call on the prisoner. She did so, and the prisoner gave her a bottle containing a liquid, and a powder, telling her to take twenty-four drops of the former on a piece of lump sugar, and the powder at twice. The liquid in the bottle was found to contain oil of savin, cantharides, and pennyroyal, the effect of a large dose of which on a pregnant woman might, according to the evidence of a surgeon examined, produce abortion. The powder was colocynth, and, used along with the liquid, would have the same tendency.—"Guilty." Sentence deferred.——Auguste Wilhelm, 26, was then charged with having used a certain instrument to procure abortion. The prosecutrix in this case was the same as in the last. It appeared that the medicine she had taken not having produced the effect intended, she had been persuaded by Moore to visit the prisoner, who practised as a German quack doctor at Halifax; he told her the safest mode of administering the medicines which would get rid of the child was by an injection. After some persuasion she was induced to allow him to use a syringe which contained some liquid like porter in appearance. The application gave her no pain, but she refused to go any more. Moore talked with the prisoner first, and he then took her into a back room and seated her on a chair, after which the syringe was used. His Lordship was of opinion that this was not using an instrument with intent to procure abortion within the meaning of the statute. The syringe was a vessel merely containing a liquid, which must be proved to be a noxious drug to bring the case within the meaning of the first part of the section of the statute. The prisoner, in cross-examination of Mary Fielding, elicited that Moore had been accused of labouring under a loathsome disease at the time that this occurred, and that he told witness he was poorly, and that the prisoner was attending him. The prisoner then stated that he had used the syringe on the person of the prosecutrix, supposing she was ill of the same disorder, (knowing from Moore that she was intimate with him,) for the purpose of curing her, as she complained of being ill, and he understood that to be her illness. His Lordship, on this evidence, directed the jury to acquit the prisoner, as there appeared some foundation for its truth, and there was no proof of what the syringe contained. ——At the Oxford Assizes, Joseph James, labourer, was charged with feloniously administering savin to Ann Clarke, with intent to procure miscarriage. The case against the prisoner was proved by the young woman, Ann Clarke, a domestic servant, who stated that she had become in the family-way by the prisoner, a farm servant, and that when she informed him of her state he proposed to give her something which should procure abortion. He gave her something in three bottles, which she took, and also some powder. This produced sickness, but did not occasion miscarriage, as was expected.

The young woman was carried into Court in a state of partial paralysis, and far advanced in pregnancy. Mr. Lamb gave evidence to the effect that he had examined the remains of the drug found in one of the bottles, and, in his opinion, it consisted of an infusion or decoction of the leaves and small branches of the shrub savin. He stated, that this drug was generally believed to have the property of causing abortion, but, in his opinion, this was a vulgar error. It would produce vomiting and purging. Mr. Justice Coleridge told the jury the question was, whether the prisoner had administered savin or any noxious thing with the intent alleged. The Medical man had stated, that it was a vulgar error to suppose that savin would procure abortion; but he (Mr. Justice Coleridge) thought the authority of Dr. Taylor was sufficient to show that this was not a vulgar error, and that savin, by the shock which it produced on the system, would not only cause abortion, but, when it produced that effect, would also destroy the life of the mother. The jury found the prisoner "Guilty." Sentenced to six months' imprisonment, with hard labour.

Mortality Notabilia.—It is satisfactory to notice a further decrease in the mortality of London. In the week that ended last Saturday the deaths registered were 904; in the preceding week they were 925; within the last six weeks the weekly number has been reduced by a hundred. In the ten weeks corresponding to last week of the years 1843-52 the average number was 1004, which, raised in proportion to increase of population, becomes 1104. Hence it appears, that the actual number of deaths in last week is less than the estimated amount by 200. Fatal cases produced by zymotic or epidemic diseases, and registered last week, are in the aggregate 225; the average number in ten corresponding weeks, after correction for increase of population, is 337. This average, however, is swelled by the cholera of 1849, and makes the comparison more favourable for last week than if founded on the results of ordinary years. One disease in this class exhibits a considerable increase in the present Return,—namely, diarrhœa,—which amounts to 54. Six deaths occurred in the week in the London Fever Hospital.

Births.—Last week the births of 716 boys and 651 girls, in all 1367 children, were registered in London. In the eight corresponding weeks of the years 1845-52 the average number was 1289.

Mortality in Public Institutions for the week ending July 16:—

	Males.	Females.	Total.
Workhouses	45	37	82
Military and Naval Asylums.. ...	3	...	3
General Hospitals	27	8	35
Hospitals for Special Diseases ...	2	6	8
Lying-in Hospitals	1	...	1
Lunatic Asylums	2	3	5
Military and Naval Hospitals ...	3	...	3
Hospitals for Foreigners, &c. ...	1	...	1
Prisons	...	...	...
	84	54	138

DEATHS *in the Metropolis for the week ending Saturday, July* 16, 1853.

Causes of Death.	July 16. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	473	286	141	904	10044
Specified Causes	471	285	141	897	9996
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	175	38	12	225	3058
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	26	11	42	443
3. Tubercular Diseases	90	115	4	209	1940
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	56	17	18	91	1091
5. Diseases of the Heart and Blood-vessels	3	14	14	31	324
6. Diseases of the Lungs and of the other Organs of Respiration ...	49	20	18	87	886
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	23	27	8	58	671
8. Diseases of the Kidneys, etc. ...	1	9	6	16	112
9. Childbirth, Diseases of the Uterus ...	...	4	1	5	108
10. Rheumatism, Diseases of the Bones, Joints, etc.	3	3	...	6	79
11. Diseases of the Skin, Cellular Tissue, etc.	1	...	...	1	15
12. Malformations	1	...	...	1	37
13. Premature Birth and Debility ...	30	1	...	31	249
14. Atrophy	26	...	7	33	255
15. Age	...	...	35	35	392
16. Sudden	2	...	2	4	78
17. Violence, Privation, Cold, and Intemperance	6	11	5	22	258
Causes not Specified	2	1	...	7	48

TO CORRESPONDENTS.

Charing-cross Hospital.

A Student.—The following letter has been received by a Member of the College:—

[Copy.]

"Royal College of Surgeons, July 18, 1853.

"Sir,—In reply to your inquiry, whether the Charing-cross Hospital Medical School is now recognised by this College, I have to acquaint you that the Court of Examiners of this College have found it necessary to direct a visitation of the said school, but have not come to any decision on the question of its continued recognition. If the additions and alterations which the Court of Examiners think necessary to the efficiency of the school should be completed before the beginning of the ensuing Winter Session, the recognition will be continued. In the mean time, the Council has directed its removal from the list of schools from which certificates of the professional education of candidates for the Fellowship and Membership of the College will be received for the year commencing the 1st of August next.

"I am, Sir,

"Your most obedient servant,

"Edmund Belfour, Secretary."

[To the Editor of the Medical Times and Gazette.]

Sir,—Two friends of mine, whose sons have just "passed"—the one at the preliminary examination of the Apothecaries' Hall, the other at the Matriculation Examination of the London University—are disputing which examination is the more difficult to pass through, and which confers the greater honour. Will you, Sir, be kind enough to solve this point in your notice to Correspondents? I am, &c. C. P. R.

A Subscriber to the "Medical Times and Gazette."

[Perhaps some of our Correspondents who have lately passed both Examinations will reply to this.]

[To the Editor of the Medical Times and Gazette.]

Sir,—In answer to your Correspondent "Inquirens," I may be permitted to state, that when nitric acic is added to a solution of protosulphate of iron, the nitric acid at once yields oxygen to the protoxide of iron, converts it into peroxide, and is at the same time reduced to peroxide of nitrogen or nitric oxide. This gas, when absorbed by a solution of a protosalt of iron, produces an olive green, or almost black liquid; and as the peroxide of nitrogen escapes gradually by exposure to the air, the colour becomes lighter, and, finally, of the yellow tint natural to a solution of persulphate of iron. I am, &c. X.

London.

H. W. W.—We believe that a medical man is as exempt from this duty as from serving on a jury.

W. H. Blackton, Esq.—We shall be happy to receive the report of the case of intussusception.

A Provincial.—A Physician.—We have heard of the attempts of an evangelical Contemporary to get up a demonstration, and of his supplications to the branches for favourable Resolutions at their respective meetings. This well deserves the *rap* our Correspondents suggest, but we think our time and space better occupied at present.

Mr. Phippen's paper on the Climate of Malta and Egypt shall be inserted as soon as possible.

A Fellow of the College, who will see Mr. Guthrie's letter in this week's Number, will, we think, scarcely wish us to publish his remarks upon what occurred so long as thirteen years ago.

E. G. Blackmore, Esq., shall be replied to by letter.

A Father of a Family, Cheltenham.—The gentleman referred to is a legally-qualified Surgeon.

Mr. Greenway's request has been attended to; but no message has been received.

M.R.C.S.—Our Correspondent will see that a publication of his letter could do no good. The evil has been sufficiently pointed out in the letter published last week, and Mr. Guthrie's reply shows that it has been attended to. Probably this fault of manner is just one of those faults which no one likes to make another aware of. A serjeant learned in the law, and now in large practice, always clipped his "H's," talked about his "*'and upon his 'eart*," eating "*'ashed 'are*," riding a "*'igh trotting 'orse along a 'ard road*," and so on, in perfect innocence, until a friend amused himself in court one day by cutting all the "H's" out of a newspaper and putting them into a pill-box, which he labelled "One to be taken every minute," and threw it over the table to his learned brother. Of course the mistake was corrected. Mr. Guthrie's colleagues may have felt some delicacy in telling him of any little roughness or unkindness which he might appear to show to a candidate; but we have no doubt that natural kindness of disposition will not be covered by a rude exterior now that the effects of evil appearances have been made known.

D. F.—Nock, Bloomsbury-street; Kimpton, Wardour-street.

An Old Subscriber.—Perfectly fitting and becoming. There is no other course to pursue, and it is constantly done.

Græculus.—The term is said to be derived from ἀ, νηρὸς, and εἶδος, and to signify a form without fluid. If so, it is not well chosen, as it only indicates what the instrument is not, and does not explain what it is.

A Student.—A letter addressed "Nachet, Optician, Paris," will obtain all the particulars you require. The microscope can be sent either by M. Nachet direct, or entrusted to the care of a friend.

Dr. Boon Hayes's eleventh Lecture is in the printer's hand.

COMMUNICATIONS have been received from—

Dr. Todd; Mr. Robertson; G. J. Guthrie, Esq.; W. H. Blackton, Esq., Edward E. Phippen, Esq.; Dr. Forbes Royle; Græculus; D. F.; Edwin Gordon Blackmore, Esq.; Mr. Liddle; Samuel Lane, Esq.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture XI.

FERMENTATION OF SUGAR.

When describing to you the general properties of the substances which are called sugars, I have pointed out as one of their most salient characters, the faculty possessed by sugars of being, under certain circumstances, converted into alcohol and carbonic acid, of undergoing the metamorphosis called "alcoholic fermentation." This process of transformation necessarily claims our attention, equally interesting as it is from the scientific questions involved in its explanation, as on account of the immense scale on which it is carried out in practice.

Experiment has proved, that although all the sugars which I have enumerated,—namely, grape-sugar, uncrystallisable sugar, glucose, and milk-sugar,—are capable of alcoholic fermentation, they by no means undergo this change with the same facility. It is found, that of all the substances which I have named, glucose is most easily transformed, while cane-sugar and milk-sugar undergo the same change more slowly. On this account, and also because it is in practice almost invariably glucose which is fermented, we will examine the transformation of that substance. You recollect that the composition of glucose is represented by the formula,

$$C_{12}\ H_{14}\ O_{14}$$

But that this expression includes two eqivalents of water, which may be expelled at the temperature of boiling water. The dry substance, glucose, then, may be stated to be

$$C_{12}\ H_{12}\ O_{12}$$

If a solution of glucose, at a temperature which may vary between (40° and 90° F.) 4° and 32° C., be left in contact with substances in a state of decomposition, such as decaying albuminous principles, both of vegetable and animal origin, putrid blood, or urine, etc., we find that an evolution of carbonic acid soon begins, the rapidity of which depends to a certain extent upon the exact temperature at which the process is accomplished. After twenty or thirty hours the liquid has ceased to contain any sugar; instead of this, we find several substances, among which invariably a peculiar volatile liquid is present, which may be separated by distillation, and which, as you all know, is called alcohol. The experiment succeeds best when the operation be performed between 18° and 21° C. (65° to 70° F.), and when, as the agent of transformation, a substance is employed which is called "ferment," and which is better known by the term of "yeast." In this case, almost the sole products of fermentation are carbonic acid and alcohol. It is by means of yeast that I have induced the fermentation of a portion of glucose contained in this small carboy. You observe the liquid is in a powerful agitation, and, as the carboy is provided with a delivery-tube, we have no difficulty in examining the gas which is evolved. The simple lime reaction tells us that it is carbonic acid; more accurate experiments have proved, that besides $C\ O_2$ no other gas is disengaged in this reaction. If the residuary solution be submitted to distillation, a liquid passes over, which is generaily called spirits, and which consists of alcohol and water. By a series of manipulations, which I shall mention directly, the water may be entirely removed from this mixture, when the alcohol remains in the pure state. Analysis has proved alcohol to be represented by the formula,

$$C_4\ H_6\ O_2$$

And experiments made with the special object of ascertaining in what proportion the amount of alcohol generated stands to the quantity of carbonic acid which is disengaged, have shown that this transformation may be expressed by the following equations:—

$$\underbrace{C_{12}\ H_{12}\ O_{12}}_{\text{Glucose.}} = \underbrace{2C_4\ H_6\ O_2}_{\text{Alcohol.}} + 4CO_2$$

The transformation of glucose into alcohol and carbonic acid, takes place between the limits of temperature which I have mentioned,—4° and 32° C. (40° and 90° F.,)—but is most active between 21° and 26° C. (70° and 80° F.)

Cane-sugar and milk-sugar, submitted to the action of the ferment, undergo exactly the same transformation,—but the accomplishment of this process invariably requires more time. This becomes readily intelligible by the fact, long suspected, and lately established by a series of careful observations, that the several varieties of sugar, before undergoing alcoholic fermentation, are invariably first converted into glucose by the very ferment which effects the subsequent transformation into alcohol and carbonic acid. It is generally believed that this conversion is effected by the small quantity of free acid which is always found in yeast,—an opinion which appears to be supported by the observation, that the action of yeast, both on cane and milk-sugar, is remarkably retarded by the neutralisation, or the removal by washing, of the free acid in the ferment.

The transformation of sugar into alcohol is a process of unusual interest, on account of the enormous scale on which it is carried out in practice, several trades and manufactures depending altogether on this curious metamorphosis. In the manufacture of wine, in the brewing of beer, in the distillation of spirits of every description, fabulous quantities of sugar undergo the process of fermentation. Even in the manufacture of vinegar, as we shall see by and by, the fermentation of sugar is largely concerned. Perhaps it may not be uninteresting to you to look at some statistical facts which are calculated to illustrate the importance of the subject of which we are treating. According to the experience of the Board of Inland Revenue and of the Customs, the average annual consumption of alcoholic liquids in the United Kingdom is as follows(a):—

24 millions of gallons of proof spirit (b) is yearly manufactured in this country.
4 millions of gallons in foreign spirits, (rum, Geneva, &c.)
44 millions of gallons in beer.
2 million of gallons in wines.

74 millions of gallons of proof spirit.(c)

This quantity would just twice fill Hanover-square up to the garrets.

The usefulness of fermentation, which may be traced far beyond the production of wine, beer, and vinegar, into a great variety of trades and professions, has attracted, from a comparatively early period, the attention both of the practical man and of the scientific chemist. It may be said, that it has been studied with predilection, and these studies have elicited a great deal of useful(a) information on the subject. The temperature at which fermentation proceeds most vigorously has been carefully ascertained. It is known, from experience, that many substances, such as certain acids, favour this process; while others, such as pyroligneous acid, sulphurous acid, corrosive sublimate, and volatile oil, retard or altogether interrupt it; and the best proportion in which the yeast is to be employed has been carefully established. But our knowledge regarding the causes of fermentation, and especially regarding the true nature of the ferment, such as yeast, etc., is still imperfect.

(a) I am indebted for these numbers to Adam Young, Esq., of the Chemical Department of the Inland Revenue Office.

(b) Composition of proof spirit by weight:—

Alcohol	49·24
Water	50·76
	100·00

(c) The details of these calculations are as follow:—

1—HOME-MADE.

24 million gallons of plain spirits, proof strength.
340 million gallons, or 15 million barrels of beer.

2—IMPORTED.

2½ million gallons rum (Colonial).
1½ million gallons brandy, Geneva, etc.
6 million gallons wine.

The beer is assumed to contain, upon an average, only 8 1-5th per cent. by measure of proof spirit, and the wine, 33⅓ per cent.

All these numbers are rather below than above the truth.

The origin of the ferment, its behaviour, and the views which the latest studies upon this subject have elicited, claim our attention for a moment. The juice of fruits, of grapes, for instance, which is rich in uncrystallisable sugar, gradually convertible into glucose, may be preserved for an almost unlimited period, if it be separated from the fruit in such a manner, as to exclude, during this operation, the access to it of atmospheric air. This tube contains a quantity of grape-juice obtained by squeezing the grape under mercury, and allowing the liquid to pass on into the tube. It has been preserved for about a month in a room, the temperature of which was very frequently between 21° and 26° C. (70° and 80° F.) the grape-juice has not undergone the slighest change. If, now, air or oxygen be admitted, we find, that in the course of half an hour; active fermentation sets in, carbonic acid is evolved, and, after a short time, the sugar is converted into alcohol. Carbonic acid and alcohol are by no means the sole products of the fermentation of grape-juice. In addition to these, there is formed a grey insoluble body, which generally separates upon the surface of the liquid. This substance, the result of fermentation, is capable of again inducing fermentation when coming in contact with fresh liquids containing sugar. The result, however, varies considerably, according to the nature of the sugar-solution in which it causes fermentation. If this solution be one of pure cane-sugar or glucose, we find that its action is very soon exhausted. After a certain quantity of sugar has been transformed, this wine-ferment is converted into a white fibrous mass, possessing no longer the slightest action upon a fresh solution of sugar. A very different deportment, on the other hand, is observed, if the wine-ferment be introduced into such a solution of saccharine matter, as is obtained by the conversion of starch into sugar by means of diastase, if we ferment the saccharine solution, which the brewer calls sweet-wort. In this case, we find that after the completion of the process, a very considerable portion of new ferment is formed, sometimes ten or twenty times the original amount of the wine-ferment employed. The new ferment, which, for the sake of distinction, we will call beer-ferment, exhibits again the same behaviour as the ferment produced from wine; its fermentative action on pure sugar is rapidly destroyed; while it is capable of propagating fermentations, I might say, *ad infinitum* in solutions of glucose derived from barley or similar sources. In the manufacture of beer a much larger quantity of ferment of yeast is formed in each operation, than that which is necessary to start the following fermentation. The impossibility of producing ferment from pure sugar renders it obvious, that its formation in grape juice or infusion of barley must be due to the presence of other substances. In addition to a great many mineral salts, it contains several organic acids—we shall see by-and-by, that it is the chief source of one of the most interesting organic acids—tartaric acid, and a large proportion of albuminous principles. These substances are the source of the wine-ferments; similar albuminous principles are present in sweet-wort, in fact, in all juices of plants, and hence, the invariable formation of ferment of yeast, when the sugar of such juices is submitted to fermentation.

Thus it is evident that the saccharine juices of the vegetable kingdom contain within themselves this most powerful agent of their destruction,—an agent whose powers lie imperceptible and dormant, as it were, as long as the access of air is prevented, but which are called into action the very moment it is joined, under the necessary conditions, by its indispensable ally the oxygen of the atmosphere.

The recognition of the origin of the ferment forms but a first step in the investigation of this extraordinary substance. Admitting that the ferment is the product of the action of oxygen upon the albuminous principle of vegetable juices, the question arises, What kind of a body is produced in this manner? Is it an individual definite compound which is endowed with these wonderful properties? Is it a soluble compound, or, is it the insoluble amorphous substance which separates from the liquid? In what manner, lastly, does the ferment, whatever substance it may be, effect the metamorphosis of the sugar? Very different views have been brought forward on this subject in the course of time, and the opinions of chemists remain divided even at the present moment.

The deportment exhibited by ferment, by ordinary beer yeast for instance, with a solution of pure sugar in water, appears to furnish the key to these questions. I mentioned, that ferment is by no means capable of converting an unlimited quantity of pure sugar; the ferment when introduced into a large quantity of sugar-water excites a powerful fermentation, but during the progress of this action it undergoes itself a series of changes; the slimy matter is gradually converted into a white mass of fibres, resembling woody fibre, which are not further changed. The ferment thus transformed has entirely lost its action upon sugar-water. And *thus we find that the ferment is capable of effecting the transformation of sugar only while it is itself in a state of transformation.* The above observations, which in a great measure are due to Colin and Thénard, have led Professor Liebig to a more general conception of fermentative processes. Far from attributing the ferment-action to any individual body, (in fact, chemists had vainly endeavoured to isolate such a body, both from the soluble and insoluble matter of yeast,) Liebig is of opinion, that a ferment is essentially a substance which is undergoing a transformation, (which is itself in a state of decomposition,) and that the excitation of fermentation consists simply in a communication of the motion possessed by the molecules of the substance in a state of decomposition (the ferment) to the quiescent molecules of an undecomposed body. Fermentation thus becomes the transference of certain conditions of change from one body to another. Sugar, when exposed to the action of nitrogenous substances, in which the contact of atmospheric oxygen has induced a condition of change, splits into alcohol and carbonic acid, in consequence of the mechanical impulse which the quiescent elementary molecules of sugar have received from the motion of the molecules of the ferment.

The fermentation of sugar is by no means an isolated case; as we proceed in the study of organic compounds, we shall become acquainted with a considerable number of very analogous processes; but, even in chemistry, a variety of actions are met with, which evidently must be ascribed to similar causes. It is, in fact, from mineral chemistry that Liebig collects the most striking illustrations of his ideas upon this subject. He reminds us of the well-known fact, that platinum alone is not attacked by nitric acid, while an alloy of platinum and silver is oxidised with the greatest facility; that water is not decomposed by copper in the presence of dilute acids; while brass, an alloy of copper and zinc, effects this decomposition readily with formation of oxide of zinc and oxide of copper; and that binoxide of hydrogen, when losing its second equivalent of oxygen, in the presence of certain metallic oxides, such as binoxide of manganese, or lead, and protoxide of silver, gives rise to a partial or even to an entire reduction of the oxide.

The oxidability of silver and zinc is transferred in this case to platinum and copper, while the decomposition of binoxide of hydrogen is communicated to the metallic oxides, which alone, under these circumstances, would not be altered.

It has been stated, in the commencement of this lecture, that alcoholic fermentation takes place between certain rather extended limits of temperature, but that the action is most regular and vigorous between 18° and 21° C. (65° and 70° F.) Between these temperatures, glucose appears almost entirely converted into alcohol and carbonic acid; I say almost, because, even then, minute quantities of foreign substances are produced, or, perhaps, better expressed, a minute portion of sugar appears to undergo a transformation different from true alcoholic fermentation.

If, during the process, the temperature rise much above 21°C. (70°F.), the quantity of alcohol produced sensibly diminishes, and the character of the transformation gradually changes altogether. If the temperature rise to between 30° and 40° C. (86° to 104° F.), the alcoholic fermentation ceases entirely, being replaced by what is called the *viscous fermentation.*

A saccharine liquid undergoing viscous fermentation does not present the same appearance which is exhibited by the liquid during the progress of alcoholic fermentation. The former process is usually attended with an evolution of carbonic acid; and, if the liquid be distilled after the action has terminated, a very trifling quantity of alcohol is obtained. The liquid is found to be strongly acid, and this acid reaction is due to the formation of a very important organic acid,—viz., of lactic acid, of which I may have to treat more in detail hereafter, since it has been lately produced by a very remarkable and interesting process. But carbonic and lactic acids are by no means the sole products; in addition, there are found two indif-

ferent substances. The first, mannite, is a compound crystallising in beautiful needles; it is the chief constituent of manna, and is present, in smaller or larger proportion, in the juices exuding from many fruit-trees, in several varieties of fucus and mushroom. And, secondly, a gum-like substance, which is either gum (arabic), or closely allied to it, possessing, in fact, all the properties, and also the composition of this substance. It is from the constant formation of this substance, which is precipitated in white curdy flakes from the solution on addition of alcohol, that the name of *viscous fermentation* has been derived. The nature of this fermentation is readily intelligible, if we examine the composition of the substances which are produced. The formula of gum is C_{12} H_{10} O_{10}, that of lactic acid C_{12} H_{12} O_{12} (isomeric with anhydrous glucose); that of mannite lastly, C_6 H_7 O_6, or C_{12} H_{14} O_{12}. Gum and lactic acid are formed from glucose simply by an elimination of water.

$$\underbrace{C_{12}\ H_{14}\ O_{14}}_{\text{Glucose.}} = \underbrace{C_{12}\ H_{10}\ O_{10}}_{\text{Gum.}} + \underbrace{4\ HO}_{\text{Water.}}$$

$$\underbrace{C_{12}\ H_{14}\ O_{14}}_{\text{Glucose.}} = \underbrace{C_{12}\ H_{12}\ O_{12}}_{\text{Lactic acid.}} + \underbrace{2\ HO}_{\text{Water.}}$$

Mannite lastly contains the elements of glucose, minus 2 equivalents of oxygen.

$$\underbrace{C_{12}\ H_{14}\ O_{14}}_{\text{Glucose.}} = \underbrace{C_{12}\ H_{14}\ O_{12}}_{\text{Mannite.}} + O_2$$

It appears to be produced by the partial deoxidation of sugar, the oxygen of which may participate in the combustion of the ferment originally induced by atmospheric oxygen.

I have briefly to notice two other fermentative processes, which are not less interesting than the viscous fermentation. The character of fermentations, and of the products to which they give rise, are by no means exclusively dependent upon the temperature; the nature of the ferment exerts, likewise, a very decisive influence. Thus we find, that sugar, at the very temperature of alcoholic fermentation, when submitted to the action of cheese-ferment, instead of beer or wine-ferment, *i.e.*, to the action of casine, in that state of decomposition which is effected by protracted exposure to the atmosphere, furnishes no longer a trace of alcohol. Under these circumstances, only traces of carbonic acid are evolved, and the liquid becomes gradually so intensely acid, that the process of transformation is arrested unless the free acid be neutralised by some carbonate. After the lapse of some time the sugar is entirely converted into lactic acid, and hence the name of "lactic fermentation" which is given to this process. No mannite, and only traces of gum-like substances, are generated during the reaction. If the transformation of sugar be effected by caseine at the temperature of the viscous fermentation (*i. e.*, between 30° and 40° C.—86° and 104° F.), instead of at the temperature of the alcoholic fermentation, another change sets in, which gives rise to perfectly different products. Between these temperatures the process becomes very tumultuous, abundance of gas is given off, which is no longer pure carbonic acid, but contains a large proportion of hydrogen. If the liquid remaining after all action has ceased, be examined, it is found to contain an acid differing in every respect from lactic acid. The acid thus produced, is volatile; it has the composition and all the properties of one of the acid constituents of ordinary cow's milk-butter, in fact, it is butyric acid. The transformation of sugar into butyric acid is represented by the following equation:—

$$\underbrace{C_{12}\ H_{14}\ O_{14}}_{\text{Glucose.}} = \underbrace{C_8\ H_8\ O_4}_{\text{Butyric Acid.}} + 4CO_2 + 4H + 2HO$$

But this buytric fermentation is but a further stage of lactic fermentation, preceded, as the formation of butyric acid, invariably is, by the formation of lactic acid. But lactic acid, you recollect, differs from glucose simply by containing 2 equivalents of water less. So that, the conversions require no further explanation.

The transformation of sugar into butyric acid was discovered about ten years ago by Messrs. Pelouse and Gelis. It is a process of particular interest, inasmuch as it furnished the first direct proof of the convertibility of sugar into fats, —a change which at that period was contested by physiologists.

From the statement which I have brought under your notice, you perceive that sugar must be looked upon as a sort of magazine of carbon, hydrogen, and oxygen, from which, by the action of fermentation, a very considerable number of different substances may be compounded. It is probable, not to say certain, that this number is by no means completed with alcohol, mannite, gum, lactic, and butyric acids, but that a further examination of this process, especially that of fermentations accomplished at certain different temperatures, and induced by a variety of ferments, will enable chemists to produce a vast series of bodies from sugar, which are, at present, obtained from perfectly different sources.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. III.

CASE OF AMPUTATION OF THE THIGH—SUBSEQUENT LIGATURE OF THE FEMORAL, AND THEN OF THE EXTERNAL ILIAC, ON ACCOUNT OF SECONDARY HÆMORRHAGE.

By JOHN MITCHELL, M.D.
Surgeon 7th Fusiliers.

I amputated the right thigh of private Thomas Francis, of the 7th Royal Fusiliers, a young soldier, 21 years of age, on the 19th of August, 1852, in the General Military Hospital, at Plymouth, on account of a white swelling of the knee, which was rapidly exhausting him.

The double-flap operation was performed, the flaps being made by transfixion on the anterior and posterior aspects of the limb. Nine arteries were tied. The patient, a man of great resolution, bore the operation well.

On examining the knee-joint, it was found to be full of curdly pus; the synovial apparatus was converted into a red jelly-like pulpy mass, and the cartilages were partially corroded.

On the 23rd of August, between ten and eleven o'clock in the forenoon, profuse arterial hœmorrhage took place from the stump, and, judging from the magnitude of the stream, and the force with which it was, *per saltum*, ejected, it was evident that the superficial femoral artery had given way.

I was on the spot, and lost no time in cutting down upon and tying the common femoral artery in the groin, an inch below Poupart's ligament.

The bleeding from the stump at once ceased, but returned in a mitigated form at the end of two hours, when it was effectually restrained, by pressure made on the bleeding point with the finger, a firm compress of lint being interposed.

The pressure was kept up in this manner forty-eight hours, when it was left off, and no recurrence of bleeding from the face of the stump ever afterwards took place.

I preferred securing the common femoral artery in the groin to taking up the superficial femoral nearer the bleeding point, being influenced by the apprehension, that the latter would ill withstand the effect of a ligature, and would again give way.

Between six and seven o'clock on the morning of the 1st September, the common femoral artery, which had been taken up, suddenly gave way, and a gush of blood followed.

There were two orderlies over the patient, of whom one, unaccustomed to such scenes, became faint at the sight, while the other, though instructed what to do, could not succeed in temporarily arresting the stream of blood.

Fortunately the Hospital Sergeant's quarters immediately adjoined the ward where the bleeding man lay, and he made most effective pressure on the artery as it passes over the pubes, until I arrived from my quarters in the hospital, where I was in bed at the time.

Seeing that no time was to be lost, I proceeded at once to

put a ligature round the external iliac artery, which I did, making the incisions in the usual manner.

On tying the thread, the bleeding from the common femoral instantaneously ceased. Two hours after the last operation, a profuse "welling up" of arterial blood took place from the wound where the common femoral had been tied.

The actual cautery was applied to this point, but the hæmorrhage went on. The wound was next stuffed with lint, and pressure kept up by means of the hand of an orderly, who was relieved night and day every two hours.

Mr. Sunter, the assistant-surgeon of the Regiment, or myself, were always present in the hospital, and we were several times called to arrest the bleeding from the inguinal artery, which was always effected by making pressure in the right direction on the bleeding point.

This compression was kept up for four days; at length suppuration took place; the compresses of lint were discharged, along with the matter. The ligature came away from the external iliac on the 17th September, and all was safe as far as the immediate consequences of hæmorrhage were concerned.

He was much reduced by these repeated losses of blood, the pulse was very rapid, and a mere thread; he complained of noise in his ears, his voice had degenerated into a whisper, and his countenance was of death-like paleness.

By the cautious use of wine and appropriate nourishment he recovered from this state, the stump and wounds nearly healed, and a favourable prognosis as to the ultimate issue was drawn, when, after a time, a swelling appeared on the back of right carpus, that ended in ulceration communicating with carious bones; a wasting diarrhœa set in, he was attacked with occasional epileptic fits, and, after struggling a long time against this complication of maladies, he sank emaciated to the last degree.

He died on the 21st of June, 1853.

For two days preceding dissolution, a pretty copious arterial hæmorrhage oozed from the ulcerated openings on wrist, but, as any further operative procedure was out of the question, it was moderated by pressure made on the humeral artery.

Though the stump had long healed, the wound where the common femoral had been taken up never entirely closed, and a purulent discharge continued to issue therefrom.

Immediately over the point of deligation, there was a firm tumour, about the size of a pigeon's egg. This tumour derived no pulsative expansion whatever; but the artery above and below could be felt beating, though less strongly than in the other limb.

A small fistulous opening, penetrating about an inch, remained on the site of the track of incision made for securing the external iliac.

I ought to have observed, that, prior to amputating the thigh, the patient, who was of sanguine temperament, appeared otherwise to be free from disease, and an apt subject for operation.

Post-mortem Examination Thirty Hours after Death.—On opening the head there was found to be deposited between the skull and dura mater, in the right side, under the parietal bone, some tubercular matter, and in the right corpus striatum there was a firm tubercle about the size of a pigeon's egg.

There were about six ounces of a strumous purulent matter in the anterior mediastinum. Both lungs were adherent to the walls of the chest, and contained in their substance many miliary tubercles.

The liver was much enlarged, hardened, and granular.

There were about four pints of a straw-coloured serous fluid in the abdomen.

The mesenteric glands were enlarged and tubercular.

The right external iliac artery was degenerated into an impervious shrunken chord from within half-an-inch of its commencement, down to the arch of the pubes, where the circumflex iliac, epigastric, and external pudic, arteries were given off. These arteries were enlarged in their calibre.

The common femoral, superficial femoral, and profunda, were of their normal size. Immediately over the point where the common femoral had been tied, a large firm tubercle had formed.

The bones of the right carpus were carious, and were easily cut by the knife.

General Military Hospital, Stoke,
Devonport, July 13, 1853.

REMOVAL OF THE SEQUESTRUM OF THE ENTIRE SHAFT OF THE LEFT TIBIA. ANCHYLOSIS OF THE ANKLE-JOINT.

By JOHN ADAMS, Esq., F.R.C.S.
Surgeon to the London Hospital.

The history of the following case and its progress are somewhat remarkable. I therefore send it for insertion in your Journal. It is the only instance of the sort that I have met with; and it shows that, under the most discouraging circumstances, the attempt to save a limb may be attended with success.

A youth, 11 years of age, was brought to me in April, 1852, from a school in Kent, in consequence of severe inflammation in and about the ankle-joint. The disease was attributed to a sprain of the ankle; but the account hardly justified the opinion, that it arose from accident. The youth was delicate; and I had, some time before, endeavoured to dissuade his mother from sending him to school.

When I first saw him, there were signs of suppuration in and about the ankle-joint; and, on moving the foot, distinct crepitation was felt, proving that the articular cartilages were ulcerated. The disease was attended with the highest constitutional disturbance. The treatment consisted in the use of ordinary constitutional remedies; and the ankle-joint was enveloped in successive layers of wet lint, so as to keep the parts at rest, and also to maintain a constant moisture about the part.

The history may be summed up very briefly. The disease about the ankle-joint diminished; but it was evidently extending progressively up the shaft of the bone, until the whole tibia was involved, as far as the junction of the shaft with the superior epiphysis. The disease continued, with some diminution in the constitutional disturbance; and hopes, therefore, were afforded that the limb might possibly be saved at the expense of the tibia, which seemed likely to become necrosed. Necrosis of the tibia occurred; and there was no doubt that the whole shaft of the bone was involved, as a probe, passed in various directions through small openings in the skin, came in contact with dead bone. There was still considerable swelling about the ankle-joint; but the natural mobility of the foot was diminished; indeed, I might say, that it had become, to a certain extent, fixed; and, as the fixity increased from day to day, so did the constitutional irritation abate. I was still further strengthened in the hope of saving the limb. The sequestrum of the shaft could be distinctly felt; it became gradually surrounded at the lower part, towards the ankle, with new bone; while, at the upper part, its surface was more exposed. There were altogether five apertures leading to the sequestrum, in various parts of the leg; from some of these (the lower), small spiculæ of bone were from time to time removed. Seeing that the whole shaft of the tibia had died, and that the ankle-joint had become anchylosed, I advised that time should be given to permit the complete consolidation of the ankle-joint, and the formation of new bone around the sequestrum. There was also another important reason for delay; namely, to give an opportunity for the patient to gain strength by sea air, etc.

I waited, therefore, fourteen months; and, as everything appeared favourable for the operation, with the assistance of Mr. Coulson, who had been consulted previously on the case, I removed the sequestrum.

The operation consisted in laying bare the dead bone a little below the middle of the leg; in cutting it through with Hey's saw and cutting plyers; in gouging away the new bone, so as more readily to bring away the dead piece; and then drawing the lower fragment upwards, and raising the upper fragment from its bed, thus removing, without any splintering, the two pieces which constituted the entire shaft of the tibia.

It was found here, as I believe is very frequently the case, that the sequestrum was unequally covered by new bone; that, whereas it was almost completely encased below, at the upper part it was only partially covered with new bone.

The progress of the case justifies the most sanguine expectation as to the result.

A few observations may be permitted on this case. The peculiarity of it, by which it is distinguished from other cases on record, is, that the disease having begun in the ankle-joint, led most fortunately to anchylosis, and thus a

great source of constitutional irritation was removed; without this truly fortunate occurrence, I cannot see how it was possible to save the limb. The progress of the case in the shaft of the bone requires no special comment. I cannot but believe that, in all such cases, it is most desirable to give sufficient time for the formation of a firm, bony case, before the operation of removing the sequestrum is undertaken. The difficulty of the operation is certainly enhanced by delay; but I think the security of the limb is promoted. Much must, however, be decided by the peculiarities of each case; and it is a point of the highest importance, that the strength of the patient should be brought to the highest standard possible before any operation is undertaken.

CASES OF AFFECTIONS OF THE NERVOUS SYSTEM, OF ORGANIC AND INORGANIC ORIGIN;

WITH CLINICAL AND PATHOLOGICAL OBSERVATIONS.

By J. W. OGLE, M.D.

Medical Curator at St. George's Hospital, and Physician to the St. George and St. James's Dispensary.

It appears to be indubitable, that as yet, notwithstanding the exertions of such observers as Abercrombie, Bell, Bright, M. Hall, Andral, Lallemand, Majendie, and others, we are far from being accurate in our diagnosis, and consequently in our prognosis and rational treatment of sundry diseases of the nervous system. This arises, doubtless, in a great measure, from our inexact knowledge of the physiology of this mysterious part of the human frame, and from our limited application of the laws of physiology as a foundation for our study of pathology: but at the same time it is obvious, that our deficiency in this respect would be vastly atoned for by a careful and not too premature generalisation of cases of disease faithfully observed and systematically recorded. Any one seeking to establish general laws or truths, must needs do so on exact data, based on a large number of instances and unsophisticated facts of some kind or other, following the method of inquiry common to all the departments of natural science; and it is with the hope of adding to the labours of others, and furnishing materials which may be interesting, and of practical bearing in this way, that I propose to record, from time to time, as occasion may offer, such cases and facts as I have witnessed or may witness, the notes of which shall have been written at the time of observation. It is only by means of single facts and repeated active observation that we can ever hope to nullify the expression of a well-known and trusted English author, whose writings are in the hands of all of us, who observes, in allusion to the possible immediate causes of epileptic seizures, that "as yet we have not penetrated the mystery of these remarkable phenomena;" or, again, the following observation of another writer, who remarks, that "at the present time the diseases of the brain are more obscure than any other class in the nosology." I purpose, therefore, putting together the histories of cases in which sensation, motion, the powers of thought or the will may have been interfered with in any way, associating with them such notes or remarks as may seem more immediately to arise from the consideration of such cases, postponing their classification, or any extensive deductions or conclusive opinions therefrom, to some future period. In considering any individual cases in which the functions of the cranial or spinal centres of the nerves are implicated, the primary and most important question to be settled, doubtless, is whether organic mischief be or be not the cause of the phenomena presenting themselves, or whether organic structural alteration has been established as a result; and any one who has watched such cases with any attention, will agree with me as to the frequent obscurity on this point. Should it be determined that organic mischief, as, for instance, of the brain, actually exists, we then have the task, ofttimes difficult, of deciding between inflammation with its products, simple congestion, extravasation, or effusion from some morbid state of the blood, or from concussion, tumours of various descriptions, structural changes from altered conditions of the blood-vessels and unknown causes, congenital malformations, etc. etc. Probably, the most interesting and useful set of cases which could be adduced would be those of inorganic or eccentric origin, those having for their ultimate cause some distant irritation or derangement; and this because of their greater frequency, as well as on account of the great difficulty in many cases connected with their diagnosis. Here we may make special mention of the ingenious theory of Dr. Hall, which ascribes serious epileptic and apoplectic symptoms to the sanguineous congestion of the brain and medulla spinalis, caused by spasmodic pressure of certain muscles about the cervical and laryngeal regions, which has been set up by distant irritations, and, it might have been added, distant organic diseases also. Much, indeed, has been said, as well in favour as in disfavour of this theory; but that, reasoning from analogy, we might expect such a theory to be probable, cannot, I imagine, be questioned. It would be a vain thing to quote the almost innumerable instances of a like nature occurring in the body; and it only remains, in order to arrive at some solution of a query so important in its circumstances, that cases of such a nature be carefully investigated, with reference to, and guided by this theory, and careful observation made of the due order and sequence of symptoms, our inquiry, as all observations should have, having a specific object in view. Why some honest objectors withhold their acquiescence in this theory, and deem it simply an unintelligible asseveration, on the bare ground, that epilepsy, as a disease, is supposed to be the result of debility, and so prohibit the necessity of referring to anything else as a cause, I cannot think. As a matter of fact, I believe I may safely say, that by no means do all, or nearly all, such phenomena, known as constituting epilepsy, occur in debilitated subjects; and, moreover, whenever a debilitated, atonic state exists, and the symptoms are allowed to be of eccentric origin, nothing, surely, seems more rational than to imagine, that there has been set up a special sensibility to distant irritation, just as in certain other conditions of the system,—in infancy, for instance, in puberty, at the climax of age, or at the puerperal or menstrual periods, we have a peculiar liability of this kind, and, at the same time, a proneness to congestion of the blood-vessels, should any efficient cause be originated. The chief element in the treatment of most cases, in which epileptic or apoplectic tendencies exist, supposing them to be of inorganic origin, and previously, of course, to any organic alteration being set up as a result, consists, no doubt, in the successful discovery of some distant derangement, more or less obscure, acting as an irritating cause, and in the removal of this cause; hence the unpretending simplicity and apparently inadequate effect of many methods of successful treatment; and it is often a matter of wonder how so simple a remedy as an alkali, or alkaline aperient, should have so desired an effect. This disturbing cause is often exceedingly unobservable; question and examine the patient as we may regarding specific symptoms, nevertheless it exists, and is all-potent for harm, but may be removable; and, in the enumeration of many of the cases which I adduce, we may see how remedies, which seem only to act in rectifying functional or local derangement, have dispersed the gravest, equally with the most insignificant, train of phenomena. The interesting theory above mentioned, it will be remembered, recognises the following position—viz., that we may have, comprehended in one continuous and ascending scale, and as kindred phenomena, varying for the most part only in intensity, all the various degrees, from mere giddiness and sick headache up to epilepsy, mania, pure apoplexy, and profound coma, with the long train of consequents on the severer forms. This series of symptoms, gentle as well as severe, may be the result of distant peripheral derangement or impressions, exciting motor action in various parts; and, along with other parts, why may it not be in the laryngeal and cervical regions also, thus impeding the blood's return from the nervous centres, and producing cerebral effects similar in nature to those which arise from obstruction to, or retardation of the blood's flow to the heart, in certain affections of the heart or lungs, or in the act of suffocation, etc. At any rate, in a philosophical point of view, we have not the liberty to deny the probability of such a causation, unless experiment or experience compel us. Dr. Bright, moreover, in his observations on cerebral diseases, in the Guy's Hospital Reports, page 2, Vol. II., remarks, that of the principal phenomena of most of those cases which he ascribes to "interrupted function," vascular pressure exists either as the cause or the effect. Of course, these phenomena are often, also, the result of centric causes, that is, of special affections of the central, cerebral, or spinal systems.

The histories of the cases which will be brought forward will contain, as much as is possible, the exact descriptions and phraseology of the patients themselves, as it is thought that in this way clearer ideas of their exact condition and feelings are obtained,

Case 1.—Mr. M., a steward in a nobleman's family, of thin, spare habit of body, and excitable temperament, had not been well for some days, feeling "very sickly," and had more than once vomited his food. On the 9th April, 1852, he ate heartily at dinner, and partook of pickles. On the 10th, he awoke with considerable headache, and a peculiar difficulty in breathing, with a sensation as of "something in the throat," to quote his own words, preventing his swallowing with comfort. He had some tea and bread for breakfast, but vomited them, and complained much of headache, "feeling very queer," as he said. About a quarter of an hour after breakfast, he suddenly became perfectly giddy. His eyes became "dim and misty," and, by dint of much "tottering," he managed to reach his bed-room. While in his bedroom, and the sensations still continuing, he felt "as if there was something in his throat, stopping the passage and choking him." His wife, who was not with him, heard him then make a "very odd noise," and ran to him. He became "deathly and livid," and "almost senseless," and he wandered about his room, "cramming his fingers into his mouth." Nothing like biting of the tongue, cheeks, or lips, or any twisting of the head or neck (trachelismus) existed. I then saw him, and gave him an antacid draught, containing carbonate of soda and magnesia, etc. The patient became better, as he said, experiencing "speedy relief." The draught was repeated several times, and, by attention to the diet and bowels, no other unpleasant symptom at any time arose. The above attack is described as being exactly like one which the patient experienced some years previously, in which he "lost his senses" for a quarter of an hour, but gradually recovered.

Remarks.—We have, in this case, an instance of perhaps the most common cause of eccentric irritation producing "head symptoms," and, doubtless, the use of extra feeding and indigestible food, concurred with a special proneness to excitability in a weakly subject, in bringing on what may be termed trachelismus. This term is applied to the constriction of the muscles about the throat, which produced the uncomfortable, and even painful feelings, in that region, of choking and strangulation, causing him to thrust his fingers into the throat. The muscles involved in this case were rather those in front of the larynx, etc., than those at the side of the neck, which, under spasm, would press violently on the veins returning blood from the head. It is more than probable, that there was a certain amount of laryngismus also, that is, of spasm of those muscles which play the sentry at the entrance of the windpipe, and that the very "odd noise" spoken of as being heard, was owing to a violent inspiration during the state of spasm. The wife was not present to see if any lividity was caused by this very temporary condition. The use of antacids in such cases would seem to be the correction either of a superabundant amount of such acid as is natural to the stomach, or of some acid which the stomach is unaccustomed to, and which becomes generated therein, and acts as an irritant.

Again, it may be that, in some cases, the alkali acts as a direct sedative, lulling irritation, just as it acts when applied in certain instances, to relieve external cutaneous irritation, in the form of lotions. Had not the treatment acted as required, the next remedy would have been an emetic, which would have expelled the irritating cause, and tended to prevent any excess of spasmodic action, as the act of vomiting always does.

Case 2.—Mr. D., a publican, aged 45, of slow, phlegmatic temperament, and pale, sallow countenance, stated, that he had been long the subject of "fits of giddiness." About twenty years ago, he was, for the first time, seized with extreme giddiness while out walking, which obliged him to lay hold of the railings in the street for fear of falling. He was found by some person "lying across the railings," and was thought to be intoxicated. How long he remained in this state he does not know, but is satisfied that there was no foaming at the mouth, or extreme muscular contractions. On the day following this attack, he went to work as usual, and, saving occasional attacks of transient giddiness, during which he was unable to support himself, he was free from any graver form until about three years ago, when, after a full meal, followed by a walk, and without any warning except "heaviness in the head," he became affected by great "confusion" of the intellect, loss of sight, and a trembling looseness of the limbs." This passed on to perfect loss of sensibility and power of motion, and in this state the patient remained for about one hour. By degrees, his mental faculties returned; but he was fully aware, that he was yet quite unable to move either hand or foot, and, unless assisted, would have "slid off his chair." Before long, he regained his bodily powers, and the next morning he was able to go to his usual work. Since that period, the patient has had some minor attacks, which have generally come on with a "purging and working of the inside;" but no account was given of any feelings of choking or constriction about the throat at any time, or any twisting of the neck, etc. At times, the patient is reported, during the gentler attacks, to have become "livid and death-like." He generally perspired profusely, but did not sleep after the attacks, though he was always greatly benefited by a good night's rest. There was seldom any complaint of headache, or palpitations, or faintness; but he was subject to pains in the loins, to eructations, loss of appetite, restless nights, and irregularity of the bowels. About January, 1852, he was attacked by a "somewhat stronger fit," which appears to have lasted about a quarter of an hour, when he lost all power of supporting himself, and assumed a livid, cadaverous appearance. At the beginning of March, he was complaining of urgent dyspeptic symptoms. The tongue was furred. There was loss of appetite, with pains in the back, etc.; the pulse was feeble, but regular. The urine was natural. He was treated with rhubarb, magnesia, and carbonate of soda for some days, and subsequently took the saccharated carbonate of iron. In a month's time, his symptoms had, in every way, almost departed, and he had not been troubled with giddiness or mental confusion. After that time, the patient seems to have gone on steadily improving, until he became quite well.

Remarks.—This case presents an instance of dyspeptic symptoms, arising, doubtless, naturally from the "tasting" habits of a tavern-keeper, passing through giddiness, heaviness, and confusion of intellect, into paroxysmal apoplexy and perfect coma, and occurring in a naturally feeble habit of body. In this case we have no distinct history of trachelismus, or consequent venous congestion externally. We must notice, also, the complete and general paralysis, which remained after the other unpleasant symptoms in one of the attacks were removed; and, among the graver attacks, the minor ones generally associated with evident intestinal disturbance, are not to be overlooked.

[To be continued.]

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

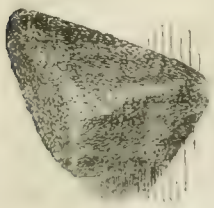
ST. BARTHOLOMEW'S HOSPITAL.

LITHOTOMY.—REMOVAL OF TWO CALCULI, ONE OF THEM PRESENTING MANY SIDES.

[Under the care of Mr. PAGET.]

THE chief interest connected with the following case is dependent on the very peculiar shape of one of the calculi. It will be seen, on reference to the appended woodcut, that the stone in question has five flat sides, as if ground by attrition with many others; yet it is certain that the bladder in which it was lodged contained beside it *but one other very soft concretion*. We should not venture to ask the attention of our readers to this fact were it a matter of mere curiosity, on account of its rareness; and we do so only because it involves an important practical lesson. When, in the course of a lithotomy operation, a stone is removed displaying on any part a flattened facet, it is customary to infer the existence of another calculus; and, if it exhibit several of these smooth sides, the probability of there remaining more than one other is constantly inferred, and in each case the operator is usually induced to continue his search. It becomes, therefore, of great importance that a correct value should be placed on such indications, since, by over-rating their conclusiveness, the patient may be exposed to a prolonged and fruitless examination. Does a stone with a facet necessarily indicate the existence of another? and, if a stone possess many flattened sides, does it render it almost certain it has lain in company with several others? On the latter part only of the question does the following case bear.

Benjamin Leaper, aged 51, a stout and somewhat bloated man, of bad constitution, was admitted on April 19, 1853, having suffered from symptoms of stone for more than a year. The presence of a calculus was easily detected, and he was subjected to the ordinary lithotomy operation on April 30. The perinæum being fat and very unusually deep, some little difficulty was encountered in finding the stone; but, after the lapse of a short time, Mr. Paget succeeded in removing some broken fragments. These fragments were of a reddish colour, sand-like, and extremely friable; the largest among them was about as big as a bean, and when put together they appeared to have composed a stone of about half the size of a walnut. In the centre were some small dark-coloured portions, of much greater density than the surrounding layers. Mr. Paget again introduced the forceps, and removed, together with a small quantity more of detritus, the stone which we here figure.



The drawing has been made to the size of nature, and well shows the many-sided outline of the concretion. Its surface was reddish, and rather soft (composed, probably, of lithic acid or lithates). Some of its sides were merely flattened, others decidedly concave; and its whole contour was such as to impress on the minds of all present the conviction, that it must, to use the expression of a bystander, have been lodged among a whole quarry of others. In the expectation, therefore, of finding several other stones, Mr. Paget proceeded to institute a further search. It unfortunately happened, that a conclusive tactile examination was entirely precluded by the extreme depth of the perinæum, as the finger could but just be made to touch without entering the bladder. Having failed to discover anything by means of the forceps and scoop, excepting a few more very small fragments of the broken stone, Mr. Paget introduced a sound, through the wound in the first instance, and afterwards by the urethra, and examined the bladder in all possible directions, but without success. The injection of warm water was next resorted to, and after it the sound again tried. An examination was also made by means of the finger in the rectum. A consultation was then held as to the propriety of further prolonging the search, and Mr. Lawrence and Mr. Stanley having made examinations of the bladder with the same results as those of Mr. Paget, it was deemed best to desist; a strong opinion being, however, still entertained by many present, that other stones existed. The operation had, of necessity, been somewhat protracted, and during it the patient had lost a more than average quantity of blood. He had, however, been fully under the influence of chloroform the whole time; and the various steps of the operation had been conducted with an admirable degree of gentleness and care. After its conclusion, as the effect in part, probably, of the long-continued use of the anæsthetic, the patient manifested rather alarming symptoms of faintness, and became extremely pale. Cold water was dashed on the surface of the chest and face, and a free current of fresh air admitted, under the influence of which he soon revived, and was able to bear removal to his bed.

The after-history of the case may be told very briefly. During the first two days, the man appeared to be in a satisfactory condition, having rallied completely from the effects of the operation. On the third day, however, symptoms of low inflammation about the viscera of the pelvis began to be manifest; and under the effect of these he gradually sank, and died on the 4th of May.

At the *post-mortem* examination, on the following day, there were found evidences of the existence of diffuse inflammation of the cellular tissue around the neck of the bladder, and, in several parts, small collections of pus had formed. The incisions had entered the bladder in the usual manner, and that viscus did not contain any calculous concretions whatever. The pelvic folds of the peritoneum were congested, and, in some parts, coated with thin films of soft lymph.

The gall bladder will, probably, occur to most of our readers as affording frequent illustrations of the difference in form assumed by calculi, according as they are solitary or in numbers. Their polyhedral shape, under the latter condition, is matter of common observation. It is, perhaps, rare to find two only, but when that is done, as far as our inquiries enable us to give an opinion, they conform to the rule, as it regards urinary stones, in each presenting a single smooth facet. Mr. Paget, however, informs us, that, since the occurrence of the above case, two biliary calculi have been shown to him by a gentleman who had carefully examined the gall-bladder of the patient from whom they were removed after death, without being able to find any others, yet they each possessed a many-sided shape. There is, of course, nothing to hinder a stone from changing its relative position with its companion, and thus subjecting another side to the attrition which has already flattened the one at first exposed; but, whether it be that such changes do not practically often occur, or that, as soon as a side escapes from the influence of friction, its smoothed appearance is rapidly obliterated by fresh depositions, the fact is, we think, not to be doubted, that it is very rare to find a stone flattened on more than one side which has not existed in company with many others.

AMPUTATION OF THE LEG ON ACCOUNT OF OBSTINATE ULCERATION EIGHT YEARS AFTER A COMPOUND FRACTURE.—EXAMINATION OF THE PARTS.

[Under the care of Mr. STANLEY.]

Eliza S., aged 17, a fine tall girl, admitted into the hospital on May 12, 1853. Eight years ago she was treated, under Mr. Stanley's care, for a severe compound and comminuted fracture of the left tibia at its middle, caused by having been run over by a cart. She was discharged in about two months cured, with the exception that owing to the contraction of the gastrocnemius and soleus muscles, consequent on the injury, she was not able to put her heel to the ground. She remained well for about four years, when the contraction of the muscles had increased to such an extent that she was only able to reach the ground with her toes, and a large ulcer had formed on the shin, over the part where the bone had been broken. This ulcer kept healing over and breaking out again, accordingly as she rested or worked during the three following years, when she was again admitted under Mr. Stanley's care on account of it. As it had occasioned her so much inconvenience, and as the limb was a very imperfect one, she was at this time desirous to have amputation performed, but Mr. Stanley preferred to attempt to again procure its healing. By a long confinement to bed this was done, and the patient returned home with a pretty sound cicatrix, and was not again seen until the present occasion. The leg is now not much swollen, but its front half is covered by an extremely tense cicatrix, in the middle of which, exactly over the border of the tibia, is a large ulcer. Excepting an elevated portion of the bone in the centre of the ulcer, there does not appear to be any mark by which the position of the fracture can be distinguished. The foot is firmly fixed in the position of an extreme case of talipes equinus, and but that it can be moved with tolerable ease in a lateral direction, the ankle joint might be supposed to have suffered anchylosis. The patient is out of health; she states that the ulcer broke out almost immediately after she last left the hospital, and as it has now troubled her for four consecutive years, occasioning great pain and annoyance, she is very anxious to submit to amputation.

On June 25, the girl having been confined to the recumbent posture, treated with tonics, and well fed, she had not only much improved in health, but the sore had materially diminished in size. The question as to the propriety of removing the limb had frequently been discussed, and from a consideration of the history of the ulcer, of its peculiar cause, of the circumstance, that no sound skin in the neighbourhood existed, on which to practise any form of plastic operation, it had at length been decided in the affirmative, on the ground that it was extremely improbable that the sore would ever cicatrise in a manner sufficiently permanent to permit the girl to follow her occupation, or to live in any comfort. Amputation was accordingly performed, and with the exception of inflammation and a superficial sloughing from the face of the stump, the patient has recovered well.

On examination of the limb the gastrocnemius and soleus muscles were found atrophied, and much contracted in length. The tendo-Achillis adhered closely to the surrounding structures, but was not bound down to the bone as had been suspected. Along the spine of the tibia, beneath where the ulcer had been, was a raised bony eminence nearly three inches long, probably the result of superabundant ossific deposition during the process of union. A longitudinal section of the shaft of the bone having been made, no evidence whatever of its having ever sustained fracture could be discovered, with the exception of the ridge before-mentioned. The reparative process had in truth been so complete, that Mr. Stanley stated, that were not the fact proved by the most conclusive evidence, it would have been difficult to believe that the bone had ever sustained any injury excepting on its surface. The ankle-joint was found to be perfectly healthy.

It is evident, that in this case, the obstinacy of the ulceration had been due to the tension of the skin of the front aspect of the leg kept up over an unnatural projection of rough bone, vertically by the contraction of the muscles of the calf, and laterally by that of the surrounding cicatrised skin. The patient is much to be congratulated, on having exchanged for a healthy stump, what must, in all probability, have been a permanent cause of trouble and annoyance, undermining her constitutional powers by long continued suppuration, and incapacitating her by protracted pain for the ordinary duties of life.

GUY'S HOSPITAL.

OPERATION FOR HERNIA BY THE SMALL SUBCUTANEOUS INCISION.

[Under the care of Mr. HILTON.]

We alluded some weeks ago to the reasons why herniotomy operations are now regarded as so much less serious proceedings than they were formerly, and, among others, to improved methods of operating. The advantages derivable from the latter have probably been but rarely better exemplified than in the following case, which recently occurred under the care of Mr. Hilton. The patient, Mary Attfield, aged 69, was admitted thirty-six hours after she had begun to suffer severely from symptoms of the strangulation of a femoral rupture on the right side, to the protrusion of which she had long been subject. She was a thin lax-fibred woman, and the neck and relations of the hernial swelling were easily felt through the loose integument of her groin. Having failed in his attempts at reduction by the taxis, Mr. Hilton at once proceeded with the operation for the division of the constriction. The tumour being held to the outer side by Mr. Maunder, one of Mr. Hilton's dressers, an incision about an inch long was made through the skin and cellular tissue, on the inner side and somewhat below the neck of the sac; a director was next introduced, and by a little care insinuated within the constriction external to the sac. With a small blunt-pointed bistoury the stricture was then notched, after which the bowel returned readily into the abdomen. With the exception of a small portion, not so large as the tip of a finger, the sac had not been seen by the operator. The edges of the wound were at once brought together, and covered by a strip of plaster. All urgent symptoms were at once relieved, and the patient slept fairly during the following night. On the third day, the bowels acted spontaneously, and the plaster having accidently got rubbed off the wound, the latter was found to have healed completely by the first intention, the cicatrix being, indeed, scarcely perceptible. The woman might be considered as quite well.

STRANGULATED CONGENITAL HERNIA.—OBSCURE SYMPTOMS.—OPERATION.—DEATH.

[Under the care of Mr. BIRKETT.]

E. L., aged 40, a strong, healthy man was admitted on Wednesday, the 13th inst., at 11 a.m., suffering from some of the symptoms of strangulated hernia. He stated, that from youth he had been subject to a slight protrusion, but had only found it necessary to wear a truss during the last ten years, and that it had never occasioned him any serious symptoms until the present time. In the evening of the 11th (Monday), the rupture had descended to much more than its usual extent, his attempts at reduction had failed, and about two hours afterwards he had been attacked by vomiting. During the following night and day, long-continued and violent efforts at the taxis had been made, both by himself and by a surgeon whom he had consulted, but without success. During the night immediately previous, the symptoms had been somewhat abating in severity, and when admitted into hospital they were not severe. He complained of pain only when the tumour was pressed; the pulse was full and compressible; the tongue moist; and the countenance free from anxiety of expression. The hernia was an oblique inguinal one, and occupied the left side of the scrotum; the integuments of which were almost black from the ecchymosis resulting from violent attempts at the taxis. There was not the degree of elasticity present which is usual in intestinal hernia, and a remarkable kind of crepitation was felt when the tumour was slightly compressed. Such being the condition of the parts, it was not deemed wise to make any further attempts at reduction, and the patient was first put in a warm bath, and had afterwards two grains of opium administered, and a bladder of ice applied to the scrotum.

Mr. Birkett saw the man again at ten p.m., when he stated that he felt easy. He had not vomited; the abdomen was flat, and not tender on pressure; and, although the tumour itself was still very tender, yet the symptoms appeared to be rather those of an incarcerated hernia, which had been much abused, than of a strangulated one. The operation was accordingly deferred.

14th, nine a.m.—The patient having passed a restless night, and as, although the belly was still flat and flaccid, yet the tumour had become more tense, Mr. Birkett decided no longer to delay the examination of the parts.

Operation.—A vertical incision was made from a little above the site of the external abdominal ring to a point about half way down the scrotum; after which Mr. Birkett freely exposed and divided the external ring, by which the tumour was tightly girt; its division, however, did not at all facilitate the return of the protrusion, and the peritoneal sac was therefore next opened. On doing so, about two drachms of sanious serum escaped, and a coil of the small intestine, with a portion of mesentery, was exposed. The bowel adhered to the sac by soft lymph effused all around it; it was very much congested, and of an almost black colour. The testicle was seen lying at the bottom of the sac, and the tunica vaginalis immediately surrounding it was much thickened. The director having been introduced, the neck of the sac at the part corresponding with the external ring was divided; and, after some manipulation, the bowel was returned.

Mr. Birkett remarked, that he had found the inguinal canal of very unusual length, and that the two rings did not appear to have been at all approximated, as is commonly the case in old-standing oblique herniæ. This length of the canal it was which had prevented the intestine from being quickly returned, since the internal ring was large and quite free from constriction.

Immediately after the completion of the operation, a pill containing two grains of opium was administered. In the evening the patient stated that he was free from pain; he had had no vomiting, but the pulse was quick and small, and the abdomen rather tympanitic.

℞ Pulv. opii gr. j., hydrarg. chlorid. gr. j., tertiis horis sumend.

15th, 9 a.m.—Has passed a good night; is free from pain; countenance much improved; pulse weak and small; tongue moist; abdomen tympanitic; the wound looks healthy. To continue the pills, and to take, from time to time, a small quantity of brandy.

In the evening, the patient suddenly began to complain of extreme pain in the abdomen, which shortly afterwards increased to such an unbearable degree, that he could with difficulty be kept in bed. Within a few hours symptoms of collapse came on, and death took place about three a.m. on the 16th. No *post-mortem* examination was, unfortunately, allowed; but, from the strongly-marked character of the symptoms, there could be little doubt but that death had resulted from the acute peritonitis consequent on perforation of the diseased bowel. It will be seen, by reference to the dates, that strangulation had probably existed about sixty-six hours before the operation was performed, and that the patient lived about thirty-nine hours afterwards; the bowel had, therefore, occupied, in the process of ulcerating through, rather more than four days.

Among the points for instructive comment suggested by the above case are, 1st. The circumstance of a hernia of the congenital form having never descended into the scrotum until near the age of thirty; 2nd. The very extensive ecchymosis and swelling of the scrotum which had resulted from the attempts at the taxis made before admission. Looking at the fact, that the acute inflammation of the sac and its contents had not extended itself to the abdomen, it seems probable, that the severe bruising to which the former had been subjected had served as the chief agent in inducing that condition; and it may, without unfairness, be speculated, that the ultimate fatal result of the case was in a large measure due to the well-meant, but ill-directed attempts at reduction. From this consideration a most important lesson may be learned. 3rd. The peculiar crepitant sensation communicated on pressing the tumour. When, at the operation, there was found no air in the cellular tissue, but a large quantity of lymph effused around the bowel, a comparison between this sensation and the friction fremitus of pleurisy or pericarditis was suggested. 4th. The great degree of freedom from urgent symptoms which existed during the first day that the patient was in the hospital. To some extent, no doubt, the true indications had been masked by the free administration of opium. The effect of this invaluable drug in obscuring the symptoms of severe inflammation not infrequently constitutes a drawback to its usefulness, and should always be carefully borne in mind during its employment.

Note on Abdominal Friction Sounds.—All that is necessary for the production of friction sound is the apposition of two membranes, either dry or coated with lymph, between which motion is permitted; and, as is well known, the phenomenon is not by any means confined to inflammations of the pleura or pericardium. Friction fremitus may be felt occasionally in the thecæ of tendons, in joints, and, as in the above case, in hernial sacs. In these situations, however, as there is no provision for constant motion, no rubbing sound is heard unless the auscultator take means to produce it artificially. In some rare cases of exudative peritonitis, on the contrary, not only may the fremitus be felt, but the friction sound most distinctly heard. A patient, now (July 26) under the care of Dr. Barlow, in Guy's Hospital, affords an interesting illustration of this. He is a middle-aged man, and suffers from a tumour affecting the left lobe of the liver, having, also, all the rational signs of local peritonitis to the left, and a little above the umbilicus. On pressure, a peculiar creak-

ing sensation is most distinctly felt; and, with the stethoscope, a very loud and well-marked friction sound is heard, synchronous with the respiratory movements. Dr. Barlow informs us, that he has heard the same sound once or twice before; and that, on one occasion, his conclusion as to its cause was verified by a *post-mortem* examination.

ST. THOMAS'S HOSPITAL.

GUNSHOT WOUND OF THE FOREARM.—REMOVAL OF PART OF THE CHARGE FIVE MONTHS AFTERWARDS.—DIVISION OF THE FLEXOR TENDONS.—RECOVERY.

[Under the care of Mr. SOLLY.]

The following case affords an interesting example of the influence exerted by foreign bodies, when allowed to remain long in the structures of a limb, in inducing deformity from tonic contraction of the irritated muscles. Its history also exhibits a surgical success in the simultaneous removal of the cause of the disease, and of the consequences already existing.

William Newberry, aged 18, a farm-labourer, admitted on February 8, 1853. Five months ago, he had the misfortune to let fall a loaded gun, which exploded, and lodged the whole of its contents in the front of his right forearm. The gun-muzzle being almost close to the part, the charge—which consisted of small shot—together with the wadding, entered, without spreading, at one small round hole. Much inflammation followed the injury, and the wound suppurated freely for some time; but the wadding and a great number of shot-corns having come away in the discharge, it ultimately healed about a month after the accident. Pain and tenderness, however, remained in the part, and an increasing tendency to contraction of the flexor tendons. About a month ago, the sinus again opened, and has since continued to discharge a small quantity of pus, and, at irregular intervals, one or two shot-corns. During the last two months, the patient has had great difficulty in straightening his fingers, and has noticed that, when they were extended, he could not extend his wrist. At present, the hand is bent at a right angle on the forearm, and the fingers are contracted on the palm; there is, about four inches above the wrist, the orifice of a sinus, which leads downwards. The tendons are prominent and tense in front of the wrist, and great pain is produced by any attempt to straighten the hand.

Feb. 19.—The patient being under the influence of chloroform, Mr. Solly introduced a probe into the sinus, and then made a free incision deeply in the direction which it had taken. After a little search, a number of shots (about fourteen) were found embedded between the flexor profundus digitorum and the flexor longus pollicis muscles. These having been removed, Mr. Solly next divided, through the wound, by which several of them were already exposed, the whole of the flexor tendons of the forearm, at a little distance above the wrist-joint. The hand was then placed in an extended position on a splint, and the wound covered with wet lint.

During the healing of the wound, which proceeded throughout favourably, careful extension of the hand was kept up by means of a back splint. The man left the hospital quite well, and having some degree of power over his fingers, on April 7, seven weeks after the operation.

Mr. Moreton, Mr. Solly's house-surgeon, to whom we are indebted for the above particulars, further informs us, that he has seen the patient several times since his discharge, and that the use of his fingers has been by this time (July 20) almost entirely regained. The whole hand, however, still feels somewhat colder than the opposite one, and sensation, although much improving, is not yet perfect. There is, indeed, a decided degree of numbness in the index and middle fingers; and it must be noted regarding them, as a very interesting circumstance, that a series of small, but very troublesome, ulcers have occurred about their tips. This phenomenon is no doubt dependent on the deficient supply of nervous influence, as it is probable that the trunk of the median nerve was seriously interfered with, both in the original accident, and during the operation. It affords an instructive illustration and proof, if further proof were needed, of the important influence over the function of nutrition exercised by the cerebro-spinal nerves. As this influence has, of late years, been disbelieved, or, "at best," to use the words of a well-known pathologist, "admitted grudgingly and doubtfully," we will venture, in order to furnish another example of it, to anticipate a little the particulars of a case which we hope soon to bring before our readers at full. The case alluded to is that of an elderly woman lately under the care of Mr. Hilton, in Guy's Hospital, on account of a large solid tumour, deeply situated behind the left clavicle, which, by its upward pressure on the branches of the brachial plexus, has occasioned gangrene at the tips of several of the fingers of the left hand.

With regard to Mr. Solly's patient, from the progressive improvement which is taking place, there is every reason to expect that, in a short time, he will regain the almost perfect use of the affected part.

COMPOUND FRACTURE OF THE THIGH.—SUPERVENTION OF COMA.—DEATH ON THE FIFTH DAY.—AUTOPSY.—LACERATION OF THE KIDNEY.

[Under the care of Mr. LE GROS CLARK.]

Malcolm Robinson, aged 38, a sailor, was admitted, at half-past eight o'clock in the morning of the 3rd of May, having just perviously fallen from a ship's yard, a height of twenty-five feet, on to the deck. In the fall he had struck against a projecting spar, and ultimately came down on his stomach and chest, with the left leg doubled under him. He was perfectly sensible, though in a state of partial collapse, and the only external injury he had sustained was a severe compound fracture of the left thigh, at the junction of its middle and upper thirds. The extremities of the bone did not project, but could be felt on passing the finger into the wound, which was on the outer part of the limb, and about an inch and a-half long. Very severe pain was complained of at the pit of the stomach, but it was not increased on deep inspiration. Warm fomentations were directed to be applied over the abdomen and lower part of the chest; the fracture of the thigh was reduced; and as it had been ascertained, by examination by the finger in the wound, that the upper fragment projected outwards and upwards, the limb was extended on the double inclined plane.

Three hours after the accident, it was noticed that the patient's complexion appeared to have assumed, since admission, a perceptibly sallow hue; he complained of sickness, and the pain over the stomach and chest was still extreme. Mr. Clark ordered some brandy to be administered, and expressed a fear that rupture of some one of the abdominal viscera had taken place.

Vespere, 9 p.m.—The patient has not suffered materially from the fracture, but the pain referred to the stomach has continued through the day very severe; there has also been some headache. About a pint of clear urine was passed voluntarily at noon, but, on again making an effort at micturition, half-an-hour ago, there was voided only about an ounce and a-half of almost pure blood. During the last two hours he has been in a state of most profuse perspiration. Pulse very quick and small. Tongue dry. Capiat tincturæ opii ♏ xl. statim.

May 4, 9 a.m.—The patient is now in a state of coma, completely insensible, and can be roused but very partially. The pupils are slightly sensible to light; pulse very quick; breathing deep and laboured; muscles of face contracted and drawn back; right hand placed over the epigastrium; forehead covered with large drops of perspiration. The night nurse states, that until four this morning, he continued quite sensible, and about that time passed a quantity of water mixed with blood. Soon afterwards, her attention was attracted by hearing him make a loud and peculiar noise, which ended in a low groan; and on going to see what was the matter, she found him in his present condition. A catheter having been introduced, urine unmixed with blood was drawn off. From this date to the 8th of May, when death took place, he remained in exactly the condition above described, with the exception that, at times, he could be roused to a certain extent, always, however, sinking off again almost immediately into a state of insensibility. In spite of repeated injections, and the administration of croton oil (♏ iv.), the bowels continued obstinately costive; very small quantities of urine were, from time to time, passed involuntarily, and by the catheter; it was ammoniacal, but never contained blood. There was throughout profuse perspiration from the face; the pulse became gradually more feeble, and death took place at 4 a.m., on the 8th, nearly five days after the accident.

Autopsy.—The fracture of the femur was found to be transverse, and situated a little above the middle of its shaft; a small portion of bone had been detached, and was lying between the broken ends, around which suppuration had taken place. Head: The brain and its investing membranes were carefully examined, and were, to all appearance, in every respect healthy. Thorax: With the exception of a small quantity of bloody serum in the sac of the pericardium, nothing abnormal was observed. Abdomen: Behind the peritoneum, in the left lumbo-iliac region, was a large quantity of recently extravasated blood, which it was afterwards found had escaped from a large and deep laceration in the posterior aspect of the left kidney, which had extended deeply into the renal substance, but did not quite reach the pelvis. The bladder contained a small quantity of clear urine, untinged with blood. The opposite kidney, the liver, spleen, stomach, and intestines, were severally examined, but no other lesion was detected.

We are indebted to Mr. Smith, one of Mr. Clark's dressers, for the above particulars. There are some very interesting features

in the case. The presence of blood in the urine, during the first day, is amply explained by the extensive laceration which the kidney had sustained; and its subsequent absence, by the fact, that this laceration did not involve the walls of the renal pelvic cavity, taken in conjunction with a supposition that, from the severity of the injury, the organ ceased shortly afterwards to exercise its secretory function. It is, however, much more difficult to assign a satisfactory cause for the comatose condition which so rapidly supervened, since no lesion could, as we have seen, be detected in the head. Mr. Clark suggested, that it was induced by the toxæmia consequent on deficient elimination of urea, and the small quantity of urine which the patient voided, the incomplete character of the coma, and the profuse perspirations which attended it, all seem to favour this supposition. In accepting such an explanation, however, it must be remarked as very unusual, that the symptoms were manifest within twenty-four hours of an injury, which, at most, had but disorganised one viscus, the fellow of which was of natural size, and still remained perfectly healthy in appearance.

OPERATIONS.

Saturday, July 16.—*Lithotomy on a Boy.—Difficulty in Introducing the Sound.—Encysted (?) Calculus.*—The patient was a florid, robust-looking boy, aged 4, who had been sent up to Mr. Le Gros Clark from the country, with the statement, that for two years he had suffered severely from the symptoms of vesical calculus, and that the surgeon in attendance had never been able to introduce a sound. Shortly after his admission Mr. Clark had succeeded, with but trifling difficulty, in passing an instrument into the bladder, and ascertaining the existence of a stone, which, from the examination then made both by Mr. South and himself, was inferred to be of large size. On the 14th instant, it was intended to have performed the operation for its extraction; but the child having been placed on the table, and the sound passed, it was found, on depressing the handle of the instrument, that it could not be moved with the usual freedom, and that the stone could not be felt. On another trial being made, the sound was got to move freely in the bladder; but, although the stone could be felt in its *concavity*, it could not be struck satisfactorily. An impression existed, that the instrument had passed into a canal or pouch between the rectum and the bladder, and the operation was accordingly deferred. During the ensuing forty-eight hours, however, no aggravation of the symptoms took place, and the child was, therefore, on the present occasion, again brought into the theatre.

While cautiously passing the staff, the operator remarked, just before depressing its handle, that he felt its point strike against the stone; after, however, it had fairly entered the bladder the stone could only be felt as before, in its *concavity*. The ordinary lateral incisions having been made, Mr. Clark examined the bladder with his finger, and stated that the part of the stone which he could feel was smaller than he had expected, and that it appeared to be lodged behind the pubes. After one or two attempts, during which pressure was made above the pubes by Mr. South, it was, however, seized, and, with a little difficulty on account of its large size, extracted. It was smooth externally, in shape like a truncated cone, and, although light for its size, weighed more than half an ounce. After the operation, Mr. Clark observed, that from the result of his previous examinations, and also of that by the finger passed through the wound, he could not but conclude that the stone had been detained behind the pubes, and there partially covered either by a sacculated portion of the bladder, or by lymph thrown out from an ulcerated part of the mucous membrane. In support of the latter conjecture was the fact, that a curious piece of substance, very like membranous lymph, had been passed per urethram, just before the operation. On the surface of the stone, too, was one portion which differed from the rest, and had apparently been the part exposed. During sounding, the stone had never been heard, and the sensation communicated to the hand of the operator on striking it had always been that of a dull substance, excepting on each occasion, just as the point of the staff entered the bladder, when the usual grating of stone was perceived, —facts strongly in support of the idea, that the calculus had been partially invaginated. Mr. Clark also directed attention to the circumstance, that the prolapse of the rectum, from which the child had long suffered during his straining efforts, had not been at all prevented by the insensibility produced by chloroform, and remarked, that the continued tendency to prolapse which had existed through the operation, was doubtless of reflex origin, having been excited by the irritation of the staff in the urethra.

The patient has hitherto (July 28) progressed most favourably, and now looks as florid and robust as ever, in this respect presenting a marked contrast with a poor cachectic boy (a Londoner) in the next bed, on whom Mr. Clark performed lithotomy a fortnight ago, but who is also, considering his previous condition, doing very well.

Operation for Caries of Os Calcis.—After the above, a lad was brought into the theatre, aged 18, suffering from old-standing strumous disease of the right os calcis. After the administration of chloroform, Mr. Solly exposed the outer surface of the bone by a crucial incision, and gouged away the diseased portions. To illustrate his after-comments on the case, the operator had a young man brought from the adjoining ward, on whom a similar proceeding had been practised, with success, about seven months previously.

Amputation in the Upper Third of the Arm after Erysipelas.—In the operating theatre on the women's side of the hospital, Mr. Solly afterwards performed a double-flap amputation of the arm a little below the shoulder-joint.

The patient, an old woman, aged 61, had sustained a severe contusion of the right hand from being run over by a brewer's dray. After her admission into the hospital, six weeks ago, there had occurred most severe phlegmonous erysipelas of the whole extremity. Abscesses had formed, attended with profuse suppuration and sloughing of the cellular tissue from the fingers to the axilla. The wrist joint had been destroyed; and, although the acute symptoms had now subsided, yet the general disorganisation was so great, that it was evident that longer to defer amputation would be to risk the patient's life for the sake of preserving a limb which could never be useful. Amputation was accordingly decided on. Although, from the vascularity of the inflamed parts, the bleeding was rather great, yet the patient has since done well, and her stump is now almost healed.

After this, Mr. Solly performed two operations for the removal of necrosed bone; but neither of them presented features of sufficient interest to claim the attention of our readers.

THE ROYAL FREE HOSPITAL.

TREATMENT OF ULCERS ON THE LEG BY INCISIONS AND PLASTIC OPERATIONS.

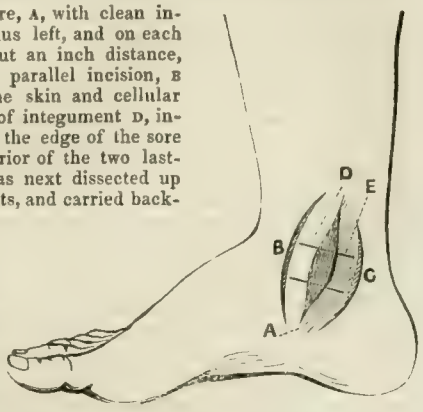
[Cases under the care of Mr. GAY.]

We mentioned, some months ago (*Medical Times and Gazette*, for April 16, page 398), the case of a man on whom Mr. Gay had tried the plan of making a longitudinal incision by the side of the sore, in order to favour the cicatrisation of an ulcer which had resisted all treatment for twenty years. At the time of our report, the healing process was but just complete, and the patient had not left the hospital. We, therefore, willingly revert to the case, in order to inform our readers, that the man who was its subject, has now been engaged for nearly ten weeks at a laborious occupation, and that his leg still continues quite sound. We have recently witnessed, in St. Mary's Hospital, the result of similar treatment in two cases, under the care of Mr. Coulson. In one, the ulcer was seated on the buttock; and in the other, which had been very intractable, it was on the leg. In both, the event has been successful, and in one, at least, the success appears to be fairly attributable to the liberation of the parts afforded by the incision.

There is another class of ulcers on the leg besides those; the healing of which is resisted by the tension of the surrounding part, which are yet very difficult to get to cicatrise. It is that of sores which are seated immediately over a superficial bone, and the edges of which have become firmly agglutinated to the thickened and exposed periosteum. For these Mr. Gay has proposed and practised an ingenious plastic operation, which we shall best describe by detailing the particulars of the following case:—

Ann B——, a maid servant, aged 29, was admitted into the Royal Free Hospital, on account of an oval ulcer over the left inner malleolus, which had troubled her, more or less, for twelve years. The ulcer had originally appeared to depend on a varicose condition of the veins of the leg. On three several occasions Mr. Gay had performed the operation of tying these dilated trunks, and during the confinement to bed necessarily following each operation, the sore below had skinned over. A sound cicatrix had, however, never formed, and always on returning to work the ulcer shortly opened again. In this case the sore was prevented healing permanently solely by its peculiar location, by the circumstance that its edges were firmly adherent to the diseased periosteum, so that when cicatrisation did take place, it was by a delicate new cuticle being formed over the surface of the granulations, and not by the contraction of the whole. The surrounding integument was not tense; it was, therefore, manifest, that no good could be done by the lateral incision, as practised so successfully in the former case. Mr. Gay, therefore, determined to practise the following plastic operation:—The sore itself was first surrounded by an incision just sufficiently

far from the border to include its thickened and diseased portion, which was then dissected quite away.



An elliptical sore, A, with clean incised edges, was thus left, and on each side of it, at about an inch distance, Mr. Gay made a parallel incision, B and C, through the skin and cellular tissue. The strip of integument D, intervening between the edge of the sore and the most anterior of the two last-mentioned cuts, was next dissected up from its attachments, and carried backwards, placed over the surface of the quondam ulcer, and there united to the opposite side by means of the hare-lip pins and the twisted suture. The original sore was thus covered by a portion of sound skin at the expense of making a gaping wound considerably anterior to it, and over a part at a considerable distance from the bone. The second incision, behind the posterior margin of the sore, was made merely to allow of a better degree of yielding on the part of the skin E there situated; for it was not deemed advisable to run the risk of dissecting it also up from its subjacent connexions, as had been done with the corresponding portion on the opposite side.

A very narrow border from one edge of the transplanted portion sloughed soon after the operation, but with that exception the healing proceeded favourably, and on the fourth day the strip appeared to have united to the surface of the ulcer. An attack of typhus fever then occurred, by which the process of cicatrisation was much delayed. On recovering from it, the patient left the hospital in order to regain her health, and continued to attend as an out patient, on account of her leg. By the aid of bandaging and zinc ointment as a dressing, the artificial sore gradually filled up by granulation, and the cicatrisation of the whole ultimately became complete. Mr. Gay informs us, that the patient has since been seen on several occasions, and that the cicatrix has become firmer, and is gaining its healthy colour, the transplanted skin having never lost it. It must be stated, that ever since the patient left the hospital she has been engaged in occupations which precluded the complete rest of the affected limb, so that, healing having been effected while walking about, there is every reason to hope that it may be permanent.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

LEEDS GENERAL INFIRMARY.

CASE OF LARGE CYST IN THE LABIUM PUDENDI ANALOGOUS TO HYDROCELE OF THE SPERMATIC CORD.

[Under the care of Mr. T. P. TEALE]

The notes of this case were taken by Mr. Scattergood, formerly one of the resident Assistants at the Leeds Infirmary, by whom, also, the examination of the contents of the cyst was made.

Esther Gilbert, aged 55, married, was admitted into the Leeds Infirmary, June 24, 1847, on account of a tumour occupying the right labium pudendi. The tumour was of oblongo-oval form. It commenced at the lower part of the inguinal canal, which was apparently occupied by it, and extended downwards, distending the labium, and forming a pendulous mass hanging down between the thighs; fluctuation was distinct throughout its whole extent. She stated, that more than a year ago she perceived a lump, as large as a pullet's egg, in the upper part of the labium. Since that time it had gradually enlarged, but had never been painful. The bowels were generally costive, but never obstructed; her general health was pretty good; menstruation ceased three or four years ago. On puncturing the tumour with a grooved needle, a fluid issued, resembling in appearance thin dirty cream.

June 26th.—Mr. Teale tapped the tumour. Three pints of fluid were evacuated, of sp. gr. 1026, in colour resembling ordinary tea to which cream has been added, of an odour not unpleasant; rather sour, like that of butter-milk. It had a slightly acid re-action, and was not rendered viscid by boiling with liquor potassæ. Under the microscope it exhibited a large quantity of oil globules, to which was no doubt owing the want of transparency of the fluid. In microscopic appearance it much resembled milk.

27th.—The collapsed cyst forms a tumour of the size of a fist. It is thick, hard, and at the upper part uneven.

July 2.—The sac is filling again. She is made an out-patient.

August 7.—Re-admitted. About three weeks after she left the hospital, the tumour reached its original size. It then opened spontaneously, and discharged part of its contents. The opening has now closed. Owing to over-exertion she is feverish, and is obliged to remain in bed.

17th.—Fever abated; labium much distended. After tapping, not quite three pints of fluid discharged, of a dirtier colour than before, of putrid odour, and of sp. gr. 1016.

25th.—Cyst filling again. She is made an out-patient.

Oct. 7th.—Re-admitted; tumour as large as before; after removing the fluid by tapping, Mr. Teale injected two drachms each of tincture of iodine and of rectified spirit of wine.

8th.—She had felt but little pain. Iodine is readily detected in the urine and saliva.

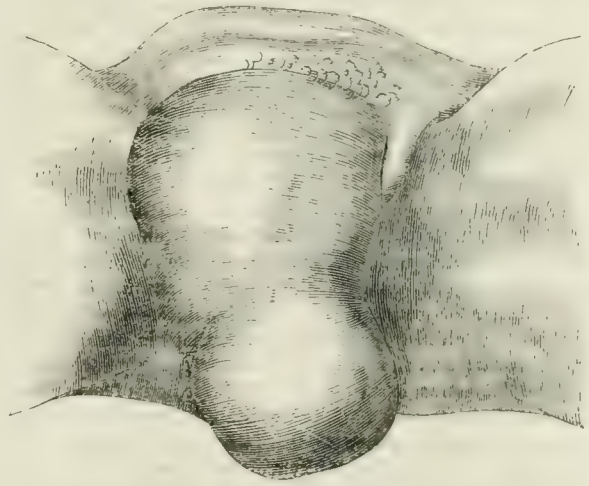
Nov. 17th.—Tumour as large as before. The tapping repeated, and half an ounce each of tincture of iodine and spirit of wine injected. The operation was followed by slight pain for an hour or two.

Feb. 17th, 1848.—The cyst has not filled again.

May 17th.—The cyst is again distended, but not so much as on former occasions; the fluid was again removed by tapping.

It was the intention of Mr. Teale to repeat the injection of iodine if the cyst should fill again; but the patient discontinued her attendance at the hospital, and information was afterwards received that she died of some disease unconnected with the tumour.

It is much to be regretted, that the opportunity was not afforded of determining, after death, the anatomical relations of the tumour. Mr. Teale suspected the disease to be a cyst, developed in connexion with the round ligament, analogous to hydrocele of the spermatic cord in the male.



A cast of this tumour is preserved in the Museum of Leeds School of Medicine, and a duplicate cast has been sent by Mr. Teale to the Museum of St. Bartholomew's Hospital.

Jenner.—1,600 dollars have been subscribed in the United States for the contemplated monument to Jenner. We believe this is a much larger sum than any other country has yet contributed.

Cholera is at present so rife in Calcutta, that no less than 1,100 persons were carried off in the course of two days. There had been great heat and absence of rain. It is also very prevalent in Copenhagen, within 500 miles of the coast of Norfolk. In one day, from the 15th to the 16th, 350 cases, equal to 3,500 in Paris, comparatively with the respective populations, occurred, and 137 deaths. The cholera is increasing at Stettin, and cases at Dantzic are reported. It is anticipated, that it will spread throughout the Baltic provinces. At St. Petersburg, the epidemic is so prevalent, that the field-manœuvres of the troops have been suspended.

Medical Times & Gazette.

SATURDAY, JULY 30, 1853.

VACCINATION EXTENSION BILL.

The proportion of deaths from small-pox in London, is three times, and in Glasgow six times, what it is in Brussels, Berlin, or Copenhagen. Of each thousand persons who die in England and Wales, twenty-two die of small-pox. Of each thousand persons who die in Ireland, forty-nine die of small-pox; while of each thousand persons who die in Lombardy, two only die of small-pox.

The proportionate mortality, then, from small-pox, in England and Wales is eleven times, and in Ireland twenty-four times greater than it is in Lombardy. Whence comes this difference? In England, those who please, take their children to be vaccinated; in Lombardy vaccination is compulsory.

The proportionate mortality from small-pox in England and Wales is three times greater than what it is in any country in which the inhabitants are compelled, by law, to to have their children vaccinated.

These are great facts.

In our Metropolis, one thousand persons die annually of small-pox; if vaccination were compulsory, it is indisputable that the number of deaths from this disease, in London, would be reduced to two or three hundred per annum. From six to eight hundred persons thus die yearly in the Metropolis alone, whose lives might be saved by an Act of the Legislature. That a Vaccination Extension Bill should be before Parliament; that all should be agreed on the propriety of legislating anew on this important subject, is, then, considered in the abstract, matter for rejoicing. When, however, we come to consider the especial Act in question, we find it is held by many to be open to serious doubt whether it is calculated to effect the object in view, and, if it be so, whether it does not propose to inflict a great injustice on the members of the Medical Profession.

The principle on which the Bill is framed is, that every parent ought to be compelled to have his child vaccinated within a limited period after its birth; the mode of enforcing obedience adopted in the proposed measure is by fine. The father or guardian is to receive notice soon after the birth of the child from the Registrar, that his child must be vaccinated; and should he fail, after receiving such notice.

The Registrar is supposed to be informed of every birth in the district, and on him the State throws the trouble of giving a written notice to the father of the child, of the necessity of having his child vaccinated, and also of keeping a book containing a Minute of his having given such notice.

Let it be granted, that the principle of the Bill—viz., compulsion, is good,—and we are strongly in favour of some form of compulsion,—that a fine is the best mode of enforcing obedience, concerning which we are by no means sure, —and that the Registrar is the most fit person to call the attention of the parent to his duty, and to the legal consequences of its neglect; still, the portion of the Bill which provides for the performances of the operation remains for consideration; and it is of this part of the Act, as it more immediately concerns the interests of the members of the Medical Profession, that we propose now to speak.

The State determines that the child shall be vaccinated, and, therefore, the State provides certain officers to perform the operation. These persons are necessarily Medical men. If the Bill now before Parliament becomes law, there will be, as there now are, district Vaccinators, and these Vaccinators will have to vaccinate, as at present, all children brought to them for that purpose. In regard of this point, their condition will be unchanged, EXCEPTING that the Vaccinator must take the lymph he is about to use from the arm of a healthy child, in the presence of the parent of the child he is about to vaccinate; or if unable to secure the attendance of a healthy child from which to take the necessary lymph, he must report the case and the cause to the Overseers or Guardians of the Poor.

But, in addition to vaccinating the child, the district vaccinator must give to the parents of the child a certificate, to show that it has been successfully vaccinated. And, finally, he must attend upon and prescribe for any child he has vaccinated, should it be in any way indisposed in consequence of the vaccination. And then, for performing the operation, inspecting the arm to see that it has been successful, for writing a certificate for the parent, and a duplicate of the certificate for the parish, and visiting the child and prescribing for it, if necessary, he is to receive the fee he now receives for doing half the duty, and no more. Really this is most monstrous. Ill-paid now, his remuneration under the New Act would be ridiculously small.

One shilling and sixpence is the State idea of remuneration to the members of a learned Profession for vaccinating a child, inspecting its arm, certifying to the success of the operation, certifying to the parish the fact of the vaccination, with many particulars concerning it; making a special Report to the Guardians as often as the attendance of a healthy child, from whom healthy lymph may be obtained, cannot be secured, and as often as the child brought to be vaccinated is out of health; and for visiting once or oftener all children fancied by their mothers to be ill from the effects of the operation.

But, setting aside the question of remuneration, it is most absurd and vexatious to decree that the vaccinator shall, on every occasion, have a child present to supply him with lymph, or report his inability to secure the attendance of a child to the overseers or guardians of the poor. Such a Clause could only have been introduced by a man practically ignorant of the subject on which he was attempting to legislate.

Holding these opinions, then, in regard of the subject generally, and in reference to this special Bill, we were exceedingly pleased to find that the Home Secretary, on the 13th inst., while he assented to the principle of Lord Lyttelton's Bill, expressed his conviction that its machinery required considerable alteration. Judging from the known sound practical good sense of Lord Palmerston, we confidently anticipate that this Bill will be considerably amended before it becomes law.

It is to be hoped that the provisions of the Bill may also be made to extend to Scotland. In Liverpool, the mortality from small-pox in the 10 years ending 1850, was 21 in 1000, while in Glasgow it reached 36 in 1000; and it has been ascertained that in Edinburgh, Glasgow, and Perth, the deaths from this disease occur almost entirely among the unvaccinated. It is a duty of the Government to see that the negligent and ignorant do not injure their more careful and prudent neighbours, by exposing them to the risk of contracting such a disfiguring and dangerous disease as small-pox.

Since writing the above, we have received the Report of the Small-pox and Vaccination Committee of the Epidemio-

logical Society. This Report we have printed at length; and to it we would direct the attention of our readers, as one of the most able papers that has appeared in opposition to the machinery of the Bill.

THE *EDINBURGH REVIEW* AND THE QUARANTINE QUESTION.

THERE is an article in the last Number of the *Edinburgh Review*, entitled, "Quarantine, Small Pox, and Yellow Fever," which cannot be allowed to pass without notice; not that it possesses merit or ability, but because it is characterised by the same unmasked suppressions of the truth, the same thorough special-pleading, the same insulting depreciation of the Medical Profession, the same false reasoning, and the same dangerous practical errors which have uniformly distinguished the reports on Quarantine proceeding from the General Board of Health. It is very evidently the production of the same pen which drew up those notorious documents.

It appears that a body of Gentlemen, forming the Manchester Chamber of Commerce, met together, and satisfied themselves that Quarantine regulations, as practised of late years, are "cumbersome, cruel, and costly, and ineffectual towards securing the end for which they are established." Of course it is quite impossible that a body of merchants could have any interested motive in wishing to remove impediments to commercial intercourse and enterprise, and equally impossible that their interests might lead them to overlook the evils likely to follow the importation of contagious diseases. Yet, we find the Reviewer following his old vocation of insulting those who believe that plague, small-pox, and yellow fever have been introduced from diseased into healthy localities, by asserting that their caution in desiring to prevent a repetition of similar misfortunes, and their consequent opposition to the abolition of Quarantine Regulations, is solely because they are "interested in perpetuating the reign of ignorance and error."

Then follows the application of the theories of the Manchester gentlemen and the Board of Health to the practical question of preventing the importation of small-pox. The Arethusa arrived at Plymouth from Lisbon with small-pox on board, and landed twelve patients at the Naval Hospital. This did not lead to an epidemic of small-pox at Plymouth,—therefore quarantine precaution is useless! Such is a specimen of the reasoning of the Board of Health. Why, this very case shows the utility of good quarantine regulations. The Hospital was a clean well-ventilated lazaretto for the time, where due and proper precautions were used to effect all necessary separation of the sick from the healthy and from each other.

Quarantine, as now practised, is not now what the *Edinburgh Review* ignorantly asserts—a "confining the healthy in the same vitiated atmosphere with the sick and dying." In no European lazaretto are the sick confined together in a limited space; but they are removed from the ships to large well-ventilated rooms on shore, where they are not only separated from the healthy, but from each other, and attendants are placed with them to undergo the same period of quarantine. The Board of Health utterly repudiates such precautions. It inculcates the necessity of cleanliness and ventilation certainly, but ridicules the additional precaution of separating the sick from each other, and from those to whom they might communicate disease. No lessons from the experience of the past are regarded except such as those which, like the case of the Arethusa just quoted, can be twisted and perverted to support the peculiar theoretical views the Board so obstinately maintains. Yet a very slight acquaintance with the history of small-pox would prove, that within the last twenty years its spread has been repeatedly arrested by quarantine regulation. In our Number of July 9, the course of two epidemics at Corfu in 1842 and 1852, is described; the one checked by proper precautions, the other, while still progressing, having led to 4053 attacks and 704 deaths, on a small island, between March and December. At Malta, in 1830, small-pox was brought into the healthy island, from Greece, in H.M.S. Asia. The patients were landed at the Naval Hospital, and the disease was distinctly proved to have spread from this establishment to the home of the person who washed the patients' linen, and then over the greater part of the island, attacking 10,351, of whom 1503 died, in a population of 114,000. This lesson was so severe, that ever since, cases of small-pox arriving in Malta have been sent to the Lazaretto, and kept there until all danger of propagating disease had passed off. Not a year has passed without several cases having been admitted into the Lazaretto, but small-pox has never spread beyond its walls. Yet those who insist upon protecting a population from death, or from disfigurement by a loathsome disease, are to be charged with interested motives, and sickened by false statements of the cruelty and inhumanity of quarantine. It is not cruel to disfigure a tenth of a population, or to kill some one or two per cent. of the poor people; but it is very "cruel and costly" to keep a few diseased travellers, two or three times a-year, in a large, clean, well-aired hospital, so separated from the healthy that they cannot propagate disease!

The subject of quarantine, in its relation to yellow fever, is too important to be discussed at the close of an article; and we shall recur to it again.

CHARING-CROSS HOSPITAL.

A fortnight since, we directed the attention of our readers to the rumoured withdrawal of the recognition of the Charing-cross Hospital Medical School by the Royal College of Surgeons. The truth of the report was for some time denied; but an official letter we published last week from the Secretary of the College expressly confirms it. As this is the second time that the withdrawal of the recognition has taken place, we owe it to the credit of the Medical Schools of the Metropolis to investigate the causes which have led to such a result; and an Address to the Governors, just published by Dr. E. Smith, enables us to do so.

In the first place, according to Dr. Smith, the governing body of this hospital has been very much smaller than in other hospitals and schools, consisting only of four members, only three of whom take an active part in the management,—no other officer of the hospital or lecturer in the school having any power whatever in its direction. This has tended to lower the position of those excluded from a voice in the Councils.

Secondly,—One of the Physicians has had office without performing its duties, which he has delegated to an Assistant Physician.

Thirdly,—There are no Assistant-Surgeons, so that the care of the out-patients has principally devolved upon a second year's pupil, or "house-pupil," as he is called. This is a monstrous evil, which is so totally unjustifiable, whether we regard the patients, the interests of science, or those of the Profession, that we trust it will be remedied before the Hospital be again recognised by the College.

Fourthly,—One of the Surgeons is not admitted to any share in the governing body.

Fifthly,—A charge of jobbery is preferred against the Direction, inasmuch as its chief member is said to live in a large house, in good condition, free of rates and taxes, while the apartments of the working officers of the hospital are unworthy of them, the building itself requiring repairs, and the clerk, porters, and nurses being underpaid.

Sixthly,—It is said that the diet of the patients is insufficient,—one pound of uncooked meat serving as full diet for three patients; and as it is not weighed after cooking, it places temptation to robbery in the way of the underpaid nurses.

Into the merits of the dispute between Dr. E. Smith and the Committee we do not wish to enter; but it is due to the Profession, that substantial charges like those we have just enumerated should be answered. The subscribers have a right to see that their money is honestly appropriated, and that they do not support an institution where it can be said, with any approach to truth, that, if it were necessary to perform an amputation in the night, there is not an instrument in the house to do it with; that the House-surgeon must make splints out of pieces of board; that the only two fracture-beds in the establishment being out of repair, a patient "was lying waiting for such a bed for several days;" and another was detained "for three weeks in want of a pair of crutches."

We have been assured on good authority, that these charges are not true, that the statement about the crutches and splints is quite unfounded, and that the necessary repairs of the hospital had been decided on by the Board before the unexpected visitation of the College of Surgeons took place. But, whether true or false, they have been made and published. It rests with the Direction to say how far they are true, and with the subscribing Governors to see that evils really proved to exist should be reformed.

MEMOIR OF DR. GEORGE RAE.

Dr. George Rae, Surgeon of H.M.S. Calypso, who fell a victim to yellow fever at La Guayra, South America, on the 31st December last, was born at Dalkeith, near Edinburgh, in July, 1819; consequently, at the time of his lamented death, he had not yet attained his 34th year.

After serving an apprenticeship with the late Dr. Morison, a gentleman who enjoyed extensive practice in Dalkeith, and having attended the usual course of medical and surgical study at the University of Edinburgh, George Rae obtained the degree of M.D. at that celebrated school of medicine in 1840, and shortly afterwards he passed his examination before the Royal College of Surgeons, and received the diploma of Surgeon from that body.

From the position and influence possessed by his father, the worthy and respected Factor to the family of the Marquis of Lothian during two Marquisates; and now, verging upon the same service in the seignory of a third Marquis, Dr. Rae had good prospects of success in private practice in his own neighbourhood; but, being of an enterprising turn of mind, he preferred the more exciting, and, as has been but too plainly exemplified in his own case, the more perilous employment of the medical service of the Royal Navy.

In January, 1841, Dr. Rae received the appointment of Assistant-Surgeon in the Royal Navy, and was for some time employed at the great Naval Hospital of Plymouth.

The exigencies of the war in China requiring fresh supplies of medical officers, Dr. Rae soon afterwards proceeded to that station, where, on board H.M.S. Childers, he was, on several occasions, engaged in active operations against the enemy, for which he received the medal recently granted by Her Majesty for war services. The Childers was at this time commanded by Captain Edward P. Halsted, a scientific, well-informed, and kind-hearted officer, who, to our knowledge, has always entertained a high respect for Naval Medical Officers, and whose just appreciation of their value has derived, alas! but too ample confirmation during his recent service in the West Indies, as Commander of the ill-fated Dauntless. While on this station, Dr. Rae also did duty on board the hospital-ship Minden, of which he acquitted himself highly to the satisfaction of Dr. John Wilson, the Inspector of Hospitals, and principal naval medical officer in China.

In 1844, Dr. Rae returned from China, having suffered somewhat in health from upwards of three years service in that trying climate. But he remained on shore only sufficiently long to enable him to pass the necessary examinations for the rank of Surgeon. This being accomplished, he again applied for employment, and was, accordingly, in the beginning of 1845, appointed Assistant-Surgeon of H.M.S. Canopus, 84 guns, commanded by Captain Fairfax Moresby, C.B., now Rear-Admiral, and Commander-in-Chief in the Pacific. The Canopus was variously employed in the Channel, in the Mediterranean, and in the West Indies; and Dr. Rae remained in her until she was paid off in 1848.

In a report to the Admiralty, Captain Moresby, speaking of the subject of our memoir, says—"I shall ever be ready to give testimony to the good opinion I have of Dr. Rae's ability, and gentlemanly conduct."

Dr. Rae could not rest quiet until his well-earned promotion had been awarded him. Accordingly, in a very few months after the Canopus was paid off, he was on his way to the West Indies, to join H.M.S. Wellesley, bearing the flag of that celebrated veteran, Vice-Admiral the Earl of Dundonald, Commander-in-Chief of the station, better known in history as Lord Cochrane.

In 1850, Dr. Rae was promoted to the rank of Surgeon in the Navy; and in the same year he married, at Halifax, Nova Scotia, Jessie, daughter of his cousin, Dr. James Hume, of that place, son of Dr. Robert Hume, a Medical Officer of the Navy for upwards of half-a-century, well known at Halifax to the Naval Officers on the North American Station, for his amiable, kind, and hospitable qualities. This excellent and time-honoured man has likewise paid the common debt of nature, within the last few months, at Halifax, where he had long been the Senior Medical Practitioner.

In July, 1851, Dr. Rae was appointed Surgeon of H.M.S. Calypso, which shortly afterwards proceeded to the West India Station.

The Calypso remained remarkably healthy, notwithstanding that yellow-fever was prevailing in many ships on the station, and that she had also visited "San Juan de Nicaragua," a locality where the Indefatigable, Fair Rosamond, and other vessels-of-war, had suffered severely from fever.

Dr. Rae, indeed, in the letters preceding those that conveyed the melancholy intelligence of his death, wrote to his relatives in Scotland in the highest spirits, looking forward to the ship's proceeding to Halifax, where, in the midst of his friends, he was to be joined by his young wife and his infant daughter from Scotland. But it is "when man proposes, that God disposes;" for it was ordained, that these joyous and happy anticipations were not to be realised. In the early part of December, 1852, H.M.S. Highflyer arrived at Trinidad, with yellow fever on board. It was here that Dr. Rae's professional assistance was requested, and readily given to the sick of the Highflyer; and it was in the discharge of this duty that he imbibed the disease which was soon to carry our friend, then in the prime of life, and in the full vigour of health, to a premature grave.

The Calypso soon sailed for La Guayra; and, in the evening of the 26th December, Dr. Rae first felt the approach of feverish symptoms, and on the following morning he went on shore, for the sake of greater comfort and medical attendance, (there being, at this time, no other medical officer in the Calypso,) where he was received and attended to most kindly, throughout his illness, by Mr. Stacey, the English Consul at La Guayra.

In the mean time, the Calypso having dispatches for the Commander-in-Chief, sailed from La Guayra to deliver them up; and on her return on the 3rd of January, his brother officers found to their grief, that their poor messmate had breathed his last only four days previously, on the last day of the old year.

"He was buried," adds Lieutenant Stanhope of the Calypso, in a beautiful and affecting letter to Dr. Rae's father, "on the same day, in the Protestant burial-ground, close to his poor messmate, our marine officer, whom he

himself had followed to the grave, only a few days before he was taken ill. Upwards of seventy of the most respectable inhabitants of the place followed him to the grave, over which a tombstone, with suitable inscription, is being erected to his memory."

"From the Captain, down to the smallest boy," continues Mr. Stanhope, "we all loved and respected him, from his uniform mild and gentlemanly conduct towards each and every one."

Those who had the privilege of knowing Dr. Rae cannot but feel that his death has deprived the public service of a kind, valuable, and beloved officer,—his wife of an affectionate and devoted husband,—and his parents of a son who was at once the pride and comfort of their declining years.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Thursday, a Petition was presented from Camberwell, praying that the right of being represented may be bestowed on the University of London; also by Captain Scobell, from the Medical Profession residing in Bath and its vicinity, against some of the provisions of the Vaccination Bill.

On Friday, in Committee on the Government of India Bill, Sir C. Wood said, with regard to appointments to Assistant-Surgeonships in the East India Company's army, he intended to adhere to his original proposition, that these should be altogether open to competition, the natives of India being equally admissible to candidateship with Her Majesty's other subjects.

On Monday, petitions were presented by Mr. Heathcote, from the Surgeons of Boston, for the better accommodation of Assistant-Surgeons in the Navy; by Mr. Alexander, from members of the Medical Profession, to the same effect; by Dr. W. Michell, from the students of the Metropolitan Hospitals, to the same effect; by Colonel Smyth, from Medical men practising in York; by Sir J. B. East, from the Medical gentlemen practising at Winchester; by Mr. K. King, from the naval Medical officers of Swansea—all to the same effect; by Mr. Brotherton, from certain members of the Vegetarian Society, against the Vaccination Bill.

On Tuesday, Petitions were presented by Mr. Liddell, from the members of the Medical Profession in Liverpool, praying the House to consider the case of the Naval Medical Officers; by Mr. Pellatt, from 123 surgeons and medical students of Metropolitan hospitals, in favour of a separate cabin for the Assistant-Surgeons in Her Majesty's navy; and by Sir J. Walmsley, one from Medical Practitioners in London, and the other from Leicester, in favour of the Navy Surgeons.

REPORT
ON THE VACCINATION EXTENSION BILL.

PRESENTED TO THE COUNCIL OF THE EPIDEMIOLOGICAL SOCIETY BY THE SMALL-POX AND VACCINATION COMMITTEE.

The Report which the Small-pox and Vaccination Committee presented to the Council on the 26th of March, was drawn up by them, as then stated, in consequence of a Bill for the Extension of Vaccination having been laid before Parliament by Lord Lyttelton.

It contained a review of the present state of vaccination in this and foreign countries, and concluded with a unanimous expression of opinion on the part of the Committee in favour of a compulsory enactment, and with suggestions for the improvement of the "Vaccination Extension Bill."

The Report having been adopted by the Council, copies of it were forwarded, at their desire, to the Secretary of State for the Home Department and to Lord Lyttelton, and it has since been printed and published by order of the House of Commons.

The Bill having passed through all its stages in the House of Lords, is now waiting a second reading before the House of Commons; and, as in its progress it has undergone many alterations avowedly in consequence of the Report emanating from this Committee, the Committee consider that it has become their duty to examine how far these changes are in conformity with the suggestions made, and to what extent the Bill in its present shape is likely to be successful in attaining the end proposed by its Author,—the more general diffusion of vaccination.

To attain this great object two things appear to the Committee to be alike indispensable: a compulsory enactment, and the encouragement and stimulation of those employed to administer it.

They consider that the argument in favour of compulsory vaccination was satisfactorily established when it was shown, that the proportionate mortality from small-pox in England and Wales, where the practice is entirely voluntary, is considerable more than double what it is in *any* European country in which the practice is compulsory, and *ten times as great as it is in many of them;* and the Committee only revert to this point for the sake of recording their satisfaction at finding that the National Vaccine Board, in their Report just presented to Parliament, are equally anxious that vaccination should be made compulsory, and renew the expression of their "conviction, that, if England is to be freed from small-pox, the interposition of the Legislature alone, by wise and comprehensive measures, can disarm the pestilence of its terrors, and realise the fond hopes and prayers of the friends of humanity."

The Committee, however, are quite as firmly convinced that any measure of compulsion will fall far short of what may reasonably be expected of it, unless encouragement be given at the same time to administrative zeal and energy. They showed in their former Report how much had been effected, and might be effected, by these alone; and they gave a most striking illustration of their importance, by contrasting two provinces of the same kingdom (Belgium),—subject, of course, to the same compulsory laws,—in one of which the vaccinations in proportion to the births were nearly twice as numerous as in the other.

These, then, being the essential or fundamental conditions to be kept in view in any measure for the extension of vaccination, the Committee have examined the amended Bill of Lord Lyttelton with reference to them, and beg to observe:

1. *In reference to Compulsion.*—That the clause for this purpose (VIII.) is simple and direct, and likely to a large extent to be efficacious for its object; but that it would have been more so had the suggestion of the Committee been adopted, and had it been made the duty of some special officer in every union or district, to proceed against persons not complying with its terms.

2. *In reference to Encouragement.*—That, not only does the Bill hold out no encouragement to stimulate the zeal and activity of those upon whom it will mainly devolve to carry it into execution, but that by imposing upon them additional duties, while, at the same time, it expressly provides that they shall receive no remuneration for these duties, it makes it their present interest to oppose the Bill in its passage through the Legislature, and will disincline them, should it eventually become the law of the land, from rendering that active and spirited co-operation, which the Committee have pointed out as essential for the attainment of the object sought.

It would need no laboured argument to show, that on the Medical men employed as public vaccinators throughout the kingdom, it will depend, in a great measure, whether the act shall be successful in its operation or not. If *they* be interested in its success, the universal vaccination of the people of this kingdom, is not far distant; if, on the other hand, they be indifferent and apathetic, still more if they be hostile, this or any other measure will fail, to a great extent, to secure its end; and the real alternative before the Legislature is this—Whether they will permit some thousands of deaths from small-pox to take place yearly, or whether, by a wise and just expenditure of the public funds, they will evince their earnestness to eradicate this scourge, so disgraceful to the empire and to the age in which we live.

In their former Report, the Committee exhibited some of the evils resulting from the present system of Medical remuneration as regards the practice of vaccination. They showed, that the average sum paid for each successful case, in England and Wales, was less than eighteen-pence—a sum so inadequate, that in many districts it was the custom to delay vaccination until a sufficient number of cases had accumulated to make it worth the while of the Medical Practitioner to perform the operation. This serious evil will, to a certain extent, be prevented by the enactment, that all vaccinations shall take place within a given time after birth,—but additional trouble will

be thus so far imposed upon the vaccinator, and this, of itself, should constitute a ground for increase of remuneration.

Another great evil of so low a scale of payment has been found to be, that the vaccinator having performed the operation, has, in many instances, considered his task as accomplished, and has taken but little pains to insure the inspection of the person vaccinated. Yet, such inspection is alike necessary for ascertaining that the vaccination has taken proper effect; and for keeping up the supply of lymph. It should be one of the first duties of the Legislature so to provide for the remuneration of the Vaccinator as to enable him to afford the requisite time, and to make it worth his while to follow each case to its own home (provided it be not brought to the station,) so that, in no instance, should there be any doubt as to the success of the operation, nor any opportunity lost of maintaining a proper stock of good healthy lymph.

But if the payment hitherto given has been found insufficient to secure the two attendances thus pointed out as absolutely indispensable, still less can it be expected that the additional duties imposed by the Act will be efficiently discharged unless additional remuneration be afforded. By the 3rd Clause, the Vaccinator will have, besides keeping the books and registers, with which he is already furnished, to give two certificates *in every case*,—one to the parents, the other to be sent to the Registrar; and, by the 4th Clause, he will be required to examine into the state of health of persons submitted to him for the operation, and to certify thereupon if they be not then fit for it; and this examination and certificate (which are as much professional acts, and involve as much trouble and judgment as vaccination itself,) may have to be renewed an indefinite number of times. It is only those who have had such duties to perform who can understand the time they require, and the trouble they give; the labour they imply ought not to be unrewarded, and the Committee are quite at a loss to understand why a fee should be given to the Registrar for each certificate he may give, or entry he may make, and yet withhold from the medical man for the far more important duties which he has to perform.

Independently of the mischief which has arisen from the insufficient remuneration to the Public Vaccinators, there are other evils, resulting from the *mode* in which that remuneration is given. Under the present system, payment is made by the Boards of Guardians,—half from the Consolidated Fund, and half out of the Poors-rate.

One serious evil was shown, in the Report, to be, that some Boards, from a mistaken notion of economy, and desire to keep down the rates, actually discouraged the efforts of the Public Vaccinators, and remonstrate with them if the number of vaccinations be large.

Another, to which the Committee did not then advert, appears to be this:—The Poor-law Medical Relief, and Public Vaccination, being administered by the same Board, and *paid for out of the same funds*, private practitioners, who would willingly be Vaccinators under a national system, but who do not desire to be considered as in the employment of the Boards of Guardians, have abstained from taking the office, and thus the number of Public Vaccinators has been unduly limited.

The first of these evils would be entirely, and the second partially, obviated, if the payment for vaccinations were made altogether out of the Consolidated Fund.

The most effectual remedy, indeed, for all the evils which have been pointed out, would be, to disconnect public vaccination from the Poor-law administration, and to place it under the superintendence of competent persons, (as in other countries,) whose sole duties should be the organising and carrying out a system for the entire vaccination of the people. But if the Legislature should be unwilling, at the present moment, to make this fundamental and, as the Committee believe, most essential and ultimately, indispensable change, it will yet be a great improvement on the present system, that the rate of remuneration should forthwith be increased, and that payment should be made out of the Consolidated Fund.

To give effect to these suggestions, it will be necessary that a short clause be introduced between Clauses II. and III., requiring the parents or guardians to return with the child on the eighth day after the operation, that the arm may be inspected and the certificate of successful vaccination given; that the 5th Clause be omitted altogether, and that a Clause be added fixing a minimum fee for the operation, and regulating the manner in which the fee shall be paid.

There are some other points to which the Committee have to advert. They find that Clause 2 of the Bill is still so worded as to interfere with the rights of the private practitioner,—an obligation being thereby imposed by the Legislature on *every* qualified medical practitioner to vaccinate *any* child which may be brought to him. Such is, undoubtedly, the effect of the clause, though the Committee know that this is far from the intention of the author and promoters of the Bill; and they suggest, that the object of the clause will be attained, and every objection obviated, if all the words from the end of the 34th line be omitted, and the following substituted, "for the purpose of being vaccinated, (unless he shall have been previously vaccinated by some other qualified medical practitioner, and the vaccination duly certified,) and the said medical officer, or practitioner, so appointed shall, and he is hereby required thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child."

The Committee regret to observe, that no provision is made for the vaccination of children immigrating into this country; for the case of the removal of a child from the district in which he is born to some other district previous to the time till which vaccination may be deferred; for the exemption of children and persons who have had small-pox; nor for securing more frequent periodical returns of the numbers vaccinated to the central authorities.

(Signed)	R. D. Grainger, Chairman.
J. F. Marson.	C. A. Aikin.
Thomas Hunt.	W. B. Kesteven.
W. A. Lewis M.B.	E. C. Seaton, M.D., Hon. Sec.

REVIEWS.

Researches on the Primary Stages of Histogenesis and Histolysis. By Robert D. Lyons, M.B.T.C.D., M.R.I.A., Honorary Professor of Anatomy to the Royal Dublin Society, etc. From the Proceedings of the Royal Irish Academy.

The author believes, in opposition to Schwann's theory in its extreme and exclusive application, that there are several tissues, which at no period of their development exhibit any evidence of formation by cells; and that, consequently, cells cannot be considered as the only plastic germs or formative elements of organic life. He enumerates the appearances presented by the yelk of the hen's egg under a magnifying power of 420 diameters; viz., minute granules, oil-globules, vesicles of various shapes—some with granules, others transparent; also the details of the examination of a portion of the germinal membrane, in no part of which he found a distinctly nucleated cell. In a preparation from near the germinal centre, after twenty-four hours' incubation, the vesicles were seen much larger and very finely granular. From one of the halones he noticed in a fragment a considerable number of long flat bands or fibres, with very clear double outline, and minutely granular centre. He is much disposed to think that the linear aggregation of granules indicates the true mode of formation of such fibres. In the plasma, from a cut in the finger, five minutes after the blood ceased to flow, he found granules, granular corpuscles, hyaline vesicles, and granular masses.

He refers to the observations of Robin and Handfield Jones, on the development of fat; the well-known experiments of Ascherson in the formation of vesicles, by bringing oil and albumen into contact; the experiments of Panum and Melsens, in support of his view. He believes in at least three elements of organic bodies, independent of cells, namely, granules and granular base, fibres, and corpuscles.

He proceeds thence to furnish the results of his researches in histolysis, or the decomposition of tissue, from which he is led to believe that a certain order of morphic changes takes place before the final dissolution of organic structures. First ensue softening and separation of the morphic constituents; next, the appearance of granules, arising from recombinations of the particles of the organic fluids. Animalcules are seen at this stage; then the morphic elements of histolysis pass gradually into lower forms, ex-

hibiting instances of endogenous fissiparition, granular disintegration, etc.; and, lastly, a period arrives at which chemico-physical forces prevail, evidenced by the passage of certain elements into crystalline forms, others passing off by volatilisation, solution, etc.

Dr. Lyons evidently possesses the qualities both of industry and carefulness; and he may acquire in time considerable histological repute. We would urge upon him the importance of simplifying, and not complicating, the theory of the formation of tissues, as he inevitably will by enumerating, without classification, all appearances in the field of the microscope as equally important. That which he has described is correct, but not new. The great want which we feel is, not a repetition of microscopic observations, but a proper interpretation of the facts already recorded.

Remarks on the Operation of Bronchotomy. By William Martin, Esq., Bengal Medical Service. 8vo. Pp. 21. Calcutta, 1853.

The object of this pamphlet is to point out the advantage of performing the operation of bronchotomy with a trocar and canula, instead of by incision. We have long been convinced that the former is by far the simpler, neater, and safer operation, and, in common with many London surgeons, have adopted it except when operating for the removal of a foreign body. Mr. Martin diminishes the length of the canula to an inch and a quarter, and "shortens the distance of the point and facets of the trocar from the lower end of the canula; in fact, to bring the cutting edges nearly up to that point."—P. 4.

He prefers a straight to a curved instrument; but, as he only appears to have performed the operation once on the living subject, it is not improbable that further experience may lead him to modify his opinions in this respect. However this may be, the pamphlet is calculated to be useful, by drawing the attention of those who still operate by incision to the use of the trocar and canula.

Elements of Experimental and Natural Philosophy. Edited by Jabez Hogg, Surgeon. 8vo. Pp. 357. London. 1853.

This work forms one of an admirable series of illustrated educational works issued by the spirited proprietors of the *Illustrated London News*. It is completed in a style exceedingly creditable both to its Editor and publishers; and we know of no work which can be so strongly recommended to those who wish for a cheap, interesting, and useful introduction to the study of the physical sciences.

Table-Turning and Table-Talking. 12mo. Pp. 191. London. 1853.

Although this singular epidemic madness has been set at rest by Faraday, this little book may not be without a certain utility, as a history of the experiments which have been made in America, Germany, France, and England, the mistaken spirit in which they have been observed, and the falsehoods by which they have been followed.

Confessions of an English Opium-Eater. 12mo. Pp. 176. London. 1853.

A new and very neat edition of this well-known work.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON THE ENTIRE RESECTION OF BOTH SUPERIOR MAXILLARY BONES.

By M. HEYFELDER,
Professor of Clinical Surgery at Erlangen.

Gensoul at Lyons, and Lizars in England, were the first to extirpate (1827) the superior maxillary bone of one side in cases of disease. Since then the operation has been often repeated, and in 1846, Ried (*Die Resectionen der Knochen*) was able to collect thirty-five cases, of which twenty-four were followed by success. If to these be added the cases of Morel-Lavalle, Maisonneuve, Chassaignac, Robert, and Muston, together with those related in the Surgical Cliniques of Munich, Wurzburg, and Erlangen, not yet published, above fifty cases may be easily enumerated. The same remark cannot be made of the resection of both superior maxillæ. M. Velpeau accords the honour to Rogers, "who, in 1824, took away the upper jawbone of both sides as far as the pterygoid processes, and who found it scarcely necessary to divide the lip." This description is too brief to be intelligible. Liston removed the entire superior maxilla of one side, and part of the other. Dupuytren (1818) effected the partial removal of both maxillæ in a man sixty-eight years of age.(a)

Thus, the cases hitherto known are but examples of the partial resection of both maxillary bones.

The complete extirpation of both bones has been performed by Heyfelder twice. The first operation was in the summer of 1844; the second, in January, 1850.

Case 1.—A. Schmidt, aged 25, came to the Clinique, June 13, 1844, suffering from a tumour of the face, which, from his account, had commenced a-year ago, in the posterior part of the palate, and had gradually involved both superior maxillary bones. The nose was pushed upwards, and flattened; the palatine arch was depressed towards the tongue; the face was affected with œdematous swelling; both respiration and deglutition were impaired, speech was embarrassed, and the sleep broken. The teeth, though loosened, were sound; only two incisors were wanting. The tumour appeared everywhere hard, uneven, and insensible to the touch, and did not pass beyond the boundaries of the superior maxillary bones. The constitution was good; lancinating pains had been felt in the tumour only during the last few weeks.

Dr. Heyfelder concluded that the tumour was of an indolent malignant character, and that the only remedy consisted in the entire removal of both maxillary bones. The operation was performed, June 23, 1844. The patient being seated in a chair, the head resting against the chest of an assistant, two incisions were made from the external angles of the eyes to the labial commissures, and the included parts were reflected upwards to the internal angles of the eyes, and to the ossa nasi. The flap, thus formed, was raised towards the forehead, until the infra-orbital ridge was exposed. Then the chain-saw of Jeffray was passed through the spheno-maxillary fissures, and the malar bones were divided; the maxillæ were next separated from the ossa nasi; the vomer and the thinner bones were cut with strong scissors; after which a chisel, applied with moderate force to the superior part of the tumour, was sufficient to effect its separation. The accessions of syncope prolonged the operation, which, however, did not last longer than three quarters of an hour. Very little blood was lost; torsion and compression sufficed to arrest the hæmorrhage. Two hours afterwards, the edges of the wounds, from the angles of the eyes to the corners of the mouth, were united by twenty-six points of suture, and cold lotions were applied; there was no re-action nor swelling; the patient could swallow water and broth. Four days after the operation it was remarked, that the wounds had become almost entirely united by first intention. In six weeks the patient was presented at the Physico-Medical Society of Erlangen, and on August 25 he was discharged.

The following was his condition:—There was no deformity of the features; in the mouth there was seen along the median line a fissure thirteen lines long and three lines broad; the extirpated parts had been replaced by the tissue of a cicatrix, firm and solid at the circumference, but somewhat softer near the fissure; the soft palate and the uvula were in their natural place; deglutition was free, and the tongue in a better state than formerly; the nose had resumed its usual form and direction; the face, which, before the operation, was monkey-like, once again possessed a human expression.

The microscopical examination of the tumour showed that it was of cancerous nature. Six months afterwards, the patient, in good health, went to work in the fields; but in the summer of 1845, Dr. Heyfelder was informed that another tumour was forming in the forehead.

Case 2.—Martin Lochner, aged 55, was affected in the upper lip, twelve years ago, with a cancerous growth, which

(a) Mr. Lawrence lately performed the same operation with success in a girl; the particulars will shortly appear in this Journal.

was operated upon three years after its appearance. For two years there was no return; but, subsequently, a small tumour developed itself near the cicatrix, approached the nose, and excited violent pains. Soon a cancerous ulcer formed, which extended over the right half of the upper lip, the ala nasi, and the palate. The patient came into the hospital Jan. 21, 1850, in the following state:—A horrible cancerous ulcer, commencing at the right commissure of the mouth, occupies the greater part of the upper lip, and has destroyed both the right ala and the septum nasi. All the parts were covered with painful, bleeding, fungous growths. The palatine arch was converted into an irregular, knobbed, cancerous mass; most of the teeth were lost; an offensive secretion was constantly flowing, and the patient was thinned and worn out.

The operation was performed January 24. Two incisions were made, exactly as in the preceding case. The chain-saw was used to separate the left os malæ, and Liston's bone forceps to divide the right. The remains of the septum nasi and the vomer were cut with strong scissors. A considerable quantity of the soft parts was likewise taken away. The bleeding was easily arrested, and the wounds were united as well as possible by suture. The patient was fed by a syringe. The left coronary artery bled three hours after the operation, but it was easily tied. The case went on well; and, on February 18, when the patient was presented at the Physico-Medical Society, the following was his condition:—The greater part of the wounds were united; but a deficiency existed in the face, corresponding to the disease, at the superior part of which were seen the vertical portion of the ethmoid, and the two ethmo-turbinal bones. In the velum palati there was an opening, two centimetres wide. The destruction of the lip and of the nose produced on the right side a triangular opening, the base of which corresponded to the mouth, and the superior angle to the root of the nose.

He can take liquid food, but his speech is unintelligible; but, when the opening in the palate is closed by the sponge, he can make himself understood. Autoplastic operations were unadvisable, from the exhausted condition of the man. —*Rev. Medico-Chirurgicale de Paris*, 1853.

REPORT ON CASES OF DEATH FROM THE ADMINISTRATION OF CHLOROFORM.

[Communicated to the Chirurgical Society of Paris by Dr. Vallet, Surgeon to the Hôtel-Dieu of Orleans.—Continued.]

The next case, which occurred at Strasburg, gave rise to judicial proceedings.

Madame Simon, aged 36, the mother of three children, of strong constitution, and nervoso-sanguineous temperament, being desirous of getting rid of some molar teeth which were decayed, determined upon taking chloroform, to avoid the pain, which she much dreaded. The morning of the operation, she was in a state of extreme agitation, and expressed unpleasant forebodings. She was put into a chair; and the proceedings were about to commence, in the presence of her husband and a servant, when she got up in excitement, and ran about the room, uttering unintelligible and incoherent words. At length, she said that she had made up her mind. A few drops of chloroform were poured on a handkerchief, which was applied to the mouth and nose; and soon Madame Simon said, that she felt the effects. Three teeth were extracted. While this operation was going on, (and it was effected with extreme rapidity,) the husband was struck with a change in his wife's features; the face became pallid. He cried out, "She is dead!" and, upon examination, life was found to be extinct. She had taken only 3 gr. 25 c., (but little more than a drachm,) and the liquid was quite pure.

Examination of the Body Sixty Hours after Death.—The bronchial mucous membrane was of a pink red hue. The tubes were full of froth. The lungs were emphysematous, voluminous, and of a deeper red the more one approached the posterior part. There were some red sub-pleural spots. The pericardium contained a small quantity of serum. The right cavities were full of fluid blood; the left contained less. There were some bubbles of air in the veins on the surface of the brain, and in the basilar artery. The pia mater was not injected. The cerebral parenchyma was softened. Chemical analysis detected the presence of chloroform in the blood, and in the principal organs.

ANÆSTHETIC ACTION OF THE LYCOPERDON PROTEUS.

M. Flourens related some observations made by M. Gérard upon the anæsthetic action of the lycoperdon proteus. "I took," says the author, "the lycoperdons which I had gathered last autumn; I collected their substance, and then experimentalised with about twelve grammes (ʒss) of the capillitium, mixed with the spores. I put this substance, which burns like tinder, upon a match, which kept up the combustion, and plunged my head into the smoke for fifteen minutes. The sharpness of the smoke incommoded me at first, and caused a slight degree of irritation of the pharynx; then I had a coryza, which soon passed away; then a sensation of smarting in the eyes, which I was obliged to close; but the feeling of stupor was scarcely perceptible. During the inspiration of the smoke I withdrew from the apparatus, after the carbonisation of the capillitium, and in a few instants I felt a sharp pain, weight of head, and a peri-cephalic constriction, without actual suffering. My eyes, which had become red, shut involuntarily, although there was no feeling of somnolence. After four hours, the head became free, but the malaise continued six hours. The day afterwards the conjunctiva was no longer red, but the irritation of the eyelids continued. I experienced none of the lethargy mentioned in the *Gazette des Hôpitaux*, where it is stated, that the animals submitted to its action fell into a condition resembling death.

I am sure that the properties of the lycoperdon bovista and L. excipulæ fermis are the same as those of the lycoperdon proteus."

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, July 25, 1853.

Your readers will scarcely wonder at my long silence at this season of the year, and would readily accept the excuse which my private letters to you have already proffered.

Sooth to say, one returns but reluctantly from Continental trips. The dark forests of old Normandy, the gaiety of la belle Paris, the genial sun and laughing vineyards of merry Provence, have charms so different from the clash of medical squabbles, or even the news of the progress of medical science! For those among us who have lived the longest at the sources of medical knowledge are the best prepared to reiterate the remark of the Preacher of old, "There is nothing new under the sun;" and few can have attempted to follow the progress of modern medical science without being convinced that her chariot is too often driven, like Tony Lumpkin's chaise, round and round the pond; so that, while there are evident symptoms of active progression, there is often, after all, no real progress.

In my former communications to you, I have had a higher aim than merely to collect the floating gossip of the Medical atmosphere of the North, and preserve it in the museum of your Journal; I have sought to purify that atmosphere, not by fomenting professional jealousy and professional quarrels, but by calmly and gravely showing the principal performances in the light in which they must appear to an unbiased onlooker.

> Quicquid agunt homines, votum, timor, ira, voluptas,
> Gaudia, discursus, nostri farrago libelli.

I have, as much as possible, steered clear of personal likings and dislikings, and have sought to praise where praise seemed to be due, to censure where censure appeared to be deserved; and, while I have had the satisfaction of hearing myself very generally abused, I cannot but see that I have been the means of remedying much that was evil, and stimulating much that was good.

As one example of the former, I may instance the pleasure which the Profession must derive from the marked

IMPROVEMENT IN THE MONTHLY JOURNAL,

—in one department, at least,—that of the clinical lectures, which are now more worthy of a great medical school. I have the less hesitation about directing attention to this, as, in the "Colloquia de Omnibus Rebus," which adorned its pages in August last,

appeared a violent attack on the clinical lectures appearing in your columns, coupled with much interesting information of a miscellaneous character, the most important of which undoubtedly was, a disquisition on "The Art and Science of Rat-Catching!"

Profiting by the instructions given in this important department of medical science,—(we hope students will have *practical* information on it when examined for their degree, or how would a practical essay on it, with experiments, do for the next Harveian prize?) I propose, in memory of the past, to unearth an animal which has for some time been hiding in a hole; and, in doing so, show an Edinburgh Clinical Professor's ideas of "rational medicine!"

In the first place, look at the general style of these lectures. He would be a clever accountant who should make out a "state" in which each author should receive his own. "As apothecaries, we make new mixtures every day, pour out of one vessel into another, skim off the cream of other men's wits, pick the choice flowers of their tilled gardens to set out our own sterile plots. 'Castrant alios, ut libros suos per se graciles alieno adipe suffarciant.'"

In the second place, despite these importations, look at the amount of mere twaddle which these lectures contain. How can it be otherwise, when the Professor fancies that every thought that comes into his head *must*, because in *his* head, be of value, and commits it straightway to paper.

> Nought in the storehouse of his brains turns musty,
> No razor wit, for want of use, grows rusty:
> Whate'er his head suggests, whate'er he knows,
> Free as election beer from tubs it flows!
> Yet, ah! superior far, it boasts the merit
> Of never fuddling people with its spirit.

In the third place, admire the wonderful way in which the *post-mortem* examinations adapt themselves to the *previous (?)* remarks. One would think that autopsies were unnecessary to such a genius. Such prescience is his, that, during life, he is able to describe, without hesitation or chance of error, the exact condition of the body after death.

Let us turn to a lecture on Eruptive Fevers, and see how this new "rational medicine" teaches students to treat what is denominated "mild scarlatina, running its ordinary course, and terminating in recovery on the ninth day," and therefore merely requiring simple diluents. Observe, this heroic treatment was applied to a child, only nine years old! On the third day of the attack, with the eruption "moderate," four grains of Dover's powder, and two grains of James's powder, every third hour, with leeches over larynx. Next day, though there appears to be less than usual of a throat affection, and though that little is reported to have been relieved by the leeching, and though there is a tendency to enlargement of the submaxillary glands, a blister is applied, the powders are continued, and, in addition, a mixture (the most important ingredient of which is gtt. xv. of laudanum in each dose) is given to this child every second hour! (See *Monthly Journal*, October, 1852, page 401.)

Such treatment is the strongest argument for homœopathy.

TABLE-TURNING.

In Edinburgh, as elsewhere, *en route*, I found this absurdity the rage. Medical men who had resisted the transcendentalism of homœopathy and the mysticism of electro-biology, were the sturdy advocates for the truth and mysteriousness of this newly-discovered phenomenon; and yet, strange to say, in the exposures which were made at the time of the electro-biological mania, many of the muscular acts then exhibited were clearly shown to depend on that involuntary muscular action which your own Correspondent, and Professors Carpenter and Faraday, have so successfully applied to the elucidation of this new humbug.

LIFE INSURANCE.

This important subject, of such interest at once to the Profession and to the public, has received ample elucidation of late in the papers of Professor Christison and of Dr. Begbie, read at two successive meetings of the Medico-Chirurgical Society.

Both these papers were worthy of their distinguished authors, and therefore of great value; though it was exceedingly interesting to observe how very differently the same subject came to be treated by two gentlemen whose mental qualities are of a high order, and yet of an entirely different character.

The subject was not one to elicit much discussion, and, accordingly, but few remarks were made on either, though Dr. Gairdner threw out a remark, not unworthy of consideration, that if it became known by the public how carefully family histories were looked into in reference to life assurance, *post-mortem* examinations would be refused even more frequently than they at present are.

The whole conversation on the night when Dr. Begbie's communication was read was rather of an amusing character; and the Society was particularly indebted to Professor Syme and Dr. A. Wood, for some facetiæ regarding the Malthusian doctrine of population. I would fain regard the return of the latter gentleman to the Society as a sign that he has forgiven the freedom of my former remarks, and regained the equanimity which I disturbed. Professor Bennet was also present on one of these occasions.

CRIMINAL JURISPRUDENCE.

Some time ago, there appeared, in the columns of one of your contemporaries, a complaint by a surgeon practising in one of the provincial towns in the North, the gist of it being, that a rival surgeon, under a warrant from some one having authority, had entered the house of a patient of his, had removed the dressings which he had applied, and had otherwise injuriously interfered with the surgical treatment of the case. Similar doings having repeatedly occurred in Edinburgh, the Profession have at length bestirred themselves in the matter, and a joint Committee of the two Royal Colleges is at present engaged in endeavouring to effect an adjustment of the whole question.

In Scotland, the prosecution in criminal cases is differently managed from what it is in England. With us, every county has a local lawyer appointed by the Crown, whose business it is to search out all suspicious cases, to investigate and put in shape the evidence he obtains, and to lay this in form before the advocates acting for the Crown, that the propriety of a prosecution may be considered, and, if determined on, conducted by them. In cases of criminal charges, such as murders, or assaults of any kind, of course the medical evidence comes to be of the highest possible value; and, accordingly, this officer—the Procurator Fiscal, as he is styled—has power to issue a warrant, authorising any medical man whom he may name to examine the suffering party, and grant a certificate as to his state. This seems a very proper and wise regulation. These cases occurring usually among the very lowest of our population, frequently fall to the care of beginners, or of those of no great eminence in the Profession; and as the questions arising out of them are often of great delicacy and importance, it is essential that men superior in skill, superior in information, and superior in practical experience, should aid in their elucidation. But "humanum est errare." It too often happens that the Procurator Fiscal is guided in his selection of the individual, not by his superior attainments, but by personal friendship, or professional connexion; and thus, as these cases sometimes in our public institutions receive the first medical care, it occasionally happens that men having no peculiar qualifications for the office are put over the heads of others infinitely their superiors in every sense of the word.

In Edinburgh, other elements occur to complicate the question. There is an official, denominated the Police Surgeon, whose principal duties are—1. To attend the men of the police force when sick; 2. To examine all persons assaulted, or whose cases become the subject of judicial investigation; 3. To attend prisoners in the cells, and to search hollow organs for stolen goods secreted in them; 4. To superintend the infliction of whipping on the male juvenile offenders. The office is not one likely to be sought after by a medical man of very refined feelings, nor is his *morale* likely to be improved by the nature of his duties, or by the parties with whom he is daily brought in contact. The present occupant of the situation has contrived to render himself peculiarly obnoxious to the Profession in the discharge of these duties; and, on various occasions, has shown anything but a desire to smooth over the little asperities which the peculiarities of his position inevitably induced. The consequence has been, that, on several important occasions, the public service has been deprived of the temporary assistance of able men, who would willingly have rendered it, but who declined to co-operate with the Surgeon of Police, or involve themselves in his many quarrels.

The matter, however, is likely to be brought to a crisis now. On the 21st of March, Mr. Glover, the Police Surgeon, granted a certificate on soul and conscience, (a form equivalent in law to a solemn oath,) "describing the particulars of an injury which he had not seen, and expressing an opinion as to what he had no means of knowing anything." The substantial accuracy of this charge, which I give you in the words of Mr. Syme, is admitted by Mr. Glover, who excuses himself on the ground, that the particular object of his visit was to ascertain if the patient's life was in danger. Now, it is at once evident, that this does not in the least explain the very extraordinary circumstance of Mr. Glover issuing a certificate on soul and conscience, minutely describing an injury which he had never seen. The matter has been formally brought before the Lord Advocate, the head of the criminal jurisprudence, on the one hand; and the Commissioners of Police, the immediate masters of Mr. Glover, on the other. The remedy seems a very simple one. Let the surgeon, armed with official authority, visit the injured party, along with the doctor who is responsible for the

treatment; and, where a warrant is issued to two parties to examine a body, let the professional attendant be one of these.

Only last week a case occurred illustrating the disadvantage of the present system, even for the accomplishment of the ends of public justice. A man was tried before the supreme criminal court for the murder of his wife. She was a notorious drunkard. He struck her with a poker, and fractured her leg. She died; but whether directly in consequence of the injury, or from delirium tremens, did not very clearly appear from the evidence produced at the trial. The only testimony on the subject was that of the nurse in the infirmary to which she was conveyed; and though there she had enjoyed the professional care of Mr. Syme, neither he nor his house-surgeons were examined at all; while the *post-mortem* examination was made by Mr. Millar, who never saw the case alive, but who is the professional attendant of the Procurator Fiscal.

It is plain that, in such a case, the whole question as to the nature of the crime of the accused would turn upon the fact, as to whether the deceased party met her death as a direct consequence of the injury inflicted, or indirectly, and by delirium tremens. No evidence, as I have said, but that of the nurse was directed to this point; the eminent surgeons who attended the deceased were not examined; and the *post-mortem* examination was entrusted to gentlemen who never saw her in life. Under these circumstances, Mr. Syme, with a boldness and independence which do him credit, has addressed a Petition to the Home Secretary, praying for a commutation of the sentence, chiefly on the above ground.

We understand that a reprieve has been granted; but the matter cannot rest with the individual case; and the Profession generally, acknowledging their obligations to Mr. Syme for the manly and vigorous manner in which he has asserted their rights, must be prepared to vindicate them by united and determined action.

Your readers may possibly be of opinion, that one such accusation hanging over the head of a man is enough at a time; but an advertisement in the public papers to-day gives additional evidence of the serious injustice which may be perpetrated under the present system.

There are men in the world whose character, it may be, "nullâ pallescere culpâ;" but it remains to be seen whether the toleration they offer themselves is to be extended to them by others, or whether so many serious charges pressed on official notice at once may not render an investigation of the whole matter proper, and a re-adjustment of it essential, not only in fairness to the Profession, but in justice to the public service. The facts of this new charge are as follow:—

An idiot orphan child is entrusted to the care of an uncle and aunt, who receive money from the poor's-house for its support, and clothes to cover it. It is of a hopelessly scrofulous constitution, and is affected with tubercular deposition in various organs. Under these circumstances, it falls into a state of hopeless marasmus. It is then regularly visited by the parochial surgeon, who watches over a "slow decay" which no skill can arrest. A day or two before its death, officious neighbours circulate—as they are ever ready to do—malicious reports. The child is visited by the Police Surgeon; the marasmus is seen. This worthy, with a zeal which greatly outruns his discretion, sees the marasmus, jumps to the conclusion that it must be caused by want of food, and not by inability to digest the food freely given; removes the child to another house, during the last few hours of its life; after its death carries off its body to the police office; never communicates with the parochial surgeon in attendance, nor takes his opinion on the matter; makes a report which causes the arrest of the unfortunate relatives of the deceased child, who are only set at liberty on the Crown lawyer's discovering that all this matter, gone about with such formality, and with such punctilious knowledge of the law, was, after all, a mare's nest, to the discovery of which this official had led them.

Of course, except for the contempt which his conduct might cause to be felt for him, the Police Surgeon was not worse off, as each examination added to the fees which he received.

PAYMENT OF CERTIFICATES FOR ASSURANCE SOCIETIES.

In consequence of the stand made by the Profession, the more important Offices in Edinburgh have yielded the question of the payment of the medical man referred to by the applicant. One Office, however, whose premiums are somewhat below the average, and which, in consequence, does a good deal of business,—though, of course, its cheapness is apt to engender a niggardliness in management,—has resisted, and has proclaimed the fact in a somewhat boastful spirit. It remains to be seen whether this move, which appears to have some temper in it, will do much good to the "Scottish Provident."

GENERAL CORRESPONDENCE

HOMŒOPATHY AT THE HOLLOWAY DISPENSARY.

[To the Editor of the Medical Times and Gazette.]

SIR,—If you consider the following correspondence of public interest to the Profession, perhaps you will honour it with a place in your Journal. The facts are, that the Committee of the Holloway and North Islington Dispensary arranged with Lord Robert Grosvenor to preside at the Annual Festival in aid of the funds of that Institution, on the 14th of July, 1853. In the early part of May, 1853, several of the Medical-staff (through the Resident-Surgeon,) made known to the Treasurer that they could not (if invited as heretofore) meet his Lordship, on account of his *public* connexion with homœopathy. Such intimation was disregarded, otherwise than it formed an occasion for disrespectful remarks upon the Profession. No. 1, is a copy of the letter in which I decline the invitation of the Committee; No. 2, of the resolution which has given rise to my resignation, (under circumstances which may, if necessary, form a fit subject for another communication); and No. 3, of my reply thereto.

I am, &c.

WILLIAM A. N. CATTLIN, M.R.C.S.E., L.A.C.

No. I.

9, Sebbons-buildings, Islington,
July 4th, 1853.

MY DEAR SIR,—I beg to decline attendance at the forthcoming Festival in aid of the Holloway Dispensary, upon the ground that I cannot consistently with my oath at the College of Surgeons and the respect due to my Profession, attend any public-meeting connected with a Medical charity, the chairman of which is the *public* advocate of a most dangerous form of quackery. In fact, I am truly sorry that the feelings of a majority of your Medical staff (which were made known to the Treasurer, so long ago as the early part of May last) have not been consulted upon this subject.

I am, my dear Sir, yours very truly,

WILLIAM A. N. CATTLIN.

George Jeffkins, Esq., Hon. Sec.

No. II.

Holloway and North Islington Dispensary,
July 20th 1853.

DEAR SIR,—I beg to inform you, that at a Special Meeting o the Committee, held on the 18th inst., it was unanimously resolved—"That while the Committee are always happy to receive, and attend, to any suggestions from their Medical Officers, for the well-being of the charity, they utterly disclaim the right of any, or either of them, to dictate to the Committee as to the course they ought to pursue with regard to the selection of the Chairman of the Festival, or any other matter whatever, relative to the charity; and as Mr. Cattlin's letter has this tendency, and is calculated to produce a want of harmony between that gentleman and the Committee, the Committee regret they are obliged to come to the conclusion, that such letter is not only offensive in its nature, but an unwarrantable interference with their rights and duties, and quite at variance with the position held by Mr. Cattlin, as Dental Surgeon to the Holloway and North Islington Dispensary."

I remain, dear Sir, yours faithfully,

GEORGE JEFFKINS, Hon. Sec.

To W. A. N. Cattlin, Esq.

No. III.

9, Sebbon's-buildings, Islington, July 20th, 1853.

TO THE COMMITTEE OF THE HOLLOWAY AND NORTH ISLINGTON DISPENSARY.

GENTLEMEN,—I beg to acknowledge the receipt of your Resolution, dated July 20, 1853. In reply, I am utterly at a loss to discover by what erudite reasoning your learned Committee were guided to the charitable conclusions they arrived at. I deny that there is a sentence in my letter either dictatorial or offensive, that can be construed into an unwarrantable interference with your rights and duties, or at variance with my position as an honorary officer of the Institution, and disclaim such intention. However, the ungracious terms of your Resolution, and a sense of justice due to myself and my Profession, leave me no alternative but to resign, with indignation, the office I have held for so many years; and I would respectfully "suggest" that my successor should be a gentleman fully qualified to bear with impunity the "insolence of office." In conclusion, suffer me to add, that if the Committees of Medical Charities in this country (armed with a little brief

authority) continue to abuse the notorious liberality of a noble Profession, the day is not far distant when they will justly be required to pay for the valuable services they now receive gratuitously.

I am, gentlemen,
Your obedient servant,
W. A. N. Cattlin.

P.S. I have forwarded the correspondence upon this matter for publication, and shall take such public notice of it as I shall think right.

CHARING-CROSS HOSPITAL AND DR. EDWARD SMITH.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you afford me the opportunity of expressing the very deep sense of gratitude which I feel to your Correspondent, Mr. Jabez Hogg, for having honoured my poor name with a notice in his polite letter, and more particularly for the vigilance of his friendship in pointing out to me the great danger in which I am placed by the "falsehoods" of my friends, the students of the Charing-cross Hospital? It is highly flattering to be known, even, to a gentleman so distinguished in the literary world; but it is a matter of profound regret that I do not recognise in this distinguished writer a student, or even an occasional visiter of my class, or a colleague, or an official of any degree, of the institution in behalf of which he has thrown down the glove. I am unworthy of such a distinction; and I feel the demands upon my gratitude to be the less finite, that he has, in a spirit of boundless philanthropy, stepped out of his path to take up a cause in which he may, with so much kindly propriety, introduce my name.

I am, &c. Edward Smith, M.D.

16, Norfolk-terrace, July 26, 1853.

[We have been obliged to omit some portions of Dr. Smith's letter; for, although willing to hear all sides of a question, we cannot open our pages to merely personal affairs.—Ed.]

RELATIVE MERITS OF THE EXAMINATIONS AT APOTHECARIES' HALL AND UNIVERSITY OF LONDON.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having passed both the Matriculation examination of the London University, and the Preliminary at the Hall, I can assure your Correspondent, "A Subscriber," that there is no comparison between the two. Indeed, it stands to reason, that an ordeal extending over a period of four or five days, and requiring proficiency in Latin, Greek, French or German, Mathematics, English History and Language, Chemistry or Natural Philosophy, should be more severe than another extending over a much shorter period, and requiring less knowledge even in the subjects which it embraces.

I am, &c.

July 28, 1853. Justitia.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Copland, President, in the Chair.

ON INTERMITTING DIABETES, AND ON THE DIABETES OF OLD AGE.

By H. B. JONES, F.R.S., Physician to St. George's Hospital.

The author's object in this communication was to point out some phenomena connected with diabetes, which he had not found mentioned by other writers. Preliminary to the record of the cases, the author offered some observations on the incorrect results obtained by calculating the amount of sugar present in the urine from the specific gravity. If diabetic urines were solutions of nothing but sugar in distilled water, the tables by Dr. Henry, and the amount of sugar calculated from the specific gravity, would give all the information required; but a multitude of other substances were present besides sugar, each of which was variable, and each of which might cause the specific gravity to vary, whilst the quantity of sugar might remain constant. To be accurate, therefore, the amount of sugar should always be determined by direct experiment, and never calculated from the specific gravity. Results were given, exhibiting the specific gravity, the amount of sugar calculated from solid apparatus, and the absolute amount of sugar obtained by direct analysis. On the subject of intermitting diabetes, the author observed that there could be little doubt that our knowledge of the nature of this disorder might be extended by means of accurate determination of the varieties in the amount of sugar in the urine passed at different periods of the day, and under different circumstances. His object in relation to this form of the disease was to record some cases in which, either from the medical treatment, or the regimen, or the natural course of the complaint, the variation in the amount of sugar was not from much to little, but from highly saccharine urine to total absence of sugar. The state of the urine a few hours after the sugar had disappeared, and an hour or two before it re-appeared, was most especially worthy of attention, inasmuch as it might lead to a truer knowledge of the state of the system which preceded the commencement of diabetes. In intermitting diabetes the disease might be seen beginning and ending, and the explanation of the state of the urine which preceded the appearance of the sugar and followed its disappearance, must be included in the true theory of diabetes. Moreover, a better knowledge of the antecedent phenomena might enable us to ward off the disease, if not to treat it with more success. The records of seven cases of the intermitting form of the disease were given, and very minute particulars in several, illustrated the amount of sugar present in the urine at stated intervals in the twenty-four hours, as well as the influence of particular forms of diet on the proportion of sugar excreted. In these cases the state of the urine just after the sugar had disappeared was worthy of attention. A remarkable excess of urea was constantly found before and after the sugar disappeared; and although this might be attributed to the animal diet, yet the occurrence of free uric acid and oxalate of lime in the urine pointed most clearly to a state of indigestion which was every day to be found without any sugar appearing in the urine. The Author offered the following theoretical contrast between ordinary and saccharine indigestion: Ordinary indigestion showed itself in a want of action on the sugar and starch taken as food, in consequence of which excessive acidity was produced—that is, the changes in the non-nitrogenous food were imperfect. Imperfect changes also occurred in the nitrogenous food; this was made evident by an excess of urates and urea in the urine, and perhaps also by the formation of oxalate of lime. In diabetic indigestion the effect might be traced also on the two great classes of food. At first from the non-nitrogenous food sugar was formed instead of acid. Ultimately, if not simultaneously, sometimes the arrest of healthy changes extended to the albuminous food, and, instead of an excess of urates and urea, other products were formed, one of which was sugar. It was possible that some of these products might be found in the urine. Possibly benzoic acid, which is present in some cases of diabetes, in variable quantities, might be one of the new products. Whether this theory were true or not, it was of practical importance to remark the tendency to acidity in these cases of intermitting diabetes. In such cases, animal diet alone, or with alkalies, might stop the formation of sugar. It followed also, that, when oxalate of lime, uric acid, and excess of urea, were found in the urine, it was probable that the diabetes might be temporarily, if not permanently, removed. The occurrence or absence of these substances in the urine might lead to the recognition of the stage of the disease, and they might thus guide us in our prognosis and treatment. The second part of the communication related to the frequency of diabetes in old age. Reference is made to a paper, by M. Dechambre, on this subject, who concluded, from observations made on the urine of old people at the Salpêtrière, that sugar was habitually present in the urine of old people. The author gave the particulars of nine cases of diabetes in elderly people, and thought that the occurrence of this affection at the latter periods of life pointed also to the theory of diabetes as an indigestion resulting from an arrest of healthy changes in the food. The cases mentioned in this communication were, in the opinion of the author, opposed to the view of diabetes depending upon an affection of the nerves, or of the liver; and his daily observation led him rather to the view taken by Dr. Prout, that diabetes was an indigestion, and that it first affected the non-nitrogenous, and afterwards the nitrogenous, constituents of our food. As regarded treatment, whatever was beneficial for excessive acidity, was found equally serviceable in diabetes. Alkalies were used in all the cases with benefit. Small meals, free from sugar and acid, and the substances that could give rise to sugar and acids, constituted the best diet. He found, also, that vegetable acids with alkalies were occasionally useful. In a foot-note, the author mentioned some experiments he had not yet published, determining the quantity of sugar in several kinds of beer and wine. Porter contained from 27 to 57 grains of sugar in each ounce of liquid; ale from 43 to 50 grains; beer 25 to 40 grains; port-wine 8·5 to 11 grains; sherry 2 to 4·7 grains; claret none. The absence of all sugar, and the presence of a little

alcohol, caused claret to taste highly acid, while the quantity absolutely present was not more, sometimes less, than in other wines which have no acid taste, as, for example, most port wine.

AN ACCOUNT OF A DISSECTION OF AN OVARIAN CYST WHICH CONTAINED BRAIN.

By HENRY GREY, Esq., F.R.S.

The attention of morbid anatomists had been directed for many years to the structure of ovarian cysts and their contents, and especially to those which apparently contained fœtal remains, with a view, if possible, of determining their origin and mode of growth. It was the doubts that still hung over this subject, that induced the author to believe that the present case might prove of interest, and that at some future time it might aid in explaining the law that governed the singular developement and mode of growth of these tumours. The patient was a female, aged twenty-eight, who died in St. George's Hospital of typhus fever. A full record of the *post-mortem* appearances was given, but the contents of the pelvis relate more especially to the present subject. The vagina was healthy; the uterus was somewhat larger than natural, and its muscular wall thickened. The membrane lining its cavity was covered throughout its entire extent with a highly vascular villous membrane, resembling the decidua. The round ligaments were both healthy; the right Fallopian tube more dilatable than natural, and contained a thin bloody fluid; the right ovary was healthy; the left Fallopian tube was healthy. The left ovary was occupied as a large cyst, the size of an orange; the lining membrane of the interior of the cyst was vascular; its wall was composed of an external peritonæal layer, an inner, smooth, shining coat, devoid of epithelium. The cavity of the cyst contained a few short, light-brown hairs. The lower half the tumour consisted of a second cyst, containing some yellowish, white, purulent looking fluid, with some granular fatty matter of the consistence of honey, scaly epithelium, and fine hairs of a brownish colour being intermixed with it. The fatty matter was found to be fluid at less than the natural temperature of the body. The hair, on being separated from the matter, was found to be attached to the wall of the cyst by distinct bulbs. A portion of the wall at the lower part of the cyst presented an appearance similar to the surface of the scalp; there was a thick layer of scaly epithelium mixed with fat covering the surface; numerous sebaceous glands were indented into this layer, and a canine tooth projected from the skin, fully formed; it was implanted into a fragment of bone, covered with periosteum. There was a third cyst situated near the fragment of bone, about the size of a walnut, the wall of which was delicately vascular, forming meshes resembling the pia mater; the contents of this cyst presented all the characters of brain. On microscopic examination, the ordinary elements of nervous matter were seen, consisting of varicose nerve tubules, intermixed with the elementary component parts of grey matter; nuclei, and nucleated vesicles containing granules. There was also a fifth cyst, the contents of which were much less like brain matter than the contiguous one. So far as the author had been able to ascertain, he believed that nervous matter had not been previously described as forming a portion of the contents of these ovarian cysts.

ERYSIPELAS OF THE HEAD AND FACE AFTER CONTUSION AND LACERATION OF THE SCALP—

HEMORRHAGE FROM THE PRINCIPAL BRANCHES OF THE RIGHT CAROTID ARTERY—LIGATURE OF THE VESSEL—RECOVERY.

By EVAN THOMAS, Esq., M.R.C.S.,

Resident-Surgeon to the Workhouse in Manchester; Associate of King's College, London.

The hæmorrhage came from a wound in the temple, made for the evacuation of matter. Pressure proving unavailing, the common carotid artery was tied in the usual way, above the anterior belly of the homo-hyoid muscle. Some inflammatory symptoms occurred referrible to the chest, but the patient recovered in the course of from two to three months.

FALSE ANEURISM OF THE POSTERIOR TIBIAL ARTERY,

(FROM A WOUND IN THE OPERATION OF DIVIDING THE POSTERIOR TIBIAL TENDON IN THE OPERATION FOR CLUB-FOOT,) SUCCESSFULLY TREATED BY INJECTIONS OF PERCHLORIDE OF IRON INTO THE SPURIOUS ANEURISMAL SAC.

By WILLIAM ADAMS, F.R.C.S.,

Assistant-Surgeon to the Royal Orthopædic Hospital.

The injection of perchloride of iron caused coagulation of the blood in the spurious aneurismal sac, produced by division of the posterior tibial artery in a child aged four weeks. The firm clot squeezed out the serum, which was seen oozing from the surface of the wound. The instrument used for injection was a glass syringe, with a long and slender tube, which was made to penetrate the clot, and convey the perchloride to the fluid blood below.

ADDITIONAL EXPERIMENTS ON THE EXCITABILITY OF PARALYZED AND HEALTHY LIMBS BY THE GALVANIC CURRENT.

By R. B. TODD, M.D., F.R.S.

In the summer of 1847, Dr. Todd submitted to the Society the results of experiments tried with the view of testing the accuracy of Dr. M. Hall's dogma, that limbs paralysed by lesion of the brain became more excitable than the healthy ones by the galvanic current, in consequence of an increased irritability of the paralysed muscles. The present communication comprises the results of experiments to determine the difference on the influence of the current according to its direction, and also to ascertain whether any real difference of physiological effect exists when the galvanic trough, or the magneto-electric or electro-dynamic machine, is used. Thirteen healthy individuals were subjected to experiment, and with the following results:—

1st. That the obvious physiological effect was produced only on completing, or on interrupting, the galvanic circuit.

2nd. That more vigorous contractions were excited on the completion than on the interruption of the circuit.

3rd. That the completion or the interruption of the direct current produced more vigorous contractions than the completion or interruption of the inverse current.

These experiments were made with a Cruickshank's battery, charged with very dilute sulphuric acid. The magneto-electric rotation instrument and the coil machine (electro-dynamic) were afterwards used, and it was found that the same effects precisely were produced, and the same variation in the intensity of the contractions according as the current was direct or inverse. Fifteen cases of hemiplegic paralysis, caused by lesion of the brain, are afterwards detailed. The results of the galvanic experiments on these cases were as follow:—

1st. That of the fifteen cases, in only three was there any approach to a greater excitability of the paralysed than of the sound limb, and that in two of these it was manifested only under the influence of the inverse current.

2nd. That in three of the cases both the coil machine and the battery were used, and with precisely the same results; and that, in one of the cases, the coil machine alone was used, and with a result which corresponded with those obtained in similar cases by the galvanic battery.

3rd. That in each of the three cases in which a greater excitability existed in the paralytic limbs, the paralysing lesion in the brain was more or less of an irritative kind. In one case, the irritation was probably connected with an incipient process of cicatrisation.

4th. That in many of the experiments all degrees of galvanic power were used, and with no other difference than that of degree; the amount of physiological effect being exactly proportionate to the power of the galvanic stimulus.

STATISTICAL REPORT OF FATAL CASES OF DISEASES OF THE BRAIN OCCURRING DURING THE LAST FOUR YEARS AT ST. GEORGE'S HOSPITAL.

By A. W. BARCLAY, M.D., Medical Registrar.

The author was induced to present to the Society this statistical Report, from a conviction, that our knowledge of the relation between the symptoms and pathological states of the brain was, as yet, very imperfect; and he believed, that greater certainty in the diagnosis could only be accomplished by an accumulation of facts, and by arranging these in the present form, he was led to hope that some useful and authentic information might be obtained. The report was wholly confined to cases in which, by *post-mortem* examination, the nature of the lesion was ascertained,—for his object was to deal with facts, and not with theories; and, for the same reason, no reference was made to the proportion of cases admitted into the hospital, nor to the relative proportion of deaths and recoveries among persons supposed to be labouring under similar diseases. It was hardly necessary to add, that diseases of the brain yielded an invariably high ratio of mortality. The cases were divided into—scrofulous inflammation, with or without actual presence of tubercles in the brain; simple inflammation; abscess; softening, of a non-inflammatory nature; delirium tremens; apoplexy; and tumours. The author proceeded to offer some observations on the cases included in these several divisions.

1. *Scrofulous Inflammation.*—These cases were 28 in number and the age at which such cases proved fatal contrasted remarkably with other diseases of the brain. There were 9 under 15 years; 5 from 15 to 20; 7 from 20 to 25; 4 from 25 to 30; 2 from 30 to 40; 1 from 40 to 50; 1 over 50 years of age. No facts were recorded in the majority of the cases which threw any light

upon the usual exciting cause of scrofulous inflammation of the brain. The symptoms were sometimes slowly and insidiously developed, at other times setting in with unexpected violence; while no point in the history of the case could be learned in any way accounting for their origin. And this had not unfrequently been the case when the patient was under observation at the commencement of the disorder. In 19 of the 28 cases, scrofulous or miliary tubercles were found in the brain or its envelopes, the proportion of yellow, cheesy, or scrofulous tubercle being far greater than those of the miliary kind. The mode of incursion of this form of brain disease was very various; but those in which it was most difficult to recognise were the cases commencing with symptoms resembling ordinary continued fever. In three instances there had been previous attacks referrible to the nervous centres; in another instance the symptoms were developed soon after a fall; in one, after exposure to the sun; in the remainder there was no satisfactory history. In 11 cases pain in the head was the earliest symptom; in 6, delirium wast the first prominent symptom; in 2, convulsions commenced as the first evidence of mischief. In 11 out of 28 cases, pain of the head was not complained of; delirium was absent in 8 cases of this class. Convulsions may be said to be the rule, and their absence the exception, in childhood. Among the 28 cases there was no exception to this under the age of 13. The period at which delirium commenced, convulsions, paralysis, partial or general strabismus, were also carefully noted and recorded. The *post-mortem* condition of the cerebral mass, as well as of the membranes and vessels accompanying the scrofulous deposit, were next compared.

2. *Simple Inflammation and Congestion.*—The ages of these patients formed a striking contrast to those of the preceding class. Here the earliest period of fatal inflammation was 16 years, and only 3 were reported under the 27th year,—the period at which all but 5 of the scrofulous cases had terminated. Classed in periods of 10 years, there were 3 cases from 15 to 25, 8 from 25 to 35, 4 from 35 to 45, 3 over 45 years of age; the oldest occurring at the age of 57. Of the 18 cases only 4 were of the female sex. The mode of incursion, in cases of simple inflammation, was less insidious, and more commonly traceable to a distinct exciting cause than in the preceding class, and there were only 3 instances recorded in which the history of the case, and the character of the symptoms rendered the diagnosis of acute disease in the brain by any means doubtful. The special symptoms characteristic of cerebral lesion, pain of the head, delirium, convulsions, and paralysis, were noticed in relation to their frequency, and the period of their occurrence. Of the *post-mortem* appearances, lymph, or turbid serum, was found in 9 cases upon or under the arachnoid; in 14 cases fluid was found in the ventricles. The brain was soft in 4 cases, 2 with increased vascularity, and 2 with a watery state of the brain. It was congested in 11 cases, and wet and pale in 3. Then followed a contrast between the symptoms in the scrofulous and the non-scrofulous class.

3. *Abscess of the Brain.*—Five examples were recorded of this form of disease. The history of these cases was somewhat obscure, and the causes which determined this action in the cerebral lobes, and the period at which suppuration actually commenced, were uncertain. Four of the cases were encysted; 1 was simple abscess; 2 were associated with caries of the temporal bone; 1 with suppuration on both sides of the cranium, opposite to a sloughing wound of the integuments.

4. *Softening of a Non Inflammatory kind.*—Only one instance of this form of lesion was recorded: its duration was five months; its progress was chiefly masked by the existence of hemiplegia, with indistinct articulation; the whole of the medullary substance on the left side was softened and diffluent; the brain appeared congested.

5. *Delirium Tremens.*—Ten fatal cases of this disorder were recorded. They were all of the male sex. The ages varied from 29 to 54. Various diseased states of other organs were noted, which probably exercised an influence, more or less decided, in causing the cases to terminate fatally. The heart was diseased in 7 cases; the liver in 6; the kidney in 2. In 4 cases tubercles were found in the lungs; once recent; 5 times in the form of a cretaceous mass. The membranes of the brane were congested in 4 cases; an excess of fluid was found under the arachnoid in 8 cases. In 6 cases, the ventricles contained an excess of fluid. The substance of the brain was in the majority of cases "wet."

6. *Apoplexy.*—There were 14 cases of this disease: 9 males; 5 females. Seven cases from 40 to 50 years of age; 3 from 50 to 60; 3 from 60 to 70; 1 over 70 years. Atheroma of the arteries at the base of the brain existed in 7 cases; healthy in 5. The heart was distinctly hypertrophied in 7 cases; in all of these cases the kidneys were also diseased. The anatomical conditions in the brain were various: in one case, an old apoplectic clot under the arachnoid; in another case, turbid serum under this membrane; there was effusion of blood in this case, limited to two small clots in the third and fourth ventricles. In 3 cases there was a good deal of blood effused at the surface, with large clots in the substance of the brain. In 9 cases the clots occupied a central position with reference to the hemispheres. Distinct softening in the vicinity of the clot was found in 5 cases.

7. *Tumours.*—Of these were 6 cases; 3 males, 3 females; ages varied from 24 to 49. 4 were examples of encephaloid disease; 2, of encysted growths.

8. *Anomalous Cases.*—Two cases could not be referred to either of the preceding classes. There was no evidence of any anatomical lesion in the cerebral structures; while the symptoms during life were distinctly characteristic of brain disease. In 1 the kidneys were in a state of degeneration; but the author doubted if albuminuria ever produced paralysis of one side of the face, and strabismus, which preceded the stupor and coma, terminating fatally.

The author concluded by a general summary of the symptoms during life, in relation to the anatomical lesions recorded after death.

The President, in adjourning the Society, remarked, that the papers the abstracts of which had been read, had been furnished too late in the session to admit their being read in detail. However much this was to be regretted, it was a fault for which the authors were responsible, and not the Society. It was greatly to be wished, that those gentlemen to whose valuable communications the prosperity of the Society was so largely attributable, would furnish them earlier in the session, when papers were generally scarce.

The Society then adjourned.

During the session which has just concluded, several valuable papers, both medical and surgical, have been read, and many interesting discussions have taken place. And we have no doubt, that the next volume of the Society's Transactions will maintain for it the celebrity acquired by years of honourable exertion, for the continuance of which the high reputation of Dr. Copland and the Council affords so satisfactory a pledge.

UNIVERSITY OF LONDON.

MATRICULATION, 1853.

FIRST DIVISION.

Anstie, James	King's College.
Ashlin, Stephen	St. Mary's, Oscott.
Ashton, John Perkins	Mill-hill Grammar-school.
Barker, William Nutter	Private tuition.
Beaumont, Walter Henry	,, ,,
Belcher, Robert Shirley	King's College.
Black, Alexander Osmond	St. Paul's School.
Blazeby, William	Manchester New College.
Boddy, Cecil Viner	King's College.
Bradley, George	Amersham Grammar-school.
Bramwell, George	Private tuition.
Bridge, Walter	Stonyhurst College.
Broadbent, William Henry	Private tuition.
Brock, William	University College School.
Brown, Samuel Borton	Baptist College, Bristol.
Bruce, Samuel Noble	University College.
Burbidge, William Henry	King's College.
Camplin, Alfred Blackmore	Private tuition.
Carey, Charles Stokes	Hackney Theological Seminary.
Carnley, Henry	Hull School of Medicine.
Carter, Alfred	St. Bartholomew's Hospital.
Carter, Joseph	Airedale College.
Cecil, Charles Richard	Private tuition.
Charnley, Alexander	Stonyhurst College.
Chester, Arthur	King's College.
Clarke, George Christopher	St. Gregory's, Downside.
Clear, Walter Wedgborough	Private tuition.
Coathupe, Charles Thomas	Queen's College, Birmingham.
Cook, Edward Rider	University College.
Corbold, Edwin	Cheshunt College.
Cornforth, Charles Kilvington	University College.
Craddock, Samuel	Private tuition.
Crosbie, William	Rotherham College.
Curtis, John Charles	Owen's College.
Da Silva, Leo Charles	Private tuition.
Davies, Alban Thomas	Queen's College, Birmingham.
Davies, Joseph Walter	Private tuition.
Davis, James	Horton College.
Davis, William	Owen's College.
Dawson, Robert	Mill-hill Grammar-school.
Day, Edwin Edmund	King's College.
Dick, John Crichton	Airedale College.
Dothie, William Plaskett	,, ,,

Dowson, Alfred Pendleberry	University College School.
Earle, Edward Septimus	St. Bartholomew's Hospital.
Edwards, David	Owen's College.
Elliot, John	Private tuition.
Ernst, Albert Henry	City of London School.
Fawcett, Henry	King's College.
Ferguson, George	" "
Field, Allan	University College School.
Fordati, James Quayle	University College.
Foster, George Carey	" "
French, Alfred John	Wesleyan Coll. Inst., Taunton.
Gibson, Francis William	University College.
Gielgud, Adam Jno. Constantine	" "
Goldsmith, George Pocock	King's College.
Goldsmith, John	Private tuition.
Goodale, William Robert	" "
Grabham, George Wallington	King's College School.
Gregory William	Private tuition.
Grimshaw, Joseph Stanfield	Manchester New College.
Halley, Ebenezer	Owen's College.
Hanson, Edward Pardoe Cotton	King's College.
Harrison, William Henry	University College School.
Harrop, Robert	Chorlton High School.
Hartley, Richard Griffiths	Lancashire Independ. & Owen's.
Hawksford, Francis	St. Mary's, Oscott.
Heath, James	King's College.
Henn, John	Private tuition.
Hennell, John	University College.
Herbert, Thomas Martin	Spring-hill College.
Hogan, Francis	St. Bartholomew's Hospital.
Holland, Thomas	Manchester New College.
Howlett, Frederick	Private tuition.
Hue, William Parker	University College School.
Hughes, Henry Bailie	St. Peter's, Prior-park.
Hughes, Richard	King's College.
Hulke, Frederick Thomas	Private tuition.
Jauncey, Walter	Queen's College, Birmingham.
Jefferis, James	New College.
Jones, Richard	King's College.
Jones, William James	University College.
Jordan, Thomas Furneaux	Queen's College, Birmingham.
Kealy, John Robert	King's College.
Kinton, John Louis	University College.
Knaggs, Henry	Private tuition.
Lambert, Brooke	King's College.
La Mert, Lima Abraham	Private tuition.
Law, Thomas Graves	Stonyhurst College.
Lawrence, George William	King's College.
Leech, John	University College.
Leech, William	" "
Leete, Benjamin Eames	Airedale College.
Lidgett, Joseph	Blackheath Proprietary School.
Lowe, John	Sleaford Grammar School.
Lynch, Edmund	Queen's College, Birmingham.
Macartney, John	Rotherham College.
M'Kerrow, James Muir	Owen's College.
MacOwan, Peter	Private tuition.
Macqueen, John	Stonyhurst College.
Marshall, Alfred	Westminster Hospital.
Mockler, Thomas	Stonyhurst College,
Moore, Alphæus Herrman	King's College.
Morrogh, Alexander	St. Mary's, Oscott.
Murch, Arthur	University College.
Muskett, Joseph James	St. Bartholomew's Hospital.
Needham, Frederick Manning	University College.
Nesbitt, Henry Arthur	University College School.
Noyes, Thomas Edward	New College.
Palk, Henry	Private tuition.
Phillips, Thomas Lloyd	" "
Powell, John	St. Bartholomew's Hospital.
Powles, Edmund Sheppard	King's College.
Prout, Edward Stallybrass	New College.
Rayner, Thomas	King's College.
Richards, John	St. Gregory's, Downside.
Riding, William Steer	King's College.
Rix, William Howells	Mill Hill Grammar School.
Roberts, William	Hackney Theological Seminary.
Robjohns, Henry Thomas	Western College, Plymouth.
Rudd, Thomas	Airedale College.
Scotson, James	University College.
Seccombe, John Thomas	" "
Seymour, John	Mill Hill Grammar School.
Shoolbred, James	St. Mary's, Oscott.
Simms, Frederic	King's School, Rochester.
Smith, Alfred Fish	Private tuition.
Spencer, Alfred Lucian	Bruce Castle.
Spencer, Henry Banks	Queenwood College.
Stallybrass, Henry Martyn	University College School.
Steedman, Andrew Harrington	New College.
Swift, Thomas	Stonyhurst College.
Swinhoe, Robert	King's College.
Taylor, Sedley	University College.
Tidy, William Meymott	King's College.
Tims, John Chamberlin	University College.
Thorp, Fielden	Private tuition.
Thorpe, William Blankley	" "
Traer, James Reeves	King's College.
Tritton, William	Hackney Theological Seminary.
Turner, Frederick Storrs	New College.
Tyler, William James	Mill Hill Grammar School.
Walker, Thomas James	Private tuition.
Waugh, Alexander	Grammar School, Leatherhead.
Whitaker, William	University College.
Whitford, Antony	Truro Grammar School.
Whittleton, Robert	Stonyhurst College.
Williams, Benjamin	Brecon College.
Wilson, Frederick William	Westminster Hospital.
Winterbotham, Henry Selfe Page	Amersham Grammar School.
Wood, Charles	Manchester New College.
Worsley, Richard	University College School
Young, William	City of London School

SECOND DIVISION.

Alford, Henry James	University College.
Allen, John	Private tuition.
Arnott, James William	University College.
Belcher, Paul	King's College.
Browne, Frederick	St. Peter's, Prior-park.
Bruneau, Edouard Alfred	Private tuition.
Byron, Lionel Thomas Dawson	University College.
Campbell, Edward Willis	Guy's Hospital.
Carden, William Henry	University College.
Catton, Richard Thomas Golty.	Private tuition.
Chapman, Joseph Thomas	Stepney College.
Cousins, John Ward	Private tuition.
Eastmead, James John	Cheshunt College.
Edwards, Frederic	Baptist College, Bristol.
Ellis, Septimus	St. Peter's Coll. Sch., Eaton-sq.
Evans, John	Brecon College.
Galbraith, Charles W. Morgan	University College.
Gilbert, William Schwenck	Western Grammar School.
Giles, Philip Henry	Mill-hill Grammar School.
Gillespie, George John Knox	Private tuition.
Harding, Esau	" "
Harvey, Charles Hamilton	King's College.
Hearne, Daniel Joseph	St. Patrick's, Carlow.
Hele, Nicholas Fenwick	Private tuition.
Hind, John Marriott	" "
Humphreys, George Ward	Baptist College, Bristol.
Jones, David	Brecon College.
Jones, Josiah	" "
Key, James	Cheshunt College.
Leach, Henry	Private tuition.
Longstaff, Thomas	University College.
Massey, Thomas	Owen's College.
Meadows, Alfred	Private tuition.
Minshall, Thomas Edward	Clewer-house.
Nicholas, Ebenezer	St. George's Hospital.
Pankhurst, Richard Marsden	Owen's College.
Pinchard, Malden T. Biddulph	Private tuition.
Procter, James	Guy's Hospital.
Smale, Clement	University College.
Stronach, William Gavin	Private tuition.
Tidman, Paul Frederick	New College.
Trendell, James Richens	Cambridge-house, Hackney.
Way, John	Private tuition.
Williams, Thomas	King's College.
Wilson, James Lodge	" "
Woodcocke, Edward Walker	" "
Wotton, Charles	Grammar School, St. Alban's.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 22nd inst. :—

BROWN, ROBERT, Wintershields, Cumberland.
DAWSON, WILLIAM LEE, Cloughran, Co. Dublin.
JONES, WILLIAM HENRY, London.
MACLOGHLIN, JOHN, Liverpool.
O'NEILL, EDWARD, Mitchellstown, Co. Cork.
SEGAR, JOHN, Ainsdale, near Southport, Lancashire.
SLAUGHTER, GEORGE MOULAS, Farningham, Kent.
WILLIAMS, ISAAC MENNELL, York.
WILLIAMS, EVAN PIERCE, Denbigh, North Wales.
WINDSOR, THOMAS, Piccadilly, Manchester.
YOUNG, CHRISTOPHER, Yarm, Yorkshire.

The following gentlemen were admitted members on the 25th:

BARNET, JOHN, Moneymore, Co. Derry.
COLLINS, WILLIAM, Kingstown, Co. Dublin.
CRAVEN, GEORGE, New Worthley, Yorkshire.
IRWIN, CHAMNEY GRAVES, Raphoe, Co. Donegal.
M'KIBBIN, ROBERT, Ballymacarreth, near Belfast.
NICHOLLS, ARCHIBALD, Kilmakenney, Co. Leitrim.
PEPLER, WILLIAM BROWN, Tinhead, Devizes.
SMITH, HENRY TYRWHIT, Melton Mowbray.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 21, 1853:—

HOUGHTON, ALDERMAN THOMAS, Waters.
SKRIMSHIRE, GEORGE.
WALTERS, REGINALD BAYLEY, Winchester.

APPOINTMENTS.

MEDICAL.—London Hospital Medical College.—The appointment of Assistant-Surgeon in the East India Company's Service presented by Russell Ellice, Esq., the Chairman, has been conferred on Mr. A. J. Dale, late House-Surgeon to the Hospital.

NAVAL.—Assistant-Surgeon William H. Carter (1852), from the Cumberland, 70, flagship on the North American and West Indies station, to the Imaum, 72, receiving ship at Jamaica.

MILITARY.—39th Foot.—Staff-Surgeon of the second class Francis Reid, M.D., to be Surgeon, vice John Metge Bartley, M.D., who retires upon half-pay. 94th Foot.—Assistant-Surgeon John Matthew Biddle, from the Staff, to be Assistant-Surgeon, vice Menzies, promoted on the Staff.

HOSPITAL-STAFF. — Assistant-Surgeon Edward Menzies, from the 94th Foot, to be Staff-Surgeon of the Second Class, vice Reid, appointed to the 39th Foot. Augustus Frederic Turner, gent., to be Assistant-Surgeon to the Forces, vice Biddle, appointed to the 94th Foot.

MILITIA.—Royal North Lincoln. Edward Farr Broadbent, gent., to be Assistant-Surgeon.

DEATHS.

FISHER.—July 10, at Bungay, suddenly, Nathaniel Briggs Fisher, Esq., surgeon, aged 43. M.R.C.S.Eng. 1830; L.S.A. 1830; Surgeon to Bungay Dispensary.

IZOD.—July 18, at Newport, Isle of Wight, Ibberson Izod, Esq., aged 25. It appears, that, in consequence of some embarrassment in his private affairs, the deceased poisoned himself with prussic acid. In September last he entered into partnership with Robert Horlock, Esq., surgeon, of the above place. The melancholy event has occasioned much excitement and sympathy in the town, where the deceased was highly respected.

ARTHUR.—July 18, at 23, Church-road, De Beauvoir-square, Kingsland, John Arthur, Esq., M.D., Deputy Inspector-General of Hospitals, in his 71st year, deeply lamented.

DR. SYMONDS.—The recent announcement respecting the College of Physicians and Dr. Symonds is liable to misconstruction. We understand that Dr. Symonds was invited by the College to join their body, which invitation he accepted as an honour and distinction; and he passed through the forms of admission without undergoing the usual examination.—*Bristol Mercury.*

ROYAL COLLEGE OF CHEMISTRY.—At the Annual General Meeting and Special General Meeting, Sir James Clark, Bart., in the chair, the Report of the Council for the year ending in December, 1852, was read, from which it appeared, that the College, as regards students, was never in a more flourishing condition, that the subscriptions for the present year (if paid) will be returned to the members, and that a new volume of Chemical Reports will be immediately distributed.

SCOTTISH UNIVERSITIES.—A meeting of persons interested in the extension of the Scottish Universities, was held in George-street Hall, Edinburgh, on the 19th inst. Resolutions were agreed to, pressing upon Government the necessity of extending, and liberally supporting, the means of University education.

NAVAL MEDICAL OFFICERS.—At a sale of autographs by Messrs. Puttick and Simpson, on the 15th inst., several most interesting and unpublished letters of Nelson were disposed of; among them was one of three pages, addressed to Lady Hamilton, from Deal, September 24, 1801. In the concluding portion of this letter, as showing his exalted opinion of the naval medical officers, Nelson proposes to spend thirty guineas to purchase "a silver cup, gilt inside, with an inscription, as a mark of esteem to Dr. Andrew Baird, for his humane attention to the gallant officers and men who were wounded at Boulogne, August 16, 1801, from their Commander-in-Chief Vice-Admiral Lord Viscount Nelson, Duke of Bronte, etc. etc. What do you think of this? Will you order it?" The letter is signed "Nelson and Bronte." To Dr. Baird he also wrote as follows—"Mr. (now Sir George) Magrath, whom I admire for his great abilities every day I live, gives me excellent remedies; but we must lose such men from our service if the army goes on encouraging Medical men, while we do nothing. I am sure much ought to be done for our Naval Surgeons, or how can we expect to keep valuable men. I look to you, not only to propose it, but to enforce it, to Lord St. Vincent, who must be anxious to preserve such a valuable set of men to the Navy."—Clark and M'Arthur, Vol. II., p. 307. It is a pity there are not any officers at the present time in the Navy disposed to follow the example of the illustrious hero of Trafalgar, who well knew how much the health and comfort of his sailors depended on his medical officers. The neglect of this important branch of the service by the Executive, is likely to be remedied by Parliament, if not in the present, at least in the ensuing Session; for not a night passes without Petitions from all parts of the Kingdom being sent in, most numerously signed, not only by the members of the medical Profession, but by the bankers and merchants. During the past week Petitions from the President and Council of the Royal College of Physicians of Edinburgh, the President and Council of the Royal College of Surgeons of Ireland, the President and Members of the Provincial Medical and Surgical Association; from the medical men of Newbury, Newcastle-upon-Tyne, Lewes (2), York, Boston, Rochester, Strood, Swansea, the Metropolitan Hospitals, and Messrs. Power, Stone, Forster, Straus, Propert, and others. In order that the members of the Naval Medical Profession may know to whom they are indebted, we subjoin the names of the Members who have presented, and have promised to present, Petitions to Parliament in their favour:—John Alexander, Esq., Carlow; George Bowyer, Esq., Dundalk; John Brady, Esq., Leitrim (a very warm friend of the cause); Viscount Goderich, Huddersfield; Sir Benjamin Hall, Marylebone; G. H. Heathcote, Esq., Boston; J. K. King, Esq., Herefordshire; Sir Fitzroy Kelly, East Suffolk; the Hon. H. T. Liddell, Liverpool; Dr. William Michell, Bodmin (another good friend); J. G. Smyth, Esq., York; Sir Joshua Walmsley, Leicester, etc. It is expected, that from 120 to 150 Petitions will be presented in the present Session. The Members of the Profession are urged to get up as many Petitions as possible, and send the same to their Parliamentary representatives; and, if sent with the ends of the Petition open, like a newspaper, to their Members at the House of Commons, they will be transmitted free.

THE MEDICAL SOCIETY OF BRISTOL AND BATH held their Annual Dinner on Thursday week, at the White Lion, Bristol, under the presidency of Henry Clark, Esq., Surgeon, of that city. Among the non-professional visiters present, were the Right Worshipful the Mayor, the Very Rev. the Dean of Bristol, etc.

HEALTH OF THE TROOPS AT CHOBHAM.—On the 13th instant, the day before the change of troops took place at Chobham, the strength being 8928, there were 167 on the sick list; namely, 59 in the General Hospital at Chobham, and 108 in the regimental tents. On the day the troops marched off, the 14th, every man, with the exception of four, was able to leave with his regiment. Not one had died since the troops had been encamped. The only bad cases of disease that had occurred had been two of erysipelas. These facts are quite unprecedented, and afford the most complete answer to the remarks which have been made in Parliament and elsewhere against the site chosen for the experimental camp by our military authorities. The last report, on the 25th July, of the troops now in camp, gives 59 in the general and 101 in the regimental hospitals,—the strength being 8655. One man died of bronchitis soon after the arrival of the new troops, which was the first death since the troops have been under canvas.

CHOLERA IN CEYLON.—This disease is prevalent among the civil population in Colombo, but had not attacked the European troops at the time of the last report, although it had attacked men in the Ceylon Rifle regiment. 338 cases had occurred between the 18th March to the 11th June, of whom 158 had died.

MEDICAL PORTRAIT GALLERY.—The next of the series of the portraits of eminent Physicians and Surgeons by Maguire is one of Mr. John Gay, Surgeon of the Royal Free Hospital. The portrait is executed in Maguire's best style.

MORTALITY NOTABILIA.—The total number of deaths registered in the metropolitan districts, in the week that ended last Saturday, was 971. In the ten corresponding weeks of the years 1843-52 the average number was 1049, which, raised in a certain proportion, according to increase of population, gives an estimated amount of 1154. Last week's registration, therefore, shows, that the actual mortality is less than the corrected average by 183. The deaths ascribed to zymotic diseases are 226, about the same number as in the previous week. In the two weeks, fatal cases of small-pox were respectively 2 and 2; of measles, 26 and 11; scarlatina, 27 and 26; hooping-cough, 37 and 30; typhus, and other fever, 51 and 58. The only fact particularly attracting notice is, the increase, usual at this season, of diarrhœa. It appears, that the last few days have witnessed a decided increase both in diarrhœa and summer cholera; and, though typhus contributes nothing more than the usual proportion to the weekly mortality, local reports show that it is prevalent in some parts.

Births.—Last week the births of 819 boys, and 741 girls, in all 1560 children, were registered in London. In the eight corre-

sponding weeks of the years 1845-52, the average number was 1336.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·745 in. The mean temperature of the week was 59·6°, or 2·2° below the temperature of the same week on an average of 38 years. The mean daily temperature was below the average on every day of the week. The highest temperature was 73°, and occurred on Saturday; the lowest was 50·7°, and occurred on Monday. The wind blew, on six days, from the south-west. The amount of rain was 0·29 in.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending July 23:—

	Males.	Females.	Total.
Workhouses	37	29	66
Military and Naval Asylums.. ...	6	...	6
General Hospitals	16	18	34
Hospitals for Special Diseases ...	...	1	1
Lying-in Hospitals	...	...	...
Lunatic Asylums	3	1	4
Military and Naval Hospitals ...	4	...	4
Hospitals for Foreigners, &c. ...	2	...	2
Prisons	4	...	4
	72	49	121

DEATHS *in the Metropolis for the week ending Saturday, July* 23, 1853.

CAUSES OF DEATH.	JULY 23. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	468	324	156	971	10494
SPECIFIED CAUSES	466	323	156	946	10460
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	176	36	14	226	3672
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	26	17	47	427
3. Tubercular Diseases	92	125	9	226	1874
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	39	29	26	94	1164
5. Diseases of the Heart and Blood-vessels	3	24	11	38	289
6. Diseases of the Lungs and of the other Organs of Respiration ...	56	18	28	102	775
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	26	24	20	70	697
8. Diseases of the Kidneys, etc. ...	...	6	4	10	103
9. Childbirth, Diseases of the Uterus ...	...	10	1	11	96
10. Rheumatism, Diseases of the Bones, Joints, etc.	2	2	...	4	64
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	1	2	11
12. Malformations	2	...	...	2	32
13. Premature Birth and Debility ...	21	1	...	22	246
14. Atrophy	28	1	1	30	294
15. Age	...	...	20	20	396
16. Sudden	1	3	2	6	53
17. Violence, Privation, Cold, and Intemperance	16	17	2	36	267
CAUSES NOT SPECIFIED	2	1	...	25	34

BOOKS RECEIVED.

Beiträge zur vergleichenden pathologischen Anatomie der Gelenkkrankheiten. Von Dr. E. Gurlt. Berlin, 1853.

Habit: Physiologically considered. By J. A. Symonds, M.D. Churchill London, 1853.

The Western Lancet. February, 1853.

On the Development of Military Offences in Camp and Quarters. By F. Roberts, Staff-Surgeon, Chatham. 1853.

Verslag omtrent de Ziekten van het hart en de Groote Vaten, waargenomen van 1 Nov., 1851, tot 31 Dec., 1852, in het Stedelijk Kiekenhuis te Rotterdam. Door Dr. F. J. J. Schmidt. Rotterdam, 1853.

Commentaries on the Surgery of the War. Fifth Edition. By G. J. Guthrie, F.R.S. London: Renshaw. 1853.

Practical Observations on Aural Surgery, and the Nature and Treatment of Diseases of the Ear. By W. R. Wilde. London: Churchill. 1853. Dublin: Fannin.

La Cronica de los Hospitales. Junio, 1853.

Annual Report of the Medical College of Bengal, 1852-53. Calcutta, 1853.

An Introductory Lecture, delivered in the Grant Medical College. By W. C. Coles, M.D. Bombay, 1852.

Correspondence on the Danubian Principalities. Manchester, 1853.

Zur Pathologie und Therapie der Krankheiten des Hüftgelenks und ihrer Ausgänge. Von Dr. J. T. Bühring. Berlin, 1852.

Memoirs of a Stomach; written by Himself. London: Painter. 1853.

TO CORRESPONDENTS.

RELATIVE MERITS OF THE EXAMINATIONS AT APOTHECARIES' HALL AND UNIVERSITY OF LONDON.

M.D. says:—"It is a pity to institute a comparison between the preliminary examination at Apothecaries' Hall, and that at the University of London, as the two trials are of a different character, and intended for a different class of persons. The examination at the University is chiefly for barristers, and clergymen, and others who are going to pursue a learned education; and the number of medical candidates is comparatively small;—the examination at Apothecaries' Hall is entirely confined to medical students, and to those intending to embark in general practice. As to the relative honour of passing either examination, that must be a matter of opinion; but, considering the limited opportunities afforded to the general body of young medical students, it is, I think, highly creditable to them to pass the Hall examination; but the candidates at the University are nearly all College students, and, therefore, have far greater opportunities for classical and mathematical study, than the apprentices of the general practitioners, who are mostly occupied in strictly professional duties."

MR. GREENWAY'S IMPROVED FRACTURE APPARATUS.

We regret that the *reference notes* to the drawing in the above letter were omitted in our last. They should have been as follow:—"Fig 1. *a*, *a*, tension-rods; *b*, *b**, one of the slides of each bent plate; *c*, *c**, bent iron plates: *d*, a screw, on which is a nut, *e*, for producing extension; *f*, *f**, one of the pressure-pads of each bent plate; *g*, back-piece or floor, with pad; *h*, foot-piece, with pad. Fig. 2. One of the bent plates (*c*, Fig. 1) removed from the apparatus in order to show more completely its mechanism, and the action of the pressure-pads. *b*, *b*, the slides which support it on the tension-rods; *f*, *f*, the pressure-pads; proceeding outward from each is a screw, which passes through the side of the bent plate, and on this screw (between the pad and the plate) is a nut which, when worked against the plate, forces the pad towards its fellow."

Dr. Brown's request shall be attended to.

A Subscriber, M.D., Liverpool.—We are not aware that any analysis of the oil has been published. It is thought to be merely simple almond or olive oil, scented; and it is very doubtful whether the result alluded to by our correspondent could be produced by its use.

Mr. Hadwen's interesting case shall be inserted next week, if possible.

Mr. Henry Smith's valuable paper on Excision of the Knee joint has been unavoidably postponed. It shall appear very soon.

The reply of a Medical Student to Mr. Guthrie has been received. We think he had better remain satisfied with the effect produced by his first letter, unless fresh cause of complaint should arise. The following passage, however, is too good to be thrown aside:—"I cannot perceive any logical conclusion in either giving a diploma with a frown, or refusing it with a smile. We desire to have our examinations conducted in a quiet gentlemanly manner, without any joviality or undignified fuss. Let them be strict, or even severe; but let them be conducted with the equanimity and coolness of polite society."

A Constant Reader, N.B.—Practitioners differ much in giving chloroform during parturition; but the general rule is to begin it as soon as pain becomes very severe, and not to give enough to produce total insensibility. If this be attended to, no restorative agent can be required. The suggestion on the dental subject shall be borne in mind.

Mr. Blackton's case has been received.

Mr. Finlay has favoured us with copies of correspondence between himself and Mr. Wiblin, the quarantine officer at Southampton, who is said to have stated, that he could not place confidence in the statements made on oath by the medical officers of the Royal Mail Steam-packet Company. On an explanation being demanded, in a very proper manner, by Mr. Finlay, Mr. Wiblin merely acknowledged the receipt of the letter. There can be but one opinion of such conduct.

Dr. Seaton.—Many thanks for the report.

We have not room for Mr. Adkin's letter this week.

Erratum.—Among the names of gentlemen who passed the Preliminary Examination at Apothecaries' Hall on the 19th and 20th of this month Mr. Knight's name was inserted as "Henry John Wright," instead of "Henry John Knight."

We have received a letter on Homœopathy, signed *Cuttingham Fairleigh*, —we suppose from some lunatic asylum.

The letter of *A Second Year's Man* cannot be inserted this week.

Mr. Tapperell's letter must also be deferred.

Dr. G. A. Mitchell's request shall be attended to.

Mr. Broadbent is informed that the two lectures he inquires after have not yet been published.

This being the period when the circulars from which Medical Directories are made up are issued, it behoves each legitimate member of the Profession to forward any correction or addition that may be required,—these publications affording the principal means of distinguishing between the licensed and unlicensed medical man.

COMMUNICATIONS have been received from—

MR. GREENWAY; M.D.; A SUBSCRIBER, M.D., Liverpool; MR. HADWEN; MR. HENRY SMITH; DR. EDWARD SMITH; A MEDICAL STUDENT; A CONSTANT READER; MR. BLACKTON; MR. FINLAY; DR. SEATON; MR. ADKINS; MR. KNIGHT; A SECOND YEAR'S MAN; MR. TAPPERELL; MR. BROADBENT; MR. YEARSLEY; DR. HOFMANN; DR. BOON HAYES; MR. ADAMS; DR. OGLE; DR. FARRE; DR. GEORGE JOHNSON, etc.

ORIGINAL LECTURES.

CLINICAL LECTURE

ON

MALIGNANT DISEASE OF THE DURA MATER.

DELIVERED AT

St. Bartholomew's Hospital.

By WILLIAM LAWRENCE, Esq., F.R.S.

Case.—MALIGNANT GROWTH FROM THE DURA MATER, FORMING A PULSATING TUMOUR ON THE HEAD.—SECONDARY FORMATIONS OF DISEASE IN OTHER PARTS.—THREE OPERATIONS ON THE ORIGINAL SWELLING.

E. W., who had been married about two years, but had not borne children, had enjoyed good health till the early part of 1850. In February of this year, she suffered more than usual from headache, to which she had been subject for a long time. She now observed a small swelling on the left side of the frontal bone; it increased, and became painful, with aggravation of the headache. She bore it, however, till April, 1851, when she submitted to an operation for the removal of the swelling. The incisions made for this purpose caused profuse and alarming bleeding, which made it necessary to desist when the removal had been only partially accomplished. She was so weakened by the loss of blood as to be incapable of the least exertion for a fortnight; and six or eight weeks elapsed before she had regained her usual strength. The swelling was soon reproduced; and a second operation was undertaken for its removal, ten weeks after the first attempt. The bone was found to be rough; and the operator concluded that the diploë had been the original seat of the mischief, though previously, from the thinness of the covering, and the strong beating of the surrounding arteries, it had been considered an affection of the vessels, and that there was danger of bursting. The hæmorrhage was considerable, but not dangerous, on this occasion. Although the soft parts had been freely excised, the tumour began to grow again before the wound was healed. She now passed some months in the country for the recovery of her health, and then sought advice at St. George's Hospital, where the nature of the affection was justly appreciated, and operative interference declined, in the belief that the disease was incurable. The tumour now pulsated, but I could not ascertain whether this symptom had been observed previously to the second operation.

I saw this patient in November, 1852, when there was a swelling on the surface of the skull, occupying the left side of the frontal region, somewhat irregular in figure, about two inches in diameter at the base, and rising more than an inch above the level of the bone. There was a thin cicatrix at its upper part, the rest of the tumour being covered by the scalp, which had a slightly livid tint, so as to suggest the notion, on the first view, that it might be a case of subcutaneous nævus. It pulsated strongly, and was so acutely sensitive, that the patient could not bear either any covering on the head or the slightest touch; I could not, therefore, estimate satisfactorily the exact nature of the pulsation, or the consistence of the growth, which, however, seemed tolerably firm. All the arteries proceeding towards the part, and on each side of it, were unusually large, and beating powerfully. There was great pain in the part, and severe headache, especially at night, not admitting of relief from narcotics, which disagreed seriously. A peculiar and considerable uneasiness was often experienced at the back of the head. It was stated, that pressure on the swelling had produced some effect on the movements of the left arm; but the part was now too sensitive to admit of this circumstance being verified.

The patient and her friends, remembering the violent bleeding at the first operation, and observing the strong beating of the swelling, believed the disease was seated in the bloodvessels. They were in constant fear, from the progress of the swelling, and the increasing thinness of its coverings, that it might burst, and thus suddenly destroy life. They wished that some relief should be afforded, at any risk, to the severe pain, which had become almost insupportable. It appeared to me, that, although cure was out of the question, and operation not altogether safe, the disease might be removed, with every probability of temporary benefit, by alleviation of suffering. She readily assented to the proposal of placing herself under my care in the hospital.

It is here necessary to observe, that there was a deeply-seated tumour in the left hip, behind the joint, of oval form, about three inches in the long diameter, and movable on the surrounding structures. It had existed two years, and had been always free from pain. It was not mentioned until the question was put, whether there was disease in any other quarter.

The true nature of the affection was not suspected, either by my colleagues or myself, previously to the operation, which was proposed simply as the only means of relief from intense suffering, and to remove the constant apprehension and anxiety of bursting and bleeding. The dangerous hæmorrhage, which had prevented the completion of the first operation, the pulsation of the swelling, the enlargement and beating of the neighbouring arteries, led to the belief, that it might be a vascular growth; while the co-existence of the tumour in the hip left no doubt of its malignant character.

In performing the operation, on December 15, 1852, after the administration of chloroform, an incision between three and four inches in length was made along the posterior half of the base of the tumour, keeping clear of the mass by a considerable margin. A most violent bleeding ensued from numerous arteries of the scalp, which could not be tied, from the density of the surrounding structures; and the hæmorrhage could only be partially restrained by pressure. Thus the loss of blood was so great, that the patient seemed likely to sink under it. She soon revived under the free admission of air, the dashing of cold water on the face and chest, and the use of brandy. The operation was completed by an incision in front, not followed by any considerable bleeding, and then rapidly detaching the mass on a level with the bone, in doing which the presence of bony spiculæ in the base was observed. It was now found that the growth passed into the interior, through an opening in the cranium more than half an inch in diameter, at which the pulsation of the brain could be felt. It was necessary to apply a compress of lint with sufficient firmness to stop a general bleeding from the exposed surface; and the patient was removed to bed, where she complained of considerable pain, and was restless. She took a glass of brandy-and-water, and soon went to sleep. She was afterwards sick, with some return of bleeding, which was easily controlled. Three hours after the operation, she was in a sound, tranquil slumber; when visited in the evening, she was composed, and free from pain.

The part removed was a vascular production, of tolerable firmness, exhibiting, on microscopical examination, the appearances supposed to characterise medullary cancer. It was covered by a capsule, which might have been partly altered pericranium.

16th.—Free from pain, and quite cheerful. The thick compress of lint, hardened by drying of the blood, adheres

firmly to the scalp, causing a feeling of tightness in the temples. She slept well; pulse 112; tongue clean. The stomach has retained light nourishment in small quantities. The pad of lint to be softened cautiously with water.

17th.—A good night; pulse 108. A portion of the lint had become sufficiently softened to admit of removal.

19th.—Pulse 100 yesterday; bowels open to-day for the first time since the operation. She feels quite easy, and enjoys her food, consisting of beef-tea, with rusks, tea, and arrow-root. The lint still adheres tightly.

20th.—The compress removed easily; the surface of the wound healthy. A portion in the centre, the size of a sixpence, is dark and dry; the pulsation of the brain is obvious here. An opiate has been taken each night since the operation; as it seems to cause slight headache, half a drachm of tinct. hyoscyami is substituted.

25th.—The disorganised portion in the centre separated yesterday; the pulsation in the opening below is very distinct. The wound presents a perfectly healthy, granulating surface, and begins to cicatrise at the edges. The patient, perfectly free from pain, is in excellent health and spirits, and quite satisfied with the relief afforded by the operation.

26th.—She partook rather freely of the Christmas fare liberally provided yesterday for the hospital inmates, and has had to-day one of the bilious attacks to which she says that she is subject, with vomiting, restlessness, and return of pain in the back of the head. She complains also of pain in the right arm, a little above the elbow. Pulse 110; tongue furred; bowels confined. No pain in the wound or neighbourhood. The arm to be covered with cotton wool. A dose of castor-oil, to be followed by injection, if necessary. Effervescing saline draught every six hours.

Jan. 10, 1853.—After the bowels had been cleared on Dec. 26, she was quite comfortable, taking a little fish, or a mutton chop, with four ounces of wine daily, till Jan. 3, when there was another attack of pain in the arm and vomiting, for which it was necessary to give, on the 4th, a minim and a-half of Scheele's acid, in an effervescing draught, every six hours. She continued well till yesterday, when she started from sleep in the morning with a sensation of having hurt her arm. She also had a fit, which she described as if falling from a great height without power to save herself, all objects seeming confused and dim before her eyes, but without loss of consciousness. It was found that the arm had undergone spontaneous fracture. She was feverish, with confined bowels, and complained of flying pain in the front and back of the head, at the back of the eye, and in the left arm. Although the wound, which is considerably contracted, is quite healthy; there is a rising of the granulations in the centre, which shows that disease is renewed.

15th.—She has been better, with the pulse at 100. Another fit.

18th.—Although she is now, and has been since the operation, quite free from pain in the seat of disease, and has felt altogether comfortable, with slight exceptions, she is now restless, and fancies that she would be better at home. She was accordingly removed to her own residence.

After recovering from the exertion of moving, she was much easier for a few days, and could sit up in an arm-chair. She was alternately better and worse, with a pulse never less than 100. The pain at the back of the head returned at shorter intervals, and with greater severity, so that, in spite of her aversion to it, she was persuaded to take an opiate at night. On Feb. 21, she felt quite comfortable in the afternoon, but had another fit in the evening, and died.

The friends of the patient allowed the head to be examined, but would not permit the body to be opened, or any dissection to be made of the swelling at the hip, which had increased in size since the operation, without causing much pain. Mr. Archer, one of the house-surgeons of the hospital, and the dresser who attended the case, performed the examination, of which they have made the following report:—There was an irregular opening in the frontal bone, of somewhat oval shape, between one and two inches in its longest diameter. The edges were not bevilled; the bone all round was soft and crumbling; and this change was observed in isolated parts as far as an inch from the central aperture. There were some small portions detached, but not altered in structure. The surface was described by Mr. Archer as honey-combed, and he stated that the change extended further on the inner than on the outer table of the bone. Beyond the part thus altered by the pressure of the morbid growth, the bone was perfectly healthy. A portion of the disease, less than an inch in length, projected about half an inch beyond the level of the cranium. The morbid mass, when fully exposed, was seen to have grown from the dura-mater, to which it was firmly attached by its entire basis. It was of irregular shape, at least two inches in diameter, and about an inch in thickness. It was tolerably firm, of an obscurely fibrous texture, and very vascular. It was lined by the dura-mater, of which the internal surface was entire, excepting a small circular opening, about half an inch in diameter, through which there was a very slight protrusion of the morbid growth. The basis of the latter adhered in the firmest manner to the membrane, which was reduced nearly to the substance of its serous lining. There was a small portion of similar disease, apparently developed in the left pterygo-maxillary fossa, forcing its way through the sphenoid bone into the base of the skull, just in front of the petrous portion of the temporal bone. The patient had occasionally complained of pain at the back of the left eye. The brain was quite healthy. In the left anterior lobe there was a depression, caused by the swelling, the membranes and the cerebral substance not being affected. The left lobe of the cerebellum contained an almost spherical mass of medullary disease, nearly equal in size to the globe of the eye. It was a soft, yellowish substance, partially covered by a dark clot of blood, and it came out entire, not being firmly connected to the surrounding structure. The peculiar pain at the back of the head may probably be explained by the presence of this formation.

The fracture of the right humerus had been caused by disease of the bone, and had gone on without any attempt at repair. The upper fragment formed an elliptical swelling the size of a hen's egg, the bone being here converted into a mass of medullary disease, covered by a fibrous investment from the periosteum, in which there were slender portions of bone. The swelling was excavated at its lower end, which presented simply a fractured surface, without change of structure.

For the clear and satisfactory narrative of the following interesting case I am indebted to the kindness of Mr. C. G. Reade, of Stradbroke, Suffolk, who sent with it the gutta percha casts mentioned in the history, and the diseased bone. These casts and the bone are deposited in the Museum of St. Bartholomew's Hospital.

Case.—FUNGOID DISEASE OF THE DURA MATER, WITH SECONDARY AFFECTION OF THE LIVER, KIDNEY, AND LUNGS.

Oct. 14, 1850.—J. H., aged 33, has a tumour lying obliquely on the right parietal bone, resembling in shape a split pear with the base upwards, and measuring about 2½ inches in its long diameter by 1¼ at its widest part. It is perfectly smooth, fluctuates, and pulsates distinctly both to the eye and the touch, and is supplied on all sides by enlarged and tortuous vessels, those from below,—the temporal, auricular, and occipital arteries,—acting with considerable force. The scalp is freely moveable upon the tumour, and looks healthy, but the latter is not moveable upon the cranium, and its upper margin, when pressed upon, gives the ridge-like feel of fracture, being, moreover, exceedingly tender, as is also the cranium generally along the temporal ridge of the frontal bone. The right upper eyelid is generally closed; but when raised discloses a convergent squint of the right eye, the eye itself being somewhat tender, and the sight (independently of the double vision arising from the altered axis of the eye) slightly impaired. Muscæ and flashes of light are occasionally observed. Pupil natural. Complains of great intolerance of light, and suffers excruciating pain in the head, particularly at night, and at the catamenial periods, the pain being sometimes darting, and at others of a heavy aching character, together with a "constant whizzing noise in the head, like that of a chaff-cutting machine;" has, besides, numbness of the left hand and arm.

Examination.—The stethoscope detects a distinct sound synchronous with the stroke of the heart. Direct pressure on the tumour (it is too tender to bear much) fails to empty it of its contents, or reduce its size in any perceptible degree. Carefully applied pressure on the vessels around its base fails to arrest, although it lessens the force of the circulation. The effect of pressure on the external carotid is doubtful, but pressure of the common carotid effectually

checks the pulsation, although even then the swelling is not reduced, and the sound may be heard, but altered in character, being less intense, and as if at a distance.

History.—First observed the tumour about six months ago, it being then the size of a split bean. After remaining stationary about a month it disappeared during an illness, the recovery from which was protracted by excruciating pain in the head about the seat of the swelling, the bone at that time appearing to Mrs. H. "to be hollow when tapped upon." Fell under observation about six weeks since, when it was only the size of a split walnut. Mrs. H. has noticed the "whizzing noise" in the head for about three weeks, and the intolerance of light has existed about the same time. The squint is of only ten days' duration, and has increased gradually. Four days ago vomited twice or three times, and again to-day, there being no apparent derangement of stomach to account for it.

Complexion sallow; was generally healthy, but her mother is the subject of lupus; one sister had a fungoid tumour of the lower jaw, removed by Mr. Mayhew; one had carcinoma of the breast; and two died of obscure affections of the brain.

First gutta percha cast taken.

31st.—Almost complete amaurosis of the affected eye; the flame and light of a candle not being perceptible, except when within a few inches of the eye. The sense of taste so impaired, that she does not recognise the acidity of vinegar. The smell is failing; and the tongue, when protruded, inclines to one side, nor can she bring it into a straight line, although there is sufficient power in the antagonistic muscles at present to draw it over to the side opposite to that to which it at first inclines. Slight paralysis of left hand and arm; almost complete paralysis of left leg. The vomiting continues, recurring regularly night and morning, and whenever there has been more than usual pain in the head.

The tumour is more prominent, and the scalp around its base is getting puffy. She states, that the noise in the head increases, and speaks of the "rush of blood" in the tumour as like that of water running under an arch.

Dec. 2.—The second cast taken.

Tumour much increased. Temporal fossa bulging to a great extent. Since the tumour has developed itself more externally, the paralytic symptoms have to some extent yielded. Thus, Mrs. H. can move the left leg better than she could, and has even more sensation in it. So she can now thrust the tongue forward, and the senses of taste and smell are less affected. On the other hand, however, there is all but complete amaurosis of the left eye, that of the right eye having been long established. The right eye becomes still more prominent, and the convergent squint is exchanged for a divergent. The mind composed, indeed cheerful, though the pain is at times extremely urgent.

Jan. 15, 1851.—Third cast taken.

Tumour considerably increased.

Feb. 6.—The skin behind the ear has become very vascular, and threatens to ulcerate.

March 4.—Tumour much increased, and right eye still more bulging. Paralysis of left side still more confirmed; and, within a fortnight, almost complete loss of the power of deglutition. The speech very inarticulate. Frequent vomiting, with pain in epigastrium. Liver considerably enlarged, hard, but perfectly smooth, very tender; much pain in the region of the kidneys; urine frequently bloody, and highly ammoniacal; but, within a week, the bladder, that had long been paralysed, has regained its function.

The tumour still pulsates, though more feebly, and the stethoscope detects a feeble murmur when placed on any part of its surface. At its middle it yields a sensation of distinct fluctuation, the scalp being much thinned, though not discoloured.

8th.—Died at a quarter to five a.m., without a struggle, and retaining perfect consciousness.

Treatment.—That adopted from the first was only palliative; anodynes and diffusible stimulants, combined with the use of refrigerant lotions.

Remarks.—It is to be understood, that "reduction" of the tumour could not be at any time effected, and that compression never produced any effect upon the cerebral functions.

Post-mortem Examination.—J. H., aged 33; died a quarter to five a.m., March 8, 1851; examined at half-past two p.m., March 10. Weather dry.

Great emaciation; right eye very prominent; pupil dilated more than that of left eye; the tumour on head maintains the form assumed during life; slight œdema of both legs.

A gutta percha cast taken of the head and face.

Scalp nowhere adherent to the tumour. The denuded tumour looks like an irregular mass of ecchymosed blood, with an investing membrane, formed from the pericranium. There are a few small and detached tumours of like appearance near the mesian line. Left side of calvarium very easily removed. No adhesion to the dura mater, even in the direction of the longitudinal sinus. Upper part very thin, and carious in the direction of the longitudinal sinus.

The whole of the diseased parts on the right side removed together, including the orbit and the brain *in situ*, by making a horizontal section of the malar bone, and mastoid process of the temporal, disarticulating the occiput from the atlas, and dividing the base of the skull from before backwards.

Left Side.—The dura mater slightly thickened along the longitudinal sinus. Arachnoid thickened and opaque; adherent in many places to the pia mater, in others separated from it by a yellowish and gelatinous effusion; the latter small in quantity. Falx major thickened at upper part. Superior longitudinal sinus contains pus, and a yellowish, cheesy-looking matter. Coats much thickened and opaque; no blood present. Left half of the brain removed by a longitudinal incision. Brain rather soft, though not otherwise abnormal.

Right Side.—Right half of brain next removed from within, leaving the dura mater of that side *in situ*. This section of the brain, together with its arachnoid and pia mater, has much the appearance of the left half.

The dura mater presents extensive fungoid degeneration, similar to that observed outside the skull, occupying almost all the right side, and implicating the parts at the base of the skull, particularly those included in the sella turcica. It is separated from the bone, in some places, to the extent of a quarter of an inch or more, by the fungoid growth.

Inner table of right half of cranium presents numerous patches of caries; and an aperture, about the size of a shilling, can be detected in the parietal bone, at a point corresponding to that at which the tumour first made its appearance. The bones forming the base of the cranium are quite carious, and their cellular texture filled with a dark, glutinous fluid.

Abdomen.—Liver.—Hard, much enlarged, yellow colour, and tuberculated, but the surface not raised to any extent. Some of the tubercles in left lobe softening. In right lobe, two or three tubercles the size of nutmegs, and somewhat resembling them in appearance when cut across. They are soft and cheesy-looking.

Left Kidney.—Enlarged to four times its natural size; of a dark purple colour, and nodulated at its upper and outer part. A vertical section presents a mass of disease in different stages; looking in some places like yellow cheese, in others brain-like, in others bloody and purulent; while a prune-juice-looking fluid oozes out in other places on the entrance of the knife.

Right Kidney.—Congested, but otherwise healthy.

Thorax.—Left Lung.—In upper part, one large tubercle, the size of a nutmeg, and in character like those in the liver, softening; and, near it, some hardish, small, red, and stellated patches on the surface.

Right Lung.—Two or more large tubercles in upper lobe.

The two cases which I have now brought before you are examples in which malignant disease, originating on the cranial surface of the dura mater, and causing absorption of the bone by pressure, forms a tumour under the scalp, closely attached to the external surface of the bone, and generally attended with pulsation. Secondary morbid deposits in other situations, such as the brain, lungs, liver, bones, take place in the course of this fatal malady. I think it quite clear that this was the kind of affection in the instance treated and described by Mr. Reade; and it seems to me hardly less evident that the disease was of the same nature in E. W., though it was thought, by some of those who saw this patient, that the affection had originated in the bone. The surface of the cranium, over and around the disease, presented exactly the same appearances in both instances, the only difference between the two cases being in the extent of the mischief. There was removal of the osseous substance by absorption, causing larger and smaller superficial excavations, giving the whole surface a kind of honeycombed appearance, with fragments, crumbling and loose, towards the margin. This change had occurred to a greater

extent internally than externally. Beyond the limit directly affected by the contact of the morbid growth, the bone was in a perfectly normal state. The exact time at which pulsation commenced in this case remains uncertain; it seems not to have been noticed when the tumour was first observed, but it attracted attention after the second operation.

According to my experience, these affections of the dura mater are rare. That of E. W. is the only one that has come directly under my own observation. Our museum contains a specimen, of ancient date, and without a history. It presents a fungoid mass, issuing through an opening in the frontal region of the cranium, spreading, with a raised and everted edge, over the neighbouring portion of the bone, and less than three inches in its long diameter. The disease is continued within the cavity in a mass of about an inch in thickness at its middle, and covered by perfectly healthy dura mater. The surrounding bone presents no trace of morbid change. According to the printed catalogue, the rich pathological collection in the museum of the College contains no specimen of this affection; and the same remark applies to the museum of the College of Surgeons in Ireland. Mr. Cæsar Hawkins has informed me, that the museum of St. George's Hospital contains a specimen taken from the head of a female who had been received into the Institution with medullary cancer of the breast.

The memoir of M. Louis, "On Fungous Tumours of the Dura Mater," in the 5th Volume of the "Mémoires de l'Académie Royale de Chirurgie," edition in 4to, gives a clear account (to which subsequent experience has made little addition) of the origin, symptoms, and progress of the affection, together with the effects produced on the bone. The real nature of the disease could not have been known at that time, nor does it seem to have been even suspected more recently, although the subject of malignant disorders has been studied with so much zeal and success. The malignant character of the two cases now related is too clearly marked to require further notice. In those formerly recorded, the examination after death has been confined to the head, so that, if secondary disease had been developed in internal organs, its presence would not have been detected. From incidental notices, however, in the cases formerly recorded as fungous tumours of the dura mater, we see reason to conclude, that the disease was of the same malignant nature as in the two instances now brought before you.

The eighth case in the Memoir of M. Louis is that of a soldier, who came under treatment for a pain in the hip. There had been previously a small tumour on the frontal bone; this was unattended with pain, but increased in size, and was opened, being then found to consist of a whitish fungous substance, around which the finger passed easily through an opening in the bone into the cranium. The patient died in five days. The upper half of the thigh-bone was thoroughly diseased, being converted into a fleshy substance. In his folio work, with plates, "On the Fungous Excrescences of the Dura Mater and Cranium," Professor Chelius has given a minute account of the history and dissection of a patient, in whom a pulsating tumour in the frontal region occurred as a secondary affection consequent on primary disease of the humerus. The morbid growth was of clearly-marked medullary character, both in the arm and head. The os humeri was converted into a large mass of this disease in its upper five inches; the cranial tumour, issuing from the dura mater, had made an opening in the bone of two inches diameter. In the head of a body brought to the anatomical theatre of Mentz, Wenzel found five growths proceeding from the dura mater, and penetrating the cranium. The liver was diseased throughout, filled with tubercles, of which several corresponded in structure with the excrescences of the dura mater. ("On Fungous Excrescences of the Dura Mater." Folio, with plates.) Palletta states, that the substance of the growth, in one case which he had seen, was like that of the placenta; in another, cerebriform; in a third, white, and yielding to pressure. ("Exercitationes Pathologicæ.")

When the true nature of a disease is not understood, appropriate rules of treatment cannot be expected. Thus, M. Louis recommends, in these affections of the dura mater, that the bone should be removed around the base of the swelling, by repeated applications of the trephine, and that local means should be employed, in order to diminish or destroy the growth, when thus fairly exposed. I believe that this treatment has never been actually resorted to, although it is still recommended in systematic works on Surgery, in which a choice is offered of excision, ligature, and escharotics, for the purpose of destroying the excrescence. It has even been suggested, that, after removing the bone, the morbid growth should be cut away with the portion of dura mater from which it proceeds. That all measures of this description would increase the sufferings and shorten the life of the patient, without offering a chance of success, is an obvious and necessary inference from what I have represented to you respecting the malignant nature of the disease.

Morbid growths forming tumours closely connected to the surface of the skull, do not proceed, in all instances, from the dura mater. They may have their origin in disease of the bone, under which such growths may be formed, both on the exterior and interior of the skull. There is a preparation in the Museum illustrating this point. The bone of the skull is dense, and partially discoloured. Two considerable medullary tumours have been formed on its outer surface, and are covered by the pericranium, which appears healthy. They have produced absorption of the bony surface on which they rest. One, between two and three inches in diameter, has nearly made its way through the bone; while the other, of nearly equal size, has penetrated completely by a small opening, through which the growth has passed within the cavity to some extent. At another part, there is an excrescence springing from the dura mater nearly an inch in diameter, lodged in a circular excavation of the bone, which had not yet gone through the external table. In the works of Chelius and Wenzel, which I have already mentioned, you will find the facts hitherto recorded respecting organic affections of the dura mater and cranium collected and compared.

HISTOLOGICAL ANATOMY

AND

MICROSCOPICAL MANIPULATION.

By Dr. BOON HAYES,

Physician to the Northern Dispensary; Lecturer upon Pathology and Morbid Anatomy at the Hunterian School; formerly Lecturer on Anatomy, Physiology, and Pathology, at the Sydenham College, Birmingham.

PART SECOND.

THE PHYSIOLOGICAL DEMONSTRATION OF THE TISSUES.

Lecture XI.

Summary.—107. Two Varieties of Muscular Tissue—108. Demonstration of Voluntary Fibre and its Appearance—109. Fasciculi—110 Fibres—111. Sarcolemma—112. Fibrillæ—113. Involuntary Fibre—114. Circulation in—115. Nervous supply.

MUSCLE.

107. Muscular tissue is one of the most beautiful structures in the animal organism, and, as being specially connected with the locomotive apparatus, is peculiarly characteristic of animal, as opposed to vegetable life.

It is found in two varieties, one of which has a series of transverse stripes upon it, and is hence called "striated;" the other destitute of these, and hence called "non-striated" muscular fibre. Moreover, the former is invariably found in those muscles which are under the direction and influence of the will,—the latter acting under the irritation of other excitants, and being uncontrollable. Striated muscular fibre is, therefore, called VOLUNTARY, and non-striated INVOLUNTARY.

108. To examine voluntary muscular tissue, take a small portion of any of the muscles of locomotion, and tease it out upon the slide or stage-glass, so that it may be perfectly diaphanous; then examine it with a power of about 250 or 300 diameters. You will have observed, that the muscles seem to have a "graining," or arrangement into fibres. Now, these large and visible fibres are composed of "*fasciculi*," or "*lacerti*," of greater or less thickness. These are made up of small fibres, which, in their turn, are made up of *fibrillæ;* so that, from the smallest to the largest they proceed thus:—Fibrillæ, forming a fibre; and collection of fibres, forming a lacertus or fasciculus; and collection of

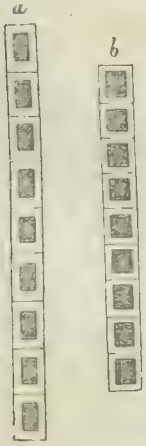
fasciculi, forming the large grains of muscles visible to the naked eye. We will examine these *seriatim*.

109. The Fasciculi are not always of the same length or thickness. A transverse section of them shows the bundles of fibrillæ, or the fibres, which have a more or less polygonal appearance on account of the forces of pressure, etc., to which they are subjected. Now, whatever the size of the lacertus, the fibres are, for the most part, of the same size—the difference in the coarseness or fineness of a muscle being referable to the coarseness or fineness of the lacerti. The length also of the lacerti depends more upon the connexion of the muscular tissue with its tendon, or with the bone, than upon any other circumstance.

110. The Fibres of which the fasciculi are made up are about the $\frac{1}{350}$ of an inch in the male, and a little smaller in the female. Upon them are seen light and dark transverse lines, the striæ; these are about $\frac{1}{3500}$ of an inch apart—the one corresponds with the true muscular element, the other with the sheath in which it is contained.

111. The Sarcolemma or sheath (of Bowman) is a perfectly homogeneous membrane, investing the fibres of the fasciculi. It may be demonstrated thus:—Take a portion of the muscle of a fish, which has been very recently killed, and, arranging it upon the stage glass, and before teasing it out for demonstration, let it soak in water for some five minutes,—water which has been distilled or boiled is best, because the process of endosmose and exosmose goes on best with this on account of its specific gravity being less than that contained in the specimen under examination. You will observe, upon arranging this specimen for observation, that small bullæ or blisters are visible upon the surface and edges of the fibres; these are the sarcolemma raised from the fibres. Sometimes you will also see a portion of the fibre torn, and yet contained in the sheath, there being constriction more or less at this part, like the division of the gut in a "string of sausages," except that you may see through this constricted part better than through the fibres.

112. The Fibrillæ, of which the fibres contained in this sheath are made up, may be demonstrated, after considerable care, with some nice manipulation. Sometimes you will accidentally obtain a specimen of a single fibrilla more beautiful and exact than any manipulation will give. Perhaps the best way of succeeding is to take a small portion of fresh muscle, and gently separating its fibres by means of your needles, press it with an over-glass; this may have to be attempted again and again before any successful specimen is obtained, but, if at all successful, your labours are most fully rewarded. You will require a *good defining* power, of from 500 diameters upwards, for a satisfactory demonstration of a fibrilla. You may then learn, that this fibrilla is apparently a series of cells, joined in a linear direction, end to end; that the true sarcous matter is contained in their centre, which is dark; that there is around this a bright border; that this dark little body in the centre is quadrangular; and, further, if you see several of these fibrillæ in connexion, that these parts are arranged symmetrically, —the quadrangular bodies being in the same right line, each to each, the pellucid borders likewise each to each,—and the fine dark line which separates one central mass, with its pellucid border, from another, each to each, and forming a continued line.



Now, it has also been observed by many, and you may demonstrate it for yourselves, that the fibre oftentimes splits up into disks; and this uniformity of correspondence in the particles of which the fibrillæ are made up, would, of course, explain the reason of this. Mr. Bowman thinks, that fibres are as readily built up of disks as of fibrillæ, and that fibrillæ are not essential to the formation of fibres. Whatever view of the case you may espouse, this is certain; first, that fibres do split into fibrillæ; secondly, that fibres do split into disks; but the former incomparably more frequently than the latter, though it must be here remembered, that the sarcolemma runs longitudinally, and may have some effect in determining the direction of this "cleavage." How the fibres are connected with their tendons is a subject a little too difficult to enter upon here, and must be reserved for a future occasion.

113. Involuntary Fibre, as before observed, is destitute of *striæ*. It is found in the lattter part of the gullet, the stomach, intestines, bladder, uterus, ureters, bronchial tubes, in some ducts, in the iris, the middle coat of the arteries, and in the dartos. The fibres are flat, somewhat strap-shaped; pale in colour; and when examined with the microscope, give you the notion of having been steeped in water, for their margin is not at all defined, and they look softened as compared with other tissues. If you add a little acetic acid to these, the nuclei become visible. No sheath has ever been demonstrated in connexion with these fibres.

The Fibres of the Heart are striped, though their action is involuntary; but the striæ are much less defined than those of ordinary striped muscle.

114. The circulation in muscular fibre is similar to that of the tissues generally. None of the vessels entering the sarcolemma, but ramifying upon it. Some being transverse, and others longitudinal.

115. The nerves ramifying on voluntary muscles, do so not by terminating as do the blood vessels, but by a series of looped arrangements, the utmost filaments turning back again upon the muscle, and rejoining some of the larger branches.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. III.

ON THE RELATIVE PREVALENCE OF PHTHISIS AT MALTA, AMONG SEAMEN, THE LAND FORCES, AND NATIVES.

EXTRACTED FROM THE OFFICIAL JOURNAL OF

T. SPENCER WELLS, F.R.C.S.,

For H.M.S. Modeste, for the year 1852.

In estimating the prevalence of phthisis at Malta, I propose to pass over, without notice, the number of admissions to the sick-list, or to hospital of persons said to be affected with this disease, as well as any statement of the amount of invaliding, because inferences deduced from such premises would be open to the objection of possible error in diagnosis, especially in the reports of the Maltese Hospitals, where a large proportion is returned under the head tabes, which may imply either phthisis or any other disease in which emaciation is considerable. I have, therefore, confined myself to the question of the proportion in which tubercles have been actually found in the lungs of dead bodies examined in the naval, military, and civil hospitals, as here, at least, the information as to the existence of phthisis must be accurate.

While I was serving in the naval hospital from January 1842 to January 1846, I opened every man who died myself, and recorded the appearances. I have also examined the records from January 1829 to January 1842, and from January 1846 to January 1852, in which the *post-mortem* appearances of 622 persons who died during those periods are detailed, including 101 examinations made by myself.

The number of bodies examined, was, from 1829 to 1842,

340; from 1842 to 1846, 101; from 1846 to 1852, 181. The following table shows the result of the examinations:—

	1829 to 1842.	1842 to 1846	1846 to 1852.
Tubercles were found in the lungs in	147	28	60
..... not existing.....	167	71	87
The men having been killed by severe injuries, the condition of the lungs was not examined	26	2	34
	340	101	181

Thus, in the first period, tubercles were found in the lungs in the proportion of 43·23 per cent. of the total deaths; in the second period, the proportion was 27·72; in the third, 33·15. The general average for the 23 years was 37·78 per cent. The variation in different years is accounted for by the amount of different facilities for invaliding, and the degree of readiness with which different medical men at the head of the hospital bring men forward for invaliding, but the average of so long a period as 23 years must approach very nearly to the truth, and we may conclude with tolerable certainty, that the deaths of seamen at Malta are caused by phthisis in the proportion of about 37 per cent. to the total deaths from all diseases and accidents.

From 1828 to 1835, Dr. Davy examined the bodies of 208 soldiers in the Military Hospital. In 67 of these bodies he found pulmonary tubercles, or a proportion of 32·21 per cent. In the years 1840-41, Dr. Galland examined with great care the bodies of every person who died in the Civil Hospital during that period, amounting to 615 in number. Of these 615, tubercles were found in the lungs of 77 only, or 12·52 per cent.

Thus, the proportion of deaths from phthisis to total deaths, or deaths in which tubercles were or were not found in the lungs, was as follows:—

Soldiers.	Seamen and Marines.	Maltese.
32·21 per cent.	37·78 per cent.	12·52 per cent.

An opinion prevails very generally in Malta, that the progress of phthisis is much more rapid in the summer and autumn. The truth of this opinion appears to be demonstrated by the following table, as far as regards the Maltese; for, of the 77 cases in which Dr. Galland found pulmonary tubercles, 36, or nearly half, died in the four hot months. But exactly the contrary holds with regard to the seamen and marines, the cold months having been much more fatal to them than the hot. Perhaps this difference may be explained by the exposure of the English to cold and damp on board their ships, and by night-watches. The comparison includes 23 Januaries, and all other months as regards the English; but only one month for the Maltese, except December, of which there are 2:—

Months.	Maltese.	English.
January	3	23
February	3	22
March	6	22
April	5	20
May	4	17
June	10	22
July	9	19
August	6	17
September	9	8
October	3	18
November	7	22
December	12	25

This difference may be partly accounted for by the invaliding, as it is not usual to send men with phthisis to England in the winter months. The relative mortality of British troops serving in Malta, and in the United Kingdom, may be some guide to estimate the tendency to phthisis among the English in Malta. From Colonel Tullock's report, 1830 to 1836 inclusive, the deaths per 1000 were as follow:—

United Kingdom.	Dragoons and Dragoon Guards	7·7
	Foot Guards	14·1
	Household Cavalry	8
Troops in West Indies		9·6
„ Gibraltar		7·0
„ Malta		7·4
„ Ionian Islands		5·0

Thus, although the mortality from phthisis at Malta is higher than at any other Mediterranean station, it is lower than the lowest mortality of the troops serving at home, although the facility for invaliding at home is much greater.

English *visiters*, sent to Malta for the benefit of the climate, frequently die of phthisis; but, during ten years, I only heard of one English *resident*, and that was a lady born in the island, of English parents. The natives then, as proved by statistical research, the English inhabitants, by continued observation, appearing to be comparatively exempt from phthisis, it becomes an important question, why the troops serving in the island, and the naval forces to a still greater degree, should be so subject to it. Perhaps the difference may be analogous to that between the Foot Guards and Household Cavalry at home. The habits and circumstances of the troops in Malta are similar to those of the Foot Guards in London; never quitting the town for country quarters, placed in circumstances of temptation to drunkenness and debauchery, exposed to severe sentinel duty, with much exposure to wind, wet, and rapid changes of temperature from hot guard-rooms to the open air. Similar causes must operate to some extent upon the Naval force; but I am inclined to attribute a very large proportion of pulmonary disease among seamen at Malta to defective ventilation of the decks between which they sleep. The ports are closed in winter, and the men are crowded in an impure atmosphere, varying from 70° to 80°, from nine p.m. until four or five the following morning, when they are called upon deck, at the very coldest part of the day, just before sunrise, to wash decks, in a temperature between 45° and 55°. If pure air was freely supplied between decks, the men would sleep in a temperature of about 60° during the cold months; the lungs would not be disposed to disease by inhaling impure air, and the circulation of imperfectly decarbonised blood through them. The change of temperature from the lower to the upper decks would be less, and even an equal change would be less sensibly felt.

H.M.S. Modeste, January, 1853.

ON THE TREATMENT OF CONTRACTIONS AND ANCHYLOSIS OF THE KNEE AND HIP JOINTS BY FORCED RUPTURE.

By PHILIP FRANK, M.D., of Manchester.

(Continued from page 61.)

It would not be fair to condemn the method of Louvrier, because in none of the cases treated by him the normal functions of the joints were regained. For it is one thing to extend a contracted or anchylosed joint, and another and very different one to restore its voluntary motion. The machine of Louvrier can only be expected to answer the first of these purposes the latter can only be attained by a persevering and well regulated orthopædic treatment. The account given by Bérard of the cases treated by Louvrier, makes no mention of the orthopædic after-treatment pursued, and we have no reason to doubt that if it had been judiciously conducted the results would have been as perfect as the natures of the cases allowed. Allowing the principle of Louvrier's method to be correct, we are far from entirely approving of its execution. For the power of the apparatus was too great and too sudden in its action; and if this mode of action, and the amount of force employed were, in some cases, justifiable, it cannot be considered rational that they were everywhere the same, and could not be regulated according to the resistance opposed. Indeed, prior to the introduction of chloroform, and the discovery of its wondrous effects on contracted muscles, no high degree of perfection in the treatment of contractions, and anchyloses of the joint was attainable. Mr. Langenbeck was the first to appreciate the great practical value of this effect of chloroform, thus introducing a method, at the same time powerful and harmless, by which in a vast number of cases results have been obtained as brilliant and perfect as the surgical art ever dared to hope for. The resistance offered by the contracted muscles being overcome by the agency of chloroform, the strength of the operator alone, with but little manual assistance, suffices to rupture the most

powerful adhesions. Here we observe, most strikingly, the great advantage of the employment of manual power over that induced by machines. The hand of the operator being able to estimate the amount of resistance offered by the adhesions, can regulate the degree of force necessary to overcome them; it is neither constrained to one mode of action, nor to one direction,—now it flexes, and the next moment it can extend; it can act either gradually, or by sudden jerks, and all these modifications of action can be called successively into play, as the nature of the case may demand. The eye and hand receive continual evidence of the result of the force employed. Here an undue tension of the skin forewarns us of its impending rupture; here an impending luxation demands a more powerful support of the parts, and a diminution of the force. This method is easily applicable to all joints. In addition to this, an orthopædic after-treatment is instituted, to preserve the degree of extension attained, and in cases where it is possible to restore the normal functions of the joint. This method, introduced by Mr. Langenbeck, constitutes an epoch in the treatment of anchylosis of the joints, which can only be fully comprehended, if we consider that, after the methods of Dieffenbach and Louvrier had failed to be generally adopted, all cases were wont to be declared incurable, against which general extension was of no avail. Now, we possess a method by which no case of anchylosis is invincible, with the exception perhaps of those case in which a firm osseous coalition of the articular surfaces has taken place. These cases are still to be regarded as incurable. The resection recommended in 1837, by Rheabarton, although successfully practised in some few cases, especially in one, operated upon by Mr. Langenbeck (knee joint), is an operation attended with too much danger to be generally recommended. Having made these general remarks, we will proceed to describe the method practised by Mr. Langenbeck since the year 1847. We will take for example a contraction and anchylosis of the knee-joint. The patient is placed on his back, and put under the full influence of chloroform: as soon as the muscles become entirely relaxed, the patient is turned round on his belly; an assistant holds the head in a raised position, to prevent respiration being impeded, and to facilitate the further inhalation of chloroform, if necessary. The patient must be so placed, that the patella of the bent knee rests on the anterior margin of the operating table. The pelvis is fixed by the hands of assistants. The operator then clasps with one hand the femur just above the popliteal fossa; with the other, the leg, just above the ancle, and by alternate flexion and extension, practised with more or less power, according to the nature of the case, restores the mobility and the normal position of the joint. A loud crepitus attends the rupture of the adhesions. Should the strength of one hand of the operator prove insufficient, the femur is held down by an assistant. The operator clasps the leg with both hands, and produces, either by strong gradual pressure, or by sudden jerking movements, the rupture of the more powerful impediment. Even firm osseous bridges are thus made to yield with a loud snapping sound. This was once, in a case of undoubted osseous anchylosis, so loud as to cause the mother of the patient, who was sitting in an adjacent room, to swoon. If, in course of the operation, the tibia threatens to luxate backwards, and particularly, as is often the case, a consecutive subluxation is already present, especial care must be taken to support the joint by pressure on the posterior surface of the upper end of the tibia. Still, luxation is often unavoidable, its mechanism depending on pathological conditions of the part, which art is unable to change. We refer to those cases where, in consequence of large defects of the inferior and posterior surfaces of the condyles of the femur, consecutive subluxation has supervened during the course of the inflammatory disease. A perfect luxation is in these cases more probable during the violent forced extension, if the patella is so firmly anchylosed with the femur as to present an invincible impediment to the pressure of the anterior surface of the tibia against its inferior margin. The tibia is often compelled to describe a circular motion backwards, the centre of which is situated there, where tibia and patella come into mutual contact.

These luxations of the tibia backwards form complications the more unpleasant, because the conditions under which they originated are the same that form serious impediments to the re-position; and if the re-position were to succeed, to maintain it. It is not possible to lay down any rule whether the joint is to be extended at the first attempt, or whether this is to be effected by repeated operations. Alarming tension of the skin, which, after a long suppurating disease of the joint is often firmly attached by cicatrices to the parts beneath, renders it judicious, at the first attempt, to effect only a certain degree of extension. If we have reason to believe that the osseous epiphyses are diseased, and if the resistance during the extension is of any magnitude, considerable caution is called for, as fractures are to be apprehended. Here, also, it would be more judicious to effect perfect extension by repeated operations. According to the practice of Mr. Langenbeck, carious and necrotic processes in the epiphysis need not deter from practising forced extension in a cautious manner. In young individuals this is a matter of the highest importance; for, during the long space of time too often necessary to the cure of these processes, atrophy of the extremity can ensue, thus causing disproportion of the limbs. Add to this, the contraction can increase, and that the longer the abnormal position of the joint is maintained, the more serious and considerable alterations of the parts may supervene. Nor does the alteration of the abnormal position of the joint appear to be devoid of influence in effecting a more rapid cure of these processes. This favourable influence can, with some certainty, be expected, where ulcerative processes supervene on those parts of the epiphysis which, by the abnormal position of the joint, are exposed to an undue degree of pressure. The tibia, in cases of contractions of the knee-joint, being generally more or less in a state of abduction, the external condyles of the tibia and femur are thus exposed to a strong mutual pressure, carious processes in either one or the other are frequently the result, and in these cases the beneficial results of meliorating the false position are most obvious. A short time since we saw a case in the private practice of Mr. Langenbeck where, in addition to a contraction and spurious anchylosis of the knee-joint, there was a large abscess in the external condyle of the tibia. This disease of the bone had persisted a long space of time, in spite of every treatment; but the joint having been stretched without any evil consequences, a remarkable melioration rapidly took place.

But extreme caution is necessary in cases of central necrosis, so often found to extend from the inferior part of the diaphysis to the epiphysis of the tibia or femur, and often communicating with the cavity of the joint itself. The only case among 150 of anchylosis treated by Mr. Langenbeck by forced rupture which terminated fatally, was a case of this kind. We shall afterwards speak of this case at large.

In our dissertation on contractions and anchyloses, we have expressed our full approbation of the opinion first promulgated by Bonnet,—viz., that it is not only justifiable, but even strictly indicated, to stretch a contracted joint, although inflammatory symptoms may still exist. The theoretical presumptions by which this practice is vindicated are too well known to the Profession to need any further discussion. It is a practice which has been crowned with the most eminent success, as all those conversant with the works of Bonnet are aware of. A most brilliant case of this kind, which occurred in the practice of Mr. Langenbeck, is subsequently related, which will testify more forcibly in favour of the proposition we advance than the most eloquent arguments. This practice is, of course, contra-indicated if the organism of the patient is in an advanced state of debility, where a dangerous and local re-action might be apprehended. According to the experience of Mr. Langenbeck, a still existing chronic-arthritic process can alone be regarded as an absolute contra-indication. If this process has terminated, contractions of the joint can be successfully treated by forced extension. The deep alterations known to be produced on the articular surfaces by the chronic-arthritic processes do not permit us to expect the restoration of the normal functions of the joint.

It will be no matter of surprise, that forced extension being practised under the precautions enumerated, we have no account to give of serious accidents having supervened during the operation. The skin was never ruptured. Only in one case superficial excoriations were observed in the popliteal fossa. We never saw the popliteal artery ruptured as it was by the machine of Louvrier, nor was ever one of the large nerves lacerated. Only once after forced extension of an anchylosis at an acute angle, anæsthesia supervened in that part of the skin supplied by the saphenus major nerve. In a short time, however, the normal sensibility returned. Nothing more serious than a distension of

the nerve can, therefore, be surmised. Where a subluxation of tibia backwards existed before the operation, it of course became more evident, after extension had been performed. Only in two cases, one of which occurred in the Royal Surgical Clinic, the other in the private practice of Mr. Langenbeck, the luxation was rendered perfect. In both of these cases, it was impossible to detach the anchylosed patella from the external condyle of the femur. All the injuries produced by the operation being subcutaneous, the re-action, after a proceeding apparently so dangerous, never attained a serious character. Of constitutional symptoms nothing but a slight febrile irritation is on record.

As far as local action is concerned, in most cases nothing but a superficial reddening was observed. In some cases, a slight inflammatory infiltration of the parts surrounding the joint took place; in others, small sugillations were noticed. A suppurative phlegmon was never remarked. These symptoms quickly yielded, in all cases, to the employment of cold applications. Violent pains in the distended muscles always followed the operation. In several cases pains increasing on pressure were complained of on the anterior surface of the epiphysis of the tibia. We do not hesitate to ascribe these to violent contusions to which the part is exposed in attempting to detach the anchylosed patella. They were most marked in those cases where this detachment was attended with the greatest difficulties.

The after-treatment is based on two indications: the first, to preserve the degree of extension obtained; the second, to endeavour to restore the normal functions of the joint. After forced extension has been practised, the muscles have a decided tendency to return to their former condition. We have seen, that muscles which have been contracted during a space of ten years, are not exempt from this tendency,—a fact which sufficiently refutes the opinions of those who assert, that muscles under prolonged contraction utterly lose their vitality. Pathological anatomy teaches us the comparative rarity of total degeneration of the muscular fibre. It is worthy of remark, that, in a few cases of recent date, where we cannot admit of a total degeneration having ensued, the tendency to recontraction was very inconsiderable; so that a pasteboard splint, fastened by a common roller in the fossa poplitea, was sufficient to maintain the extension. In most cases, this is not sufficient, and we have then either to have recourse to a bandage of gutta percha, or, to what is better still, Stromeyer's apparatus for extension of the knee-joint,—an apparatus which, in the further treatment, is as indispensable as it is efficacious. Sometimes the machine, which must always be applied during the narcosis in the degree of extension obtained during the operation, is tolerated for several days, unattended with severe pain. In most cases it is not possible to maintain the perfect extension of the joint for any length of time after the operation. The violent pains, attended by spasmodic contractions; the acute sensibility of those parts of the articular surfaces, so long unaccustomed to mutual contact, usually compel us to relax the machine, in order to allow the joints to re-assume a greater or less degree of flexion.

The loosening of the knee-cap alone is often sufficient to afford relief. In some cases it was necessary entirely to remove the apparatus; the degree of flexion which existed before the operation then soon returns. In the course of twelve or twenty-four hours, the pain in the muscles and the joint generally subsides so as to allow the extension by means of the machine to be recommenced. If the first operation did not succeed in producing perfect extension, and if the still existing adhesions rendered its consummation by means of the gradual force of the machine impossible, Mr. Langenbeck is wont, after the lapse of two or three weeks, to repeat the forced extension by means of chloroform. By this second operation, the extension is usually rendered perfect. In some cases an obstinate recontraction of the muscles alone demands their repeated distension in the narcosis. The re-action, after this second operation, is generally less considerable than after the first. We have seen cases where the patient walked about with the machine free from pain two days afterwards. Where a subluxation of the tibia backwards existed, the apparatus of Bonnet for extension of the knee-joint was applied with obvious success. In the two cases where the luxation was perfect, and in others where it was very considerable, all attempts at reposition proved in vain.

Mr. Langenbeck has expressed as his opinion, that the subcutaneous division of the two lateral ligaments might be of some service in these seemingly hopeless cases. Where a considerable degree of abduction prevailed, which, if existing together with the flexion of the tibia, always becomes more marked after the extension has been effected, an apparatus combining the mechanism of Stromeyer's machine for the extension of the knee-joint with that generally in use for the treatment of the genu vulgum, will be found of considerable service.

Should an evident contraction of the external lateral ligament be present, a subcutaneous division which we have several times seen practised with eminent success by Mr. Langenbeck, in the treatment of genu vulgum, is here advisable. In those cases where large defects in the articular surfaces of the external condyles of the tibia or femur exist, every treatment directed against the abduction will of course prove ineffectual. Those conversant with pathological anatomy will remember cases of this nature, where the external condyle of the femur rests in a deep hollow of the caput tibiæ. A fortnight or three weeks after the operation,—often sooner,—the patients wearing the machine are able, with the assistance of a stick or crutch, to walk about the room, and after some time, without either, if there is no luxation of the tibia backwards, no defects at the inferior and posterior parts of the condyli femoris, which will always favour the re-development of the muscular contraction; and if the extremity has not become too weakened by long disuse, the machine may also be omitted.

[To be continued.]

MEDICINE IN LEWCHEW.

INTRODUCTION OF VACCINATION.

Sir,—The following paper has been drawn up from information furnished by Dr. Bettleheim, who has laboured as a Missionary among the Lewchewans for seven years, encountering much opposition and misrepresentation, yet steadily persevering in the work which he has undertaken. His Missionary labours are published elsewhere.(a) His medical information, and, especially, the account of his introduction of the practice of vaccination, appear to possess much interest. I therefore venture to communicate them to you. I have altered the original as little as possible, merely to adapt it a little more to a medical journal, for which it was not originally intended.—I am, &c.

Frederic J. Farre.

7, Montague-street, Russell-square.

Note.—Dr. Bettleheim is a converted Jew. He was born at Pesth, in Hungary, and educated for the Medical Profession at Pesth, Vienna, and Padua; and was engaged as a teacher of Christianity by a Committee of Naval officers, formed by Lieutenant H. J. Clifton, R.N., of H.M.S. Alceste, which visited the island during Lord Amhurst's embassy to China. Dr. Bettleheim arrived in Lewchew in 1846.

Among the Lewchewans, and generally among the Japanese, attempts are unceasingly and systematically made to deceive the mind and even the senses of the foreigner; the Government foolishly endeavouring to make their land appear as poor, and their people as stupid as possible, to discourage the foreigner from any attempt at forming a connexion with them.

Atmospheric Condition.—The Loochoo Islands are situated in N. Lat. 26°, yet still exposed to tropical influences. The heat, in the summer months, is very oppressive, causing great languor and drowsiness, though the thermometer rarely rises above 95° in the shade, or 118° in the sun.(b) The atmosphere is constantly charged with vapour. Furniture, dress, stores, &c., feel damp and clammy; surgical instruments quickly rust; provisions keep very badly, or rather, not at all, unless dried and salted; even the sweet potatoe decays. I visited, at the capital, the Regent, who offered me a dish of salted meat offensive from putrefaction. This may possibly have been the best food the Lewchewan mandarin could procure, but I suspect it was produced to create an idea of his poverty. The moisture greatly diminishes during the summer months, but its benefit to vegetation is seen in the rich verdure which covers the blooming hills,

(a) Lewchew Mission.—Dr. Bettleheim's Journal, Published 48, Salisbury-square, Fleet-street.

(b) Our power of enduring heat has considerably diminished during our residence here, so that we now bear a temperature of 80°—85° worse than we did, in 1846, a temperature of 90°—92°.

and dales, and table lands, notwithstanding the sandiness of the soil. An experience of seven years does not make me think unfavourably of the effect of the climate on health. The oppressive effect of the mid-day summer heat is removed by the bracing morning and evening breezes, and the syrupy, clammy moisture which covers the body in the rainy season speedily disappears on the return of fine weather. Rain is plentiful and protracted about the equinoxes; thunderstorms rather unfrequent; hail occurs occasionally, but not snow. Typhoons, even violent ones, may occur at any time between May and August. Earthquakes are frequent, but perfectly harmless.

Predisposing Causes of Disease.—More powerful causes than atmospheric influences exist, in the want of proper food, raiment, and dwelling.

Dr. Bettleheim here makes a long digression, to show that man was never intended to sustain life with the least possible amount of necessaries, being far worse supplied with them at his birth than the unreasoning part of the creation; and being a peculiarly helpless and unprotected being, until supplied with them by the aid of reason. He next notices the system of privations from which the Lewchewan suffers, especially the want of animal food, and takes the opportunity of arguing, that man is intended to live, partly at least, on animal food, and that he is impoverished, both in mind and body, without this his proper sustenance. He supports this argument by the carnivorous structure of the human alimentary canal, by the Divine grant of animal food to Noah, by the appropriation of flesh under the Mosaic law to the priests' sustenance, by the command to eat the Passover, by the feeding of Elijah in the wilderness with animal food twice a-day, by the practice of our Lord and his Apostles, etc. etc.

The effect, he continues, of abstinence from animal food is seen in the muscular and mental torpor of the Lewchewan, in his lethargic inactivity, which, in the rich, degenerates into oily obesity, and incapacity for any mental or bodily exertion. The want of the natural stimulus of a healthy and vigorous frame leads to indulgence in artificial stimulants, especially *saki* (arrack); and drunkenness is accordingly universal, in all ranks, at all ages, and in both sexes. Wine and beer are despised; ardent spirits alone satisfy their inordinate craving. Pickles, onions, leeks, and other pungent or salt vegetables, are taken to provoke thirst; and he expects that, before long, opium, which has already been introduced, will become a favourite source of intoxication.

Animal Food.—Confucianism has inflicted no greater wrong on its votaries than depriving them of the nutritious food of beef.(a) A beef-steak is an abomination. But this is not all. To the farm-house and dairy,—to cheese, butter, and milk,—they are alike strangers. Pork, on the contrary, is largely eaten, and at all seasons. This food produces, among the Confucians, obstinate hereditary psora and unquenchable thirst. The thirst occasions tea-drinking; tea-drinking leads to smoking, and smoking to gambling. The goat, though chiefly reared for his dung, is not unfrequently eaten, while the sheep is proscribed, and mutton never seen. Fish occurs in endless variety, and of delicious flavour, yet it is scarcely ever eaten fresh, but only dried and salted. Fowls' eggs are eaten, but their flesh rarely. On the other hand, dogs are considered a delicacy, and, according to some, cats and rats, though this is denied by others. The cookery is of the worst description,—the meat being dressed to rags, and saturated with soy.

Vegetable Food.—The staple food of the Lewchewans is the sweet potato. *To-fu* (beans boiled to a pulp) is also a favourite dish. The pumpkin is in universal use, and the large radish. Turnips, cucumber, and the bottle gourd, occur for a short season; spinach and lettuce for a still shorter time, and melons, strange to say, are rare. Of the grains, rice is the staple food; but Indian millet is also grown largely, and is more acceptable to the poor. Wheat is least grown, and is regarded rather as a luxury than as a necessary of life. Fruits we have none, except oranges, which are plentiful between November and June. So disregarded, through vitiated habit, is this delicious provision of Nature for tropical climates. Bananas can seldom be obtained. All acids are despised, and even the orange is valued far less than the sugar-cane, which is eaten raw. A black muscovado sugar, rice, and arrack *(saki)*, are the chief articles exported from Lewchew.

If the Lewchewan's diet is bad in quality, he makes up for it in quantity, eating all day long, and carrying food with him when he leaves home. The literati never study without sacrificing freely to the Muses, and partaking largely of the sacrifice—a practice which they have borrowed from China.

Drinks.—The waters at Napa,(a) near the sea, being brackish, rain-water is collected in jars, and is generally preferred, though it abounds with infusoria. It is boiled, however, before it is used. The Lewchewan delights in weak infusions prepared from the same tea, or, if he is a poor man, from the same hay, from morning to night. He is averse to strong tea of any kind, and drinks lukewarm water with admirable gusto.

Raiment.—A cloth dress, or silk stuff lined with sheepskin, may be seen in the houses of the better class: but the general clothing is a grass-cloth gown, changed for cotton in winter by those who can afford it. Take a large square, wrap it round the body, put the arm through a large hole on either side, and hang a rag round it for a sleeve; turn over the part higher than the neck for a collar, running down on each side to the bottom of the dress; tie the whole with a rope round the middle,—and you are dressed in Lewchewan fashion. The poor are usually quite naked, and, when clad, their tunic scarcely reaches half way down the the thigh (?) (hip-bone.—Dr. B.), a rope of straw being the girdle. The head and foot are left unprotected, for the native "saba,"—a straw sole worn suspended from the leg,—is utterly useless as a protection. It is solely intended to prevent the foot from soiling the floor, or the thick matting which covers it, in the houses of the better classes, and is deposited at the door on entering them. The poor frequently use no "sabas" at all, and even respectable persons take them off in rainy weather. For short walks a small wooden footstool, called "gitta," is worn fastened to the sole, like the straw "saba." This scanty clothing is very ill suited to the Lewchewan, for none are more sensible of cold. Many are even said to die of cold in their wretched huts, when the winter is more than usually severe.

On one occasion, I represented to the Regent the importance of permitting, and even ordering, the people to wear shoes and stockings, as a means of averting many disorders; and, at the same time, transmitted 50 dolls. to be distributed by the mandarins among the poor, for the purchase of these articles. The following answer was returned by the Regent:—

"This, no doubt, proceeds from a kind and compassionate heart, and cannot but elicit our utmost gratitude; but, since of old, we follow the medical system of China, buy there our medicines, and are not wanting in effecting cures, there is no need of adopting a new medical method, or asking for medicines. In addition, our country lies south-east (of China): we have gentle breezes and warm weather. There is not one in ten who would put on stockings. What the poor want has already, before this, been supplied. Pray excuse, and do not carry the poor on your heart. I send a Tafu, who will restore the fifty dollars. Wishing you happiness," &c.

Habitation.—Even in Napa and Shuy, the buildings by no means afford the conveniences one expects in houses. With the exception of some temples in the capital, of a more solid structure, though all of wood, all houses are pervious to the wind, and most of them to rain; and in rough weather they must be shut up, and all work in-doors stopped. In protracted rains, they crumble down by degrees, from total absence of drainage; at such times, the stagnant impurities in each house, and in the sidegutters of the streets, are as disagreeable as unwholesome. In the villages, except the Rung Kwang, the public-office in each madgiri (district), I defy any one to find out a human dwelling. A general fault in most of the villages, is their being situated low, in deep little valleys and clefts, as if purposely to hide them from the eye of a casual visiter. You may sail along the shore, or go along a road of Lewchew, and not perceive any indication of a community, till you pierce forests of bamboos, and other natural fences under which they are hid. In such situations, it is not surprising that the houses are infested by vermin. Rats and snakes abound, and a centipede, whose bite produces the same effect as that of the scorpion.

(a) This remark is opposed to the statement of Mr. Forbes, Surgeon to the Alceste, in his "Voyage to Lewchew," that the beef was excellent and well preserved by the natives.

(a) Ships should take in water from the Tumai or Potsoong side of the island.

Their want of furniture is remarkable. Their best rooms only show four walls, with a sacrificial recess, the matted floor, and nothing else. It is this naked emptiness which strikes the foreigner as cleanliness; but beyond the back partition of the great hall, are disorder and filth. Chair, table, or bed, is never seen; boxes, containing all house-articles, roll about in the kitchen and lumber-room. The universal habit of constantly sitting on the floor, contributes, above most other causes, to produce a feeling of drowsiness and sloth. Though "drowsiness shall clothe a man with rags," the Lewchewan is so charmed with his undisturbed repose, which he terms the blessing of peace, that if he hides his hand in his bosom, it gives him pain to bring it again to his mouth. After the slightest exertion, he lies down, and calls in the younger members of his family to pat and stroke his naked body, by which exercise, called practical filial piety, Confucianism tells young men and women that heaven is purchased.

[To be continued.]

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

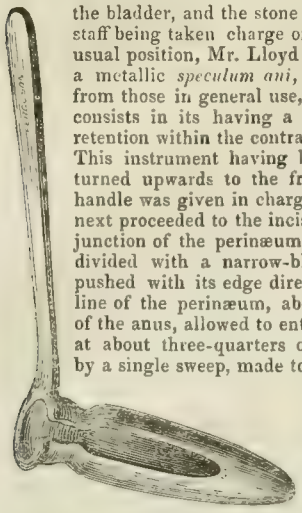
CASES OF LITHOTOMY IN WHICH THE OPERATION WAS PERFORMED BY A NEW METHOD (RECTO-URETHRAL.)

[Under the care of Mr. LLOYD.]

Our readers will no doubt remember, that we alluded, some weeks ago, to two cases in which Mr. Lloyd had performed lithotomy after a novel manner, and promised, when they should be complete, to report their entire details. Since that time, a third patient on whom Mr. Lloyd operated more recently, in a similar manner, has left the hospital quite well; and, as the first two, although not yet cured as regards the perfect closure of the wound, have been for some time convalescent, we now proceed to redeem our pledge. Before doing so, however, it may be convenient if we introduce a short statement of the reasons which led to the adoption of this new operation, as we have gathered them from Mr. Lloyd's clinical observations on the subject. From consideration of the fact, that death, after the usual lateral method, is commonly caused by one or more of three causes, viz., hæmorrhage, peritonitis, or unhealthy inflammation of the cellular tissue around the neck of the bladder and lower part of the rectum, Mr. Lloyd was led to believe, that by a modification of the methods known as lithectasy, and the recto-vesical operation, the risks involved under these several heads might be, to a very great extent, avoided. The modification which he proposed was, to perform the first half of the operation as if for recto-vesical lithotomy, and the second after the manner done in lithectasy, or that by dilatation of the urethra. He determined to make an incision from the median line of the perinæum into the rectum, dividing the posterior three-fourths of an inch of the former structure, and about the same length of the lowest part of the front wall of the rectum, thus including the anterior commissure of the sphincter ani and the fascia and cellular tissue contained in the recto-perineal angle. The next step was to consist in dissecting upwards from the wound just made, still keeping in the median line, to the membranous urethra; and having entered the groove in the staff, and slit up the whole length of that part of the canal, the prostatic portion was to be dilated sufficiently to permit of the extraction of the stone, *without any incision into either prostate or bladder.* By keeping strictly to the median line, there could be no risk of wounding any important artery of either natural or irregular distribution, since none but the inosculating capillaries and small twigs from the opposite halves of the body are there found. Should any of the hæmorrhoidal branches, which perhaps form an exception to this remark, be wounded, their ligature, in an open and comparatively superficial wound, like the one described, would be a matter of perfect ease. If an objection were made, that there was risk of wounding the bulb, the remark might be repeated by way of answer, since it has been proved, that it is not from injury to the bulb itself, but to the artery of the bulb, that dangerous bleeding is to be apprehended. Respecting inflammation of the cellular tissue between the bladder and rectum, Mr. Lloyd believed, that by making a directly depending wound, freely dividing the sphincter ani, and the angle formed by the rectum and perinæum, the possibility of the occurrence of its cause, viz., infiltration of urine, would be almost entirely removed; in fact, as a preventive measure, the exact proceeding would have been adopted which Sir Benjamin Brodie has recommended with some confidence, and practised with success, for the relief of this condition after its occurrence. That the new operation would be attended with but little risk of exciting peritonitis, Mr. Lloyd thought was evident from the consideration of the circumstances, that urinary infiltration would be prevented, that the wound would be made entirely from below, and at a considerable distance from the vesical layers of that membrane, and that neither the bladder nor the prostate would be injured. Having thus satisfied himself of the theoretic advantages which would attend his plan, Mr. Lloyd next proceeded by experiments on the dead subject to demonstrate its practicability. In one case in which it was tried (an adult), the necessary incisions having been made, the prostatic urethra was found to dilate so readily, that it was remarked, that a turkey's egg might have been extracted, yet, on dissection afterwards, it was proved, that the gland had not been cut. By this result the most apparent objection to the plan, namely, that the structure of the postate was of too unyielding a nature to permit of the extraction of a stone, was got rid of, at least as far as calculi of ordinary size are concerned. To the suggestion that wounds connecting the bladder and rectum were not prone to heal, but often left fistulæ, Mr. Lloyd replied, that in the proposed operation there would be only a connexion between the membranous urethra and the rectum; that it was notorious, that wounds of the rectum, attended even with complete division of its sphincter, usually closed favourably, as also openings from the perinæum to the membranous urethra (as in the perineal section of strictures), and stated that he could see no reason why a combination of these two conditions should not heal just as well as either of them singly. In addition, also, to the preceding advantages, it was thought, that the bladder would be much more easily reached in the median line, and the stone extracted with greater facility through a direct than a lateral incision. Having premised thus much explanatory of the views of the operator, we will now pass to the cases themselves, in the course of which the details of the operation will again come under notice; extracting many of the particulars of their after progress from the daily notes taken by Mr. Jowers, one of Mr. Lloyd's dressers.

Case 1.—Frederick Coley, aged 6, was admitted, April 14, on account of an abscess on the outer side of the left elbow, but complaining also of frequent and painful micturition. He was a pale, cachectic-looking boy, of light complexion, and had, since an attack of scarlet fever eighteen months ago, been especially delicate. It appeared that he had complained of increasingly severe symptoms of urinary irritation for about a year, and that the abscess over the elbow had commenced about three months ago, without apparent cause. The skin being tense and thin, Mr. Lloyd at once made an opening into it, and evacuated about two ounces of flaky scrofulous matter; a poultice was afterwards applied, and in about ten days the wound was healed. On April 21, the boy had a severe epileptic fit, which lasted several hours; it appeared, on inquiry, that he had experienced a similar one for the first time about five weeks before admission. On the 23rd, Mr. Lloyd examined the bladder by sounding, and detected the presence of a stone. The urine was ammoniacal, and deposited a thick mucous sediment; examined by the microscope, it was found to contain pus, blood, and crystals of triple phosphate. A mixture in which the nitro-muriatic acid was the principal ingredient was prescribed, and under its use the condition of the secretion much improved; after a little more than a month's treatment the boy seemed to have gained health sufficiently to permit of the performance of the operation.

Operation, May 31.—Chloroform having been administered, the boy was tied in the ordinary lithotomy position, a curved staff, with a rather deeper and wider groove than usual, was introduced into



the bladder, and the stone was again distinctly felt. The staff being taken charge of by Mr. Paget, and held in the usual position, Mr. Lloyd next introduced into the rectum a metallic *speculum ani*, which, as it differed somewhat from those in general use, we here figure. Its peculiarity consists in its having a constricted neck, by which its retention within the contracted sphincter is rendered easy. This instrument having been introduced with its aperture turned upwards to the front commissure of the gut, its handle was given in charge to an assistant, and Mr. Lloyd next proceeded to the incisions. The angle formed by the junction of the perinæum and rectum was transfixed and divided with a narrow-bladed scalpel, the knife being pushed with its edge directed downwards into the median line of the perinæum, about half-an-inch from the verge of the anus, allowed to enter the front wall of the rectum, at about three-quarters of an inch up the gut, and then, by a single sweep, made to cut its way out downwards into the cavity of the speculum. The next step consisted in dissecting upwards and inwards to the membranous urethra, the operator keeping his left fore-finger in the wound, and feeling for the staff. Having found the groove in the latter, the finger was placed, in order to serve as a guide to the knife, on the anterior border of the prostate, at which point the knife was made to enter the groove, and by cutting *forwards*, division of the whole length of the membranous urethra was accomplished. A pair of small straight polypus forceps were next passed along the groove in the staff, into the neck of the bladder, and the dilatation of the prostatic urethra was accomplished by gently opening their blades, and then closing and re-opening them several times. During this process, which occupied perhaps nearly a minute, several gushes of urine escaped. The dilatation having been effected to such an extent that the fore-finger could be very readily passed, Mr. Lloyd withdrew the staff, leaving his finger as a guide, on which a pair of slightly-curved extracting forceps were immediately introduced. The stone was at once found, but, apparently, from its occupying the upper and front part of the bladder, it several times eluded the grasp of the forceps, but when once firmly siezed, it was extracted with great ease. In order to prevent the roughness of the stone from injuring the important structures in the floor of the prostatic urethra, Mr. Lloyd endeavoured, as much as possible, to hold the blades of the forceps with their convexities directed upwards and downwards, while passing through that part. The calculus proved to be about the size of a small damson plum, being quite smooth on one side, in which its nucleus, probably lithates, was displayed, but very rough on the other, from irregular phosphatic incrustations. Having examined the bladder with his finger, and ascertained that no other concretions were present, Mr. Lloyd introduced through the wound, into the bladder, a short gum elastic canula, and attached it by means of a suture to one edge of the incision. The quantity of blood lost had been unusually small, and the operation had occupied but a short space of time.

June 1.—The boy has slept well, and states that he feels quite comfortable. Appetite good, no thirst; abdomen, full, soft, and free from tenderness; tongue covered with a thin white fur; skin warm; pulse quick, and of moderate volume, compressible. Urine passes freely from the canula; it is of clear colour, and free from blood.

2nd.—Has again passed a good night, takes his nourishment freely, and, excepting slight soreness around the wound, is quite free from pain. There is no tenderness whatever on pressure over the abdomen. Tongue less furred, moist; pulse not so frequent as yesterday. He is taking milk diet, with arrow-root. The canula is to be removed.

3rd.—The tongue is now quite clean, and he is in every respect still further improved. Sleeps and eats well; aspect cheerful; bowels open once daily.

5th.—Progressing favourably; the abdomen bears firm pressure in every part, without any pain being produced.

Subsequent to this date, as indeed before, the history is one of uninterrupted recovery, the only annoyance complained of being the smarting produced by the urine on passing through the wound. On the 10th instant it began to pass per urethram in small quantity. On the 12th, having been complaining previously of head-ache, the patient suddenly went off into an epileptic paroxysm, which lasted two hours. Until the 29th the urine continued to pass chiefly by the wound, but after that date, although it occasionally came by the wound, yet a much larger portion flowed by the natural passage. Mr. Lloyd on one occasion, applied oil of turpentine to the edges of the wound, which had, however, throughout looked well. On July 3, Mr. Lloyd introduced, without difficulty, a No. 7 catheter; the commissure of the sphincter ani appeared perfectly united, and the boy was able to hold his motions any length of time.

July 30.—There is still in the perinæum, near to the margin of the anus, the orifice of a small fistulous canal, communicating with the urethra. The boy always passes his urine voluntarily, and almost entirely by the natural passage; occasionally, however, during the act, a few drops force themselves through the unhealed wound. Excepting having had several convulsive fits during the last week, he has appeared to be in good health.

Case 2.—William Porter, aged 12. The history of this case, previous to the lithotomy operation, is somewhat long; but, as the disease from which the patient suffered has important relations with the result of that procedure, we must not omit an account of it. On June 24, 1852, he was admitted under Mr. Lloyd's care, a fresh-complexioned lad from the country, suffering from a perineal fistula, which had been caused by an injury six weeks previously. In trying to get over some palings he had bruised his perinæum on a spike; there was no wound inflicted, but bleeding from the urethra followed, and great swelling of the part, which terminated in abscess, and ever after the opening of the latter the whole of his urine had flowed through the aperture. Mr. Lloyd introduced a probe from the orifice of the fistula into the bladder with the greatest ease, but all attempts to reach that viscus through the front part of the urethra failed, on account of an obstruction just anterior to the fistula. At this time the urine was offensive, and contained pus and crystals of triple phosphate; but there was no especial reason to suspect the presence of a stone. About a month after admission, attempts at dilatation having failed, Mr. Lloyd performed the operation of perineal section, divided the stricture, and passed a gum-elastic catheter into the bladder. The instrument was allowed to remain for about ten days, during which it was repeatedly removed, washed, and re-introduced. Owing to Mr. Lloyd's absence from the hospital, on account of illness, its removal was, however, on one occasion neglected for several days, and, when done, the end of the instrument was found to be incrusted over with calcareous deposit. By examination through the wound, with a probe, some portions of this were found to have remained in the prostatic urethra, and, for fear of pushing these back into the bladder, Mr. Lloyd declined to re-introduce the catheter; in order, however, to prevent the stricture from again closing, a skein of silk was passed through the meatus urinarius, brought out at the wound, and tied. Several fragments of calcareous matter afterwards passed by the fistula, but, after the lapse of about five weeks, these had ceased to escape, and it was thought safe again to introduce the catheter, and endeavour to get the fistulous opening to close. During the next two months, however, although the fistula diminished greatly in size, it showed no tendency to heal, and as, on several occasions during the introduction of the flexible instrument, Mr. Lloyd had felt it strike against something hard, an examination of the bladder, by means of a metallic sound, was made (about Christmas), and the presence of a calculus detected. The treatment of the fistula was, therefore, abandoned until the stone should have been removed, Mr. Lloyd contenting himself with insuring the patency of the urethra by occasionally passing a catheter; No. 8 being the largest size ever introduced. The boy's health had been much affected by his long confinement to bed, and the irritation produced by his disease, and, on this account, the performance of lithotomy was necessarily delayed for several months. When, at length, he had sufficiently regained his strength to be submitted to it without unusual risk, the condition of his urethra differed from that of health solely in that there was a very small perineal fistula immediately behind the verge of the scrotum; a full-sized catheter could be introduced with ease, and there was no disease whatever of the posterior part of the perinæum.

Operation, May 31.—In its first steps, the operation, in this case, so precisely resembled that of the one just described, that we need not again detail them. No difficulty whatever was found in entering the bladder and dilating the prostatic urethra to the requisite extent. On introducing the forceps, the stone was at once seized, but, being friable, broke down into several portions, and was removed piecemeal, partly by the forceps, and in part by means of the scoop. The bladder being afterwards well syringed with warm water, to remove the detritus, a short canula was introduced, and retained by a suture. The quantity of blood lost had been rather more than in the preceding case, but much less than in the average of lithotomy operations. As far as could be ascertained by fitting its fragments together, the stone appeared to have had originally a size about equal to a bantam's egg. This opera-

tion and the preceding were performed, as may be seen, on the same day; and, after the patients had been removed from the operating theatre, Mr. Lloyd made some observations on the peculiarities of the method adopted, which, as we have already given their substance, it is unnecessary here to repeat.

June 1.—The boy was not sick after the operation; he has slept well, is quite free from pain, and feels comfortable; appetite good; pulse 108, soft, and of moderate volume. Milk diet, with beef-tea.

2nd.—Doing well in every respect.

3rd.—The urine flows freely from the wound, causing slight smarting. The bowels have not been open since the operation. Abdomen soft, and free from pain or tenderness. The canula is to be removed.

℞ Haust. amygdalæ cum mannâ ʒj., magnes. carb. pond. ϑj., 4tis horis si opus sit.

4th.—The bowels acted freely in the night, causing a little pain in the wound. The patient is doing, in every respect, as well as possible. The wound looks healthy, and has done so throughout.

8th.—The urine still passes solely and involuntarily by the wound. Last evening its discharge was interrupted for a short time; after which, two or three little clots of blood, with a few calcareous fragments, escaped, followed by a very small quantity of dark-coloured blood. The boy is in good health, and is now to be allowed half meat diet.

10th.—The urine came through the penis, in small quantity, for the first time, this morning. For two days past he has expelled his fæces voluntarily, and without pain.

14th.—The urine still passes chiefly through the wound, though occasionally by the urethra, in small quantities. The wound looks healthy, and is much diminished in size. The boy can retain his motions easily until an expulsive effort is made. This morning, in straining to pass a costive motion, a small quantity of flatus was forced through the urethra.

24th.—No flatus has been passed by the urethra since last note, and the urine now flows in almost equal quantity by that canal and through the wound. Last night he expelled, by the latter, some small calcareous fragments.

July 2.—Mr. Lloyd introduced a No. 8 sound with ease, the urethra being quite patent. Several fragments of calcareous deposit have been expelled during the last week. The original perineal fistula is quite closed, its edges having been touched with the lunar caustic about a week ago. The wound left by the operation is now very small, and the urine is expelled almost entirely by the natural passage.

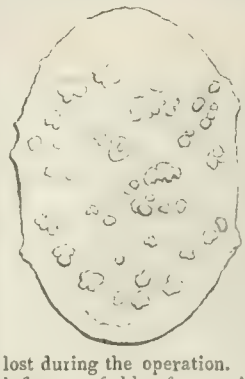
9th.—Is in much improved health compared with what he was prior to the operation; is dressed and about in the ward. The wound is still not quite closed; it is being dressed with an astringent ointment.

℞ Matico ʒj., balsami Peruviani ʒj., adipis ʒvj., ft. ung., applic. nocte maneque.

30th.—For nearly the last month, the urine has, with little exception, passed by the natural channel, but the wound still remains unhealed. Its orifice is very small, but occasionally, during a straining effort, a few drops or a pin-sized stream of urine are forced through. The boy is allowed to go out of doors, and is constantly up; he has perfect command over his sphincters, with the exception, that after sleeping unusually long, his urine will sometimes escape involuntarily per urethram. From this symptom, however, he suffered before the operation.

Case 3.—William Kingsford, aged 33, admitted June 16, having suffered from symptoms of calculus for two years. He is a married man, of strong muscular development, a labourer, living at Dover, of very temperate habits, and, with the exception of a prolonged attack of "indigestion," nine years ago, usually in the enjoyment of good health. His father used to suffer severely from "the gravel," but his other relatives have not been liable to any particular complaint. For the last month he has been obliged to pass water almost every two hours, and has suffered great pain, especially when in the recumbent posture. The urine is clear, of acid re-action, but rendered ropy on the addition of liq. potassæ. By sounding, Mr. Lloyd easily detected the presence of a calculus of very considerable size.

June 18.—*Operation.*—The incisions were made on exactly the same plan, though, perhaps, considering the adult age of the patient, not to so free an extent as in the previous cases. The sphincter ani was an unusually powerful one. The dilatation of the prostate by means of a small pair of forceps, as before, occupied a minute or two; and we were informed by Mr. Lloyd afterwards that he had found it impracticable, on account of the



smallness of the instrument, to effect it, as in the other cases, by simply opening the ends of the forceps within the prostatic part of the canal. He had, therefore, passed the blades of the forceps fairly into the bladder, so that their joint came within the prostate, and then opened them without difficulty; and, by gently drawing them out in the open state, effected the desired dilatation. The stone, which proved of large size, was readily seized, and, by gentle traction outwards and backwards, was removed with facility. The appended woodcut shows its shape and size; it weighed nearly one ounce and a-quarter. Very little blood was lost during the operation. The patient throughout was under the influence of chloroform. A canula was afterwards fastened in the bladder.

19th.—Has passed a rather restless night from pain across the loins, occasioned, as he thinks, by lying in one position; face flushed; expression tranquil; skin warm and perspiring; tongue coated with a thin white fur on the dorsum; moist and clean at the tip and edges; some thirst; appetite pretty good; pulse 88, full and soft; abdomen flaccid and free from pain or tenderness; urine flows freely through the canula; it is dark from an admixture of blood; the wound looks healthy, and is not sore. Fotus calid. abdom. applic.

20th.—Is in much the same condition as yesterday, excepting that the tongue is more thickly covered on its dorsum with a white creamy fur.

21st.—Doing well. The bowels not having acted. Mr. Lloyd prescribed Hydr. c cret. gr. v. h. s. sumend.; ol. ricini ʒss. pr. mane sequent. The canula is removed.

22nd.—Tongue much cleaner. Has slept well. Bowels have acted three times, motions relaxed, but easily retained for a few minutes until the bed-pan is procured. Pulse 112, full and soft. Urine flows freely, and involuntarily through the wound. The abdomen is tolerant of firm pressure in every part.

26th.—The urine passed, this morning, for the first time by the urethra, and in a good stream.

28th.—The bowels have been freely relieved by castor oil. The motions are easily retained, and voided without pain. Yesterday, the greater part of the urine flowed per urethram, and to day it has, on two occasions, passed solely by that canal. (From this date, the ninth day after the operation, no urine passed by the wound.)

July 11.—With the exception of some slight pectoral symptoms, nothing of importance has occurred since the last date. The wound is now entirely healed; the urine flows in a full stream by the urethra, and without producing pain. The bowels act daily, and the patient, who may be considered quite well, has perfect power in retaining his motions. Appetite good; sleeps well.

22nd.—Discharged.

It may be remarked, regarding the above three cases, that they have, in most respects, completely borne out Mr. Lloyd's anticipations. In all of them, the operation itself was performed with great facility, and the quantity of blood lost was unusually small. The amount of constitutional disturbance developed afterwards, was not worth mentioning in any one of them, and did not exceed that which often follows the most trivial operations. As regards the healing of the wounds, we may observe that in the last and most successful case, the patient acquired voluntary power over the expulsion and retention of his urine and fæces on the seventh day; on the ninth, his urine ceased to flow by the wound at all; and at the end of about three weeks the latter was quite healed. In the two cases first operated on, however, the process of healing has been much more tardy, and even now, after the lapse of two months, is not quite complete in either. In both of them, however, the sphincter ani re-acquired its efficiency within a few weeks of the operation; neither of the patients is troubled with incontinence of urine, but only with the occasional escape during micturition of a small quantity by the fistulous canal. It must be remembered, that these patients were both of them in ill-health, passing phosphatic urine at the time of the performance of the operation, and that one of them has since repeatedly passed small calcareous fragments of a character very likely to keep up irritation, and to prevent the final closing of a wound. Mr. Lloyd has, as yet, adopted no especial means to induce the healing of the remaining sinus, having been desirous to observe the progress of the wound when left to itself. The reader must bear in mind that the

fistula is perineo-urethral, and does not in any way involve the bowel, the whole of which is perfectly healed. We shall not neglect to report the further progress of these cases at some future time.

GUY'S HOSPITAL.

RESECTION OF THE METATARSO-PHALANGEAL JOINT OF THE GREAT TOE.—RECOVERY.

[Under the care of Mr. HILTON.]

Although the importance of the great toe to safe and comfortable progression has long been fully acknowledged, yet it does not appear that much attention has hitherto been directed to the avoiding of its amputation in cases usually submitted to that measure. This omission is, too, the more to be wondered at when it is considered that destructive inflammation of its metatarso-phalangeal joint is not at all an uncommon disease, and that, from the complexity of the articulation, its sesamoid bones, numerous tendons, etc., is not often susceptible of spontaneous cure. A patient now under the care of Mr. Stanley, in St. Bartholomew's Hospital, affords us a good illustration of these remarks. He has had both great toes amputated; the one, on account of caries of the articular ends; the other, by reason of great distortion, attended with a very troublesome bunion. He is now under treatment for a bad fracture of the leg, met with in a fall, occasioned by the lameness consequent on the loss of his toes. Some little time ago we saw Mr. Partridge, at King's College Hospital, resect, with a successful result, a phalangeal joint of one of the fingers; and Mr. Hilton has, we believe, once performed successfully, in private practice, the operation we are about to describe. With few exceptions, however, this kind of operation, as far as the lesser joints are concerned, appears to have been much neglected by English surgeons.

William Templeman, aged 27, a farm-labourer, residing in Lincolnshire, of fair complexion, and strumous appearance, though usually in the enjoyment of good health, was admitted, in July, 1852. He had been, for many months, at home, under the treatment of a surgeon, on account of inflammatory disorganisation of of the joint of the left great toe, who, finding no tendency to improvement, had now sent him up to Mr. Hilton, with a view to amputation of the part. The history given was, that five months ago, while carelessly swinging a chair round, he had given the ball of the left great toe a sharpish rap with one of the feet. During the week following the accident he continued with difficulty at his usual work, the joint being swollen and painful, and the pain afterwards increased to such an extent that he was obliged to lay up. At the end of a fortnight, it was necessary to open an abscess which had formed; and from that time to the present, during which he had suffered constant pain, which often prevented his sleep, the discharge of matter had never ceased.

August 10.—The man has now been in the hospital for three week, confined to bed, with poultices applied to the affected part. No improvement has, however, taken place. There is much swelling around the joint, the skin being of a dusky red colour, and presenting the openings of several large ulcerated sinuses, which lead into the joint. On grasping the first phalanx, and forcibly rotating the toe, a distinct grating sensation is felt, and great pain is occasioned to the patient. As it is thus evident that the joint is destroyed, and as, in spite of six months' treatment, there is no tendency displayed to spontaneous cure, Mr. Hilton has determined, in preference to amputation, to attempt the excision of the articular heads of the bones.

Operation.—The patient being under the influence of chloroform, Mr. Hilton dissected backwards a flap of the soft parts from the inner border of the foot, the anterior and free margin of which came about half-an-inch in front of the joint, and the posterior attachment about an inch behind it. (See the woodcuts. The dotted line on the sound foot indicates the direction of the incision.) The inner aspect of the joint was thus completely exposed, and by bending the toe outwards over the foot, the articular extremities of the metatarsal bone, and first phalanx, were turned into the wound, and the soft parts having been protected by spatulæ, were sawn through, and removed, together with the two sesamoid-bones, which were also diseased. The bone at the part where cut through, was in each case indurated, though living and vascular; the articular heads were denuded of cartilage, and roughened by caries. Portions of adherent lymph, and degenerated synovial membrane, having been removed, and the wound washed, the parts were next brought into apposition, and confined by a wet compress, the foot being supported by a splint applied to the sole, and continued up the leg, so as to keep the parts in complete rest.

At the end of six weeks after the operation, the parts were almost healed, the swelling had greatly subsided, and the toe had become fixed to a considerable extent. Suddenly, however, and without apparent cause, an abscess formed beneath the cicatrix, and the sinus re-opened. Believing that the renewal of the disease was dependent on the condition of the patient's general health, Mr. Hilton recommended him to return home. Full directions having been given him as to keeping the foot completely rested, he was accordingly discharged in November. Mr. Hilton received shortly afterwards an account that a very small piece of bone, from the inner side of the joint, had exfoliated, and that the healing process was proceeding satisfactorily. No opportunity occurred for seeing the patient until within the last month, when he came to town, and called on Mr. Hilton, to show his foot. The appended woodcuts, taken from plaster casts, accurately executed by Mr. Towne, show the very small amount of the

deformity present. The left great toe is about three-quarters of an inch shorter than the right, and anchylosed to its metatarsal bone. The cicatrix is very small, and the parts around the excised joint have lost all remains of swelling, and are in a perfectly sound condition. The man states, that when he has thick-soled boots on, he can walk over the roughest ground almost as easily as ever he could. He has been at his work for some months, and is in good health.

THE LONDON HOSPITAL.

DISORGANISATION OF THE JOINT OF THE GREAT TOE.—TREATMENT BY FREE INCISIONS.—RECOVERY.

[Under the care of Mr. CURLING.]

We quote the following case, in relation to the foregoing, for the sake of illustrating a different and milder practice in the same affection, but not with any wish to draw a comparison between the two. The two cases are, indeed, not at all comparable. In the one, the disease had lasted for seven months, it had assumed a chronic state, and the ends of the bones had become solidified by interstitial deposit; yet no attempt at repair had been commenced. The patient was, moreover, of strumous constitution, and the practice of free incisions had been tried without success before he was sent to Mr. Hilton. In the other, the disease was acute; no previous treatment had been adopted, and the patient was a strong and healthy man. The making of long and deep incisions into disorganised joints, a practice recently brought into notice, and much advocated, by Mr. Gay, for the purpose of providing for the ready escape of pus, shreds of slough, particles of bone, etc., and for preventing the former from bagging or burrowing among the tissues, appears to be very useful wherever the openings can be made in the most depending part of the joint. In the ankle, the elbow, the wrist, and, as in the case we are about to relate, in the great toe joint, such treatment seems to produce most satisfactory results in favouring recovery by anchylosis. In the case of the knee-joint, however, we might show, by adducing several instances which have occurred under our notice at different hospitals, that it is not only, at least in the manner now usually adopted, inapplicable, but also that it is attended by great risk. The danger, in these cases, as in excisions of the knee-joint, appears to depend on the circumstance, that the incisions are almost necessarily made in the front or sides of the articulation, and that they do not in any way provide for the ready escape of the unhealthy secretions which are formed in such abundance after the laying open of a joint. To return, however, to the immediate subject of our present report. John Clarke, aged 40, a very strong and healthy man, was admitted, under Mr. Curling's care, in September, 1852, having a fortnight previously sustained a severe bruise over the ball of the left great toe. The

joint had inflamed and suppurated; there was great swelling present, and on the outer side an opening through which matter was escaping. This opening having been enlarged, the patient was kept in bed, with a poultice applied to the part. After three weeks' treatment, Mr. Curling examined the condition of the joint; exposed and rough bone was easily detected by probing; and on forcibly rotating the toe, the surfaces of the articulation were felt to grate upon each other. The surrounding soft parts were much swollen, and of a dusky red colour. Mr. Curling made two free incisions into the joint, one on its inner and upper, and one along its inner and lower aspect, and from the latter much pus escaped. The relief afforded by this measure was most marked; the swelling and pain at once began to subside; in about a fortnight all the openings, excepting the lowest, had healed. Within five weeks of the operation the man was able to leave the hospital, the joint having become stiff, and the surrounding parts almost sound.

By incisions beneath the joint of the great toe, a second object is not unfrequently served. In the case before us no bone came away; but in many a small necrosed portion separated from one or other of the articular heads, or one of the sesamoid bones quite dead, and sufficing only to keep up irritation, may be removed. Mr. Hilton informs us that he has twice cut down upon and extracted the sesamoid bones, with the result of obtaining anchylosis of the destroyed joint soon afterwards.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

LINCOLN HOSPITAL.

CASE OF LITHOTRITY.

[Under the care of SAMUEL HADWEN, Esq, one of the Surgeons of that Institution.]

To know what had best be done under any circumstances of uncertainty is a good thing. To know what had best be done in perplexing cases of great difficulty and danger is a better. A stone in the bladder under the most favourable conditions is a formidable affair. A stone in the bladder combined with a kidney diseased, and in a state of suppuration, presents a case so serious as almost to exclude hope that any manual interference could be available. As we cannot choose our cases, but are called upon to advise and do what is best in every instance which comes before us, the question recurs, in a case of such dangerous complication, what is best to be done? Authority, it may be said, has settled the matter—"Meddle not;"—generally a most wise, to the surgeon often an easy, to the poor, anxious patient too often a most unsatisfactory, decision. The knowledge of that which has been done with success under given circumstances affords the best guide to what had best be done under similar circumstances. It should be borne in mind, that the guide cannot be practically trustworthy unless there be an entire correspondence in the whole of the essential circumstances in the supposed similar cases.

Daniel Lacey, aged 30, a railway labourer, was admitted into the Lincoln Hospital on the 2nd of December, 1850, with symptoms of stone in the bladder of two years' duration. In the early part of this year he appeared at the hospital with an out-patient's recommendation; and, as a stone was detected with the sound, he was advised to become an in-patient. He did not appear again, however, until the above date; he then very seriously informed me, I was quite right when I formerly told him he had a stone in his bladder. From this remark I conclude, he doubted the correctness of my statement, and on that account did not return. It appears, that the reality of his condition has been for some time past painfully impressed upon his conviction, as he states, that, after making water, he has suffered the greatest agony, until he discovered that he could displace the stone by means of his finger passed into the rectum, a practice he has latterly been much in the habit of adopting. Finding himself quite unfitted for work, he is anxious to have the stone removed. His health is reported to be good. The urine, on examination, was found to be acid, sp. gr. 1020, presenting a slight mucous deposit, and ex-albuminous; a few crystals of the triple phosphate were visible in the deposit when observed under the microscope.

A few days after admission, he appeared in bad spirits, lost his appetite, and his tongue became furred; his breathing was oppressed; there was a hacking, dry cough, and he was evidently very much out of health. After a few more days, he had a rigor, with feverishness, and a quick, small pulse. His depression increased, his features became sunken, breathing more oppressed and quickened, and his pulse smaller and weaker. He complained of no pain. On examination, however, of the abdomen, pain and tenderness were found in the region of the right kidney. These symptoms were followed by a large deposit of pure matter in the urine. I now made out, (for the patient was not intelligent, nor ordinarily communicative of his feelings,) that he had frequently suffered from similar attacks, and that his urine afterwards presented a heavy, whitish sediment, and sometimes blood.

Under varied treatment, directed chiefly to allay irritation and improve the health, in the course of some weeks he seemed to suffer less from the nephritic attacks. I explained to him, that his case had been too long delayed; and that the right kidney had, in consequence, become so much diseased, that I could not advise him to undergo the operation. I considered lithotomy out of the question, and that the case was most unfavourable for any kind of chirurgical treatment. He was still anxious to have the stone removed. As it was evident he could not long bear up against the constitutional irritation and general disturbance of health resulting from the stone, and the recurring attacks of suppuration in the kidney, I determined, having explained to him his critical position, to crush the stone. After a consultation with, and the concurrence of, my colleagues, on the 22nd of January, the patient then being in a better state than I had previously known him since admission, I injected the bladder, and, passing the lithotrite, quickly seized and crushed the stone, and afterwards two of the portions into which it had been divided. Chloroform was not used, on account of the diseased state of the kidney. He bore the operation well, and soon passed several fragments of stone. He had a rigor in the afternoon, and at night there was a flushed face and considerable febrile disturbance. Pulse 144. On the following morning, the feverishness had nearly subsided, and the pulse was 70. On the 24th, he was comfortable, passed urine abundantly, which contained a smaller amount of pus. On the 27th, the lithotrite was again used, and three crushings performed. No unfavourable symptom followed. A large quantity of the broken-up stone was discharged on the two succeeding days. On the 2nd of February, the report states:—"Is much improved in health, and the urine is but slightly rendered turbid by pus. The lithotrite was again passed this morning, and numerous fragments of the stone seized and crushed. *Vespere.*—No unfavourable symptoms. A large amount of *débris* has passed with the urine."

On the 6th and the 10th, the lithotrite was employed, and numerous fragments broken in quick succession. The operations were followed by no unfavourable results, though the crushings of the latter amounted to nine or ten. Large quantities of the reduced stone followed. Some of the pieces were so large as to cause much pain in their passage, and occasionally lodgment in the first part of the urethra; but the use of the hip-bath, or the passing of the catheter, uniformly afforded relief. He was allowed warm wine-and-water at and after the operation. The bladder was always injected previous to, and the hip-bath used after, every crushing. The diet was light and nutritious. His health and cheerfulness very much improved, and the symptoms of stone subsided.

As no fragment had passed on the two previous days, on the 16th the instrument was again introduced; but, after a most patient search, no indication of stone was obtained. He went on very well, and appeared relieved of all annoyance attributable to the stone. In the evening of the 19th, he had a rigor, and was attacked during the night with severe pain and tenderness in the right lumbar region, from which he obtained some relief by the use of the warm bath. The urine was acid and loaded with pus on the following morning. He was very nervous, and in low spirits. The pulse rapid and feeble. The stomach rejected everything. A large, hot poultice was applied to the loins, and a dose of morphia given, which produced some sleep, as well as relief to the pain. He took citrate of potass and ammonia in an effervescing state, with hydrocyanic acid and opium. These distressing symptoms continued with more or less urgency, especially the vomiting, small, feeble pulse, and the large deposit of pus in the urine, until the 24th, when the stomach became quiet, and all the other bad signs abated. He was free from pain, had much less thirst, tongue cleaner, pulse stronger—80; bowels open, urine plentiful, less highly coloured, and containing much less matter.

On the 26th, his health having very much improved, and as he was very desirous to return home, he was discharged.

At the beginning of May, he called upon me, looking very well, and perfectly free from all signs of stone in the bladder, though the urine, he said, still occasionally contained matter. He informed me, that, soon after his return home, he had another very severe illness, with sharp pain in the back, vomiting, etc., followed by a great discharge of matter with the urine, after which he im-

proved. He passed one fragment of stone after leaving the hospital, which was expelled with great difficulty and pain on the 20th of March, nearly three weeks after his discharge, and about five weeks after the last crushing. This portion has the appearance of a distinct calculus, and in size and colour looks not unlike a coffee berry. It is half an inch in length, and one inch in circumference. A longitudinal section shows a small piece of the crushed stone in the centre, augmented by fresh deposit around; the weight is fifteen grains. The whole of the fragments, including the above, collected, and in my possession, weigh ℈iv. gr. iij.; but the patient observed to me, that he passed a great deal which was not caught, both at the water-closet and in the bath. The greatest diameter of the stone indicated by the lithotrite was $\frac{7}{8}$ of an inch. The composition was oxalate of lime.

The following is a copy of my last report of this case:—"September 8, 1851.—This patient called upon me to-day in better health and appearance than I ever saw him. He says, he is quite free from symptoms of stone, but still occasionally passes thick urine."

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SATURDAY, AUGUST 6, 1853.

UNQUALIFIED MEDICAL PRACTITIONERS.

IN England, it is a misdemeanour to personate a clergyman, a solicitor, a soldier, a policeman, or to appear in the garb of one of the opposite sex. The divine, the lawyer, the military, and the police, are all protected against the assumptions of the quack and the pretender. Yet, strange to say, in the matter of health and disease, of life or death, the greatest laxity and indifference prevail. The man who rejoices in no one qualification but impudence, and in no possessions save his quack handbills, may plaster every corner of London with indecent announcements; while any irreclaimable vagabond of the London streets may vend his confectioneries, his pills, powders, or ointments; any woman who has once been a mother, or once attended at a birth, may forthwith establish herself as a midwife; and the young stripling behind a druggist's counter, who has just got over the timidity caused by the hieroglyphics on his master's show-bottles, may advise the mother, and compound a draught for her sickly infant, which, however pernicious, so long as death does not immediately result, the law is satisfied, the Legislature supine. Passing over the injustice of such laxity as affecting qualified medical men, who are confounded by the public with these hordes of disreputable adventurers, we would put the whole question on a much broader ground,—that of the welfare of the public; and, at the present time, when the subject of Medical Reform is before Parliament, we feel it to be especially necessary to call attention to this phase of our social economics.

The "Occupation Returns" of the Census for 1851 are not yet issued; and hence, for the present, we must adopt such data as we have in endeavouring to estimate the amount of unqualified practice of medicine which prevails in Great Britain. For this purpose, we take the Census of 1841, tabulating the persons there returned as practising in the various departments of medicine and surgery, and comparing those with the number of qualified medical men returned in the "London and Provincial" and "Scottish" Medical Directories for 1851. This plan, we are aware, gives an overwhelming advantage on the side of the quack, since it ignores the increase which must have accrued to this class under each head in the ten years, 1841-51; but, even on this showing, the results will be instructive, and we hope may be of some service in directing public attention to a most fruitful source of evil as it respects the public health. The Table which appears in another part of our Journal shows the population of each county, the numbers practising in thirteen classes of medical occupation, the gross totals, and the number of qualified persons, as given in the Medical Directories of 1851.

The results, then, would appear to be as follow:—In Great Britain, in 1841, there were 21,531 persons practising one or more departments of medicine without qualification, the numbers of the Census being 33,339, and of the Directories 11,808. In England, according to the Census, there was thus a practitioner to every 543 of the population; in Wales, 1 in 822; in London, 1 to every 272; in Scotland, 1 in 593; and in the British Isles, 1 in 510; while, taking the numbers in the Medical Directory, the proportion of qualified men to population was, in England, 1 in 1527; in Wales, 1 in 2893; in London, 1 in 714; in Scotland, 1 in 1614; and in the British Isles, 1 in 2215.

It will be observed, that we have included in the above, "Chemists and Druggists;" and there is sufficient reason on the face of the Table for so doing. It appears that, deducting the chemists and druggists from the grand total, would leave 22,495 persons practising medicine according to the Census, or 10,687 more than appear in the Medical Directories. Thus there is 1 chemist and druggist in Great Britain to every 2 medical practitioners. This warrants the assumption, that "chemists and druggists" are themselves practitioners to a great extent. Indeed, the experience at assizes and before coroners' juries, where detection and conviction are the exceptions, sufficiently attests the fact. We therefore include them in the gross total. "Keepers of Lunatic Asylums" have been omitted in our category, though a large number of them would legitimately appear there. It is worthy of observation, however, that under this head, 216 of them are females, and many of these under 20 years of age.

In Birmingham, there was one "herbalist" under 20 years of age; 2 "keepers of lunatic asylums" under 20; 14 female leech-bleeders; and 1 *female* physician. 1 female "dentist" in Taunton; a "*physician*" in Norwich under 20; 2 "medicine-vendors" in the Tower Hamlets under 20; 1 "midwife" in Preston under 20; 1 "physician" in Canterbury under 20; 2 "physicians" in Bristol under 20; a female "chemist and druggist" in Colchester under 20; 1 physician in Darlington under 20; and 1 *female* "surgeon" in Cornwall under 20.

After this, we must cease to wonder at the details of suffering in our Profession continually brought out in the Reports of our Medical Benevolent Fund and other Medical Charities, at the awful sacrifice of infantile life in our large towns, at the disgraceful exposures in our criminal courts, and at the melancholy results of unqualified practice, daily occurring before our Coroners.

We trust that, as a first step in Medical Reform, the Legislature will adopt a most rigid system of protection for

licensed and qualified practitioners against unprincipled pretenders; and will not only preserve the public from Coffinites, Morisonians, Herbalists, and "Silent Friends," but will give the necessary powers, either to some central licensing Board, or to certain Colleges or Universities, to prosecute and punish those who assume titles and distinctions to which they have no legal claim.

THE MEDICAL BENEVOLENT COLLEGE.

From the commencement of this noble Institution in 1851, we have done the little that lay in our power to promote the object of the indefatigable philanthropist who founded it; and have repeatedly urged the different classes of the Profession, however divided upon questions of medical politics, however different in form or designation, to unite in the great cause of charity, and to strive with worthy emulation who should best relieve the widow, and support the orphan of a professional brother.

We have not been neglectful in advocating the cause of other funds having similar benevolent objects in view, and still urge upon all our readers to do all they can to assist them; but to those whose means are not great, and who must limit their subscriptions, not by their wishes but by their means, we would say, as we have said before, join together in supporting one great National Institution, in order that the relief afforded may be sufficient to avert distress; not that small sums may be doled out occasionally in charity, but that every case of medical distress in the kingdom may be promptly and effectually relieved, either by pension or residence, that sorrow and loss may be kept secret from the world, and professional suffering relieved by the Profession itself, instead of being obtruded before the public eye.

A very little consideration will show that this hope is not a vain one. There are upwards of 12,000 Medical men in this country; surely an average of half-a-guinea yearly from each is not too much to expect for such a cause. This would give an income of 6000*l.* a-year,—a sum amply sufficient to relieve any and every case of medical distress in the kingdom, and support an admirable school for medical orphans; not to train them up for an overstocked profession, but to give them such a sound general education as should fit them for any profession, or any department of the public service. With a Local Committee in every town, to investigate each case, and forward their decisions to a Central Committee, every genuine want could be relieved, either by pension, or residence in the College, while all painful details of distress are kept secret from the world. This, it is true, would be an enlargement of the original scheme, and an improvement upon it, as in many cases a pension or annuity would be much preferred to a residence. Thus the College would assume the functions now so worthily performed by the Medical Benevolent Fund, and, in course of time, we should hope to see the two Funds amalgamated. In the mean time, until the College is complete, and its assistance to the needy can be afforded, the older charity must not be suffered to languish.

How many a man working in a profession exposed to peculiar vicissitudes, having little leisure for rest or recreation, labouring for the poor at the cost of health or life, anxiously striving to support a wife and family, is cut short in his career by death or sickness before his labours have begun to reap their reward! His savings have not been sufficient to enable him to insure his life, and his wife and children are left dependent upon the bounty of friends, or the charity of strangers. What a source of satisfaction would it not be to such a man on his death-bed to know, that by the aid of his brother Practitioners, his widow would be kept from want, and his children educated in a manner which would enable them to follow any profession, or enter any of the public services; and still greater, if he could also feel that he had himself contributed, by some small annual subscription, to support the Institution, and thus earned a peculiar right to its privileges!

The establishment of an Asylum for Distressed Medical Men and their Widows, and of a School for the Education of their Sons, not only deserves and has received the most cordial co-operation of the Profession, but has not wanted the sympathy of the public. Upwards of 20,500*l.* has been already collected, and this within two years from the time when Mr. Propert first promulgated his scheme. This is really a startling fact. No richly endowed College, no large Association, originated the movement. It is solely due to the efforts of a single General Practitioner. Those at first cold and doubting, have been warmed by his enthusiasm, and success now makes the most lukewarm energetic.

It redounds no little to the credit of the General Practitioners that this national Institution, originated by one of themselves, has been also mainly supported by them. The public has certainly shown that it sympathises with the Profession, by subscribing about a fifth part of the total sum collected for those who have battled with fever, cholera, and pestilence, but have not conquered poverty. But, of the remainder, about nine-tenths have been subscribed by General Practitioners and their wives. Of the 300 ladies who laid down purses of five guineas each on the foundation-stone, three-fourths were wives and daughters of General Practitioners. The money has not been raised from those who have been enriched and ennobled by medicine, or by their descendants. The only subscription of 500*l.* was from a son of Dr. Winthrop,—a man more remarkable for benevolence than for riches. Of three subscriptions of 100*l.*, two have been from physicians, one from Dr. William Silver, the other from one who is ever foremost in every work of philanthropy; and the third, from Mr. Churchill, the Medical Publisher. But the great mass of money, in sums of from one to ten or twenty guineas, has been from the working men of the Profession, or from their wives and daughters. This is a proud boast for them; but let us hope that the magnates of the Colleges will earn a right to join in it, by inducing the corporations which they govern to assist in the good cause; that the Provincial Association, at its coming meeting at Swansea, will not hold back, and that the Institution, so successful hitherto, shall go on and prosper to the end.

We have only to reflect upon all that has been done in the last two years, to be assured that all we have here pointed out may be attained. The site for the College has been secured, and a most eligible one it is. A plan of construction has been approved by a zealous and intelligent Council, and in after years our children may point out our work to their little ones, and tell them, that there peaceful but unrewarded heroes rest from their labours, relieved from care, supplied with the necessaries and comforts they had earned, but not insured; that their orphan youths are brought up to become useful to society, perhaps to confer honour on their country, instead of sinking beneath the temptations and degradation of poverty. We can look with pride on our feudal towers, on our baronial halls crumbling beneath the o'ergrowing ivy; but with how much greater satisfaction shall we regard this palace of charity, reared by ourselves, which will furnish, long after we have passed away, a grand centre for the streams of benevolence pouring into it from every corner of the kingdom!

THE VACCINATION EXTENSION BILL.

NOTWITHSTANDING the second reading of the Vaccination Extension Bill in the House of Commons, and its passage through the House of Lords, it is not likely to pass its final stages during the present Session in its present form, as we find that Dr. Cormack, Dr. Fraser, and Dr. Semple, waited upon Lord Palmerston on Monday last, as a Deputation, on the subject of the Bill.

The Deputation strongly urged upon His Lordship the propriety of delaying the Bill until next Session, more particularly on the ground that the Anniversary Meeting of the Provincial Medical and Surgical Association was appointed to be held on the 10th of this month, when the whole subject would be taken into consideration. The Deputation stated, that efficient vaccination was not necessarily to be obtained by making the operation compulsory, and that the proposition to leave the machinery of the Act entirely in the hands of the Guardians of the Poor-law Unions was unpopular with the Profession.

His Lordship asked various questions, and entered freely into conversation with the Deputation. He stated, that the request for delay seemed very reasonable; that he thought that Sir John Pakington would get the Bill amended in Committee, and that it would then be submitted to the consideration of the Profession. Lord Palmerston stated, that he had little doubt that the Bill would, under all the circumstances of the case, be postponed until next Session. He distinctly intimated to the Deputation, that, in his opinion, that was the proper course to be adopted.

While all must admit the necessity of rendering the practice of vaccination more extensive than it is, yet the proposition to double the labours of the Medical Practitioner, and, at the same time, to limit his remuneration to the present niggardly allowance, has met with universal opposition. The plan of confiding the operation of the Bill to the Guardians of the Poor-law Unions is also, in the highest degree, objectionable; for it needs no effort on our part to prove the general dislike very justly entertained by the Profession towards those officials. Their universal system of bringing down the salaries of the Medical Officers to the lowest possible point,—their total ignorance of the duties, and their disregard to the feelings of the Medical community, render them most improper persons to superintend the practice of vaccination, or to select and remunerate the vaccinators; and we sincerely hope that in any future attempt at legislation on this subject the Poor-law Guardians will be entirely relieved from this portion of their present duties.

During the time which must now elapse before another measure can be introduced, abundant opportunities will be afforded to the Profession to discuss the merits of the whole question; and we trust that the Medical Practitioners throughout the country will avail themselves of any means which may be offered them to communicate with the Members of both Houses of Parliament, in order that the Legislature may become thoroughly acquainted with the subject, and that a Bill may be brought forward retaining the useful parts of the present one, but rejecting its defects, and therefore claiming the general acceptance and gratitude of the Profession.

We have our doubts whether the Deputation acted wisely in making the question of professional remuneration a ground for postponing the Compulsion Clauses of the Bill. The public good requires that vaccination should be compulsory. Nothing can more clearly prove this than the following Reports just made to the Registrar-General by some of the District Registrars.

Mr. Harris, Surgeon, of Redruth, thus writes to the Registrar-General:—

"I beg to inform you, that there are hundreds of children in my district not vaccinated. My district is, the parishes of Gwennap and Stithians; and the parents frequently refuse to have their children vaccinated, as, they say, they will suffer the Lord to work His will, and that vaccination is bringing sickness upon their children. I have been asked by the parent, what I would give to be allowed to vaccinate her child. Something should be done, if possible, in this matter; for, if small-pox should again break out in this neighbourhood, the fatal cases will no doubt be very awful, as was the case some few years since, when young children, as well as adults, were often carried to the grave. I am most anxious to vaccinate every child in my district, if possible."

The Registrar of Leake (Leicestershire) says:

"Several deaths have occurred during the quarter from scarlatina and from small-pox. The latter disease has been very prevalent in a village belonging to my district, and it is astonishing to observe the ignorance and wilful stupidity which exist among a certain class of people; neither threats nor entreaties can induce them to have their children vaccinated. A young woman, near her confinement, and the mother of two other children, who refused to be vaccinated herself, or have her children vaccinated, was seized with small-pox. On the 12th June I attended her; the disease became confluent; she became a most loathsome object, and in this state gave birth to a girl on the 15th, and died on the 18th. The infant partook of the disease, and has since died. I have vaccinated a large number of children, and a few adults; but the same prejudice still exists with others, and this frightful disease is yet progressing. I am firmly convinced, if every child was properly vaccinated, under twelve months, there would be no cases of small-pox, or if so, it would be so modified, as to require little notice. I am of opinion that the disease would be extirpated."

Another observes:—

OLDHAM.—"Small-pox has been very prevalent in two small villages in my district, viz., Throstle Nest and Boarshaw; and I find that the majority of cases that have occurred in my district have been among persons not vaccinated. With the vaccinated, the disease has been very slight indeed. At no period during the last fifteen years that I have been public vaccinator, have I seen the public so anxious to avail themselves of gratuitous vaccination, which has been performed at all ages, from two months old up to twenty years."

We should, therefore, have been far more satisfied if the Deputation had endeavoured to alter the objectional details of the measure, and to assist in passing the compulsion Clauses. The whole matter shows the urgent necessity we have so long felt for the constitution of a Board of Health, which would be trusted by the public, and respected by the Profession. The latter very justly ridicule the present Board, and the former—fear them. If the Board were composed of Medical men, as it most undoubtedly ought to be, none of the difficulties that have opposed so useful a measure as Compulsory Vaccination could have arisen. The general principle established by law, the details might have been safely left to the Board, and the Profession would not then have been thrust into the unpleasant position of appearing to oppose an Act framed for the public benefit, upon what may be termed interested motives.

The *Union Médicale* mentions the erection of the new hospital at Norwich, to bear a name much cherished by the *dilettanti* both of America and the United Kingdom. The "Jenny Lind Infirmary for Sick Children" owes its existence to a concert given at Norwich by that distinguished vocalist, at which 1,240*l.* were collected Other funds have been since contributed by the neighbouring families.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Thursday, July 28, Petitions were presented by Mr. Masters Smith, from the Medical Profession of Maidstone, on behalf of the Assistant-Surgeons of the Navy, praying that they may be placed on a footing of equality with the same rank in the Army.

On Friday, July 29, Petitions were presented by Mr. Bowyer, from the members of the Medical Profession at Perth, for redress of grievances of medical officers in the Navy; by Mr. H. Berkeley, from a branch of the Medical Profession of the city of Bristol, praying the House to use due deliberation in legislating on the subject of vaccination; by Dr. Michell, from the merchants and bankers of Bishop's Stortford, praying the House not to allow the Lords of the Admiralty to treat its Resolution of the 8th of April, 1850, with contempt, by continuing the degradation of the Assistant-Surgeons of the Navy, which degradation has compelled the Board to reduce the standard of qualification in order to procure a sufficient number of inferior medical officers for Her Majesty's Navy; also another Petition, from the Medical Profession of Bishop's Stortford, to the same effect; by Mr. E. C. Egerton, from the Medical Profession in Macclesfield, against the opening of the Crystal Palace on Sundays, and for better accommodation for Assistant-Surgeons on board Her Majesty's ships; also one, from inhabitants of Macclesfield, for better accommodation of Assistant-Surgeons on board Her Majesty's ships.

On Monday, Mr. Ewart moved for the following returns:—Royal College of Physicians: Accounts of the money received by the Royal College of Physicians from persons admitted as Licentiates, from the 31st day of December, 1832, to the 1st day of January, 1853, for each year of the above period; of the manner in which the money received as above has been appropriated; detailed account of all the money received by the College for the three years ending the 31st day of December, 1852; detailed account of the expenditure of the College for the three years ending the 31st day of December, 1852; statement of any incumbrances upon the property of the College, specifying the amounts, and the periods when they were effected, the rate of interest paid on borrowed money, also whether the building in Pall-mall is freehold, or on lease on Crown land; if on lease, what is the ground-rent? Returns showing the total number of Fellows, distinguishing the number residing in London, or within seven miles; also, similar returns relating to candidates, inceptor-candidates, licentiates, and licentiates extra-urbem; of the number of persons admitted as Fellows in each year, from 1834 to 1852, inclusive, distinguishing those admitted under different bye laws, and the number rejected; also distinguishing, in the case of those admitted or rejected respectively, the number who were graduates, and further specifying the numbers of graduates from the different universities; of the number of persons who applied to be admitted as licentiates from 1834 to 1852 inclusive, distinguishing, 1, the number who were rejected on examination; 2, those who were not admitted to examination; and 3, those who passed; further distinguishing the number in each of the above three classes who were graduates, together with the number of graduates from the different universities; return similar to the above, referring to licentiates extra-urbem; returns of the number of persons admitted as licentiates and extra-licentiates, who had passed the age of forty years, distinguishing the number who were graduates, together with the number of graduates from the different universities; and of the number of persons who have, since the 31st day of December, 1834, been admonished by the censors to desist from practising in London or within seven miles, distinguishing the number who were graduates, and of what universities, and those who were extra-licentiates; also, a return of the number of persons who, having been so admonished, have subsequently presented themselves at the college for examination as licentiates, distinguishing the number who were admitted and rejected (in continuation of returns made to Mr. Warburton's Committee on Medical Education in 1834, No. 602; and to the House of Commons in 1826.)—Agreed to.

Petitions were presented by Sir De L. Evans, from Sheffield and other places, for the better accommodation of Assistant-Surgeons in the Navy.

On Tuesday, Petitions were presented, by Mr. Kinnaird, from the Medical Profession in Aberdeen, praying for measures to improve the condition of Assistant-Surgeons in the Navy; by Mr. G. Duncan, numerously signed, from the Medical Profession in Edinburgh, praying for measures to improve the condition of the Assistant-Surgeons in the Navy; by Mr. S. V. Fitzgerald, from the Medical Practitioners of Horsham, praying, that the Resolution of the House as to accommodation to the junior Assistant-Surgeons in the Navy may be carried out, and that the superior medical officers of the Navy may be placed on an equality with those in the Army as to rank, pay, and retirement; and by Mr. J. H. Vivian, from the members of the South Wales branch of the Provincial Medical and Surgical Association, against the Vaccination Bill.

THE DUBLIN HOSPITALS.

Mr. Grogan stated, that, considering the period of the Session, he should not proceed with the Motion, of which he had given notice, that a Select Committee be appointed to inquire into and report upon the expediency of the grants made from the public funds to the hospitals in the City of Dublin, and how far the circumstances of those institutions, and their utility as a medical school, require the continuance of such grants.

LUNACY.

On Wednesday, in Committee on the Lunatics Care and Treatment Bill, on Clause 4, which provides that no person shall be received into a licensed asylum without an order of admission signed by a physician, surgeon, or apothecary,

Captain Scobell moved the omission of the word "apothecary." The Amendment had been suggested by the Alleged Lunatics Society, as it was thought that physicians and surgeons were plentiful enough, without giving this power to apothecaries.

Mr. Brady opposed the Amendment, on the ground, that the examination which apothecaries were obliged to pass was quite sufficient to enable them to discharge this duty.

Mr. Phinn thought that to exclude apothecaries would be putting a slight on that large body of respectable men which they did not deserve.

Mr. Walpole believed that apothecaries were often much better qualified to discharge this duty than physicians or surgeons, because many of them acted as family medical advisers, and were enabled, by their acquaintance with the family constitutions, by their experience of the previous illnesses of the patient, and his peculiar susceptibilities, to tell whether there really was lunacy or not in cases where others would be at a loss. For this reason he should oppose the Amendment.

The Amendment was then withdrawn.

REVIEWS.

A Treatise on Diseases of the Heart. By O'B. Bellingham, M.D., F.R.C.S.I., one of the Medical Officers of St. Vincent's Hospital, &c. 8vo., pp. 252. Dublin: 1853.

Dr. Bellingham has been long and well-known as a careful and accurate investigator of the pathology of thoracic disease, but principally of affections of the circulating system. Portions of the present Work have already appeared as Clinical Lectures in many of our former numbers, and in the pages of the Dublin Medical Press. The subject has, however, now undergone a thorough revision at the hands of the Author, and has also received the addition of much new matter.

Every Author who undertakes to write a *treatise* is, by the very nature of the work he has proposed to himself, subjected to difficulties and embarrassments which do not encumber the efforts of the writers of purely original essays; thus he is obliged, *pro formâ*, to introduce descriptions of things by no means essential, and yet which it might be considered strange for him to omit. This practice it is which necessitates, we might almost say, the repetition of certain superficial anatomical and pathological *platitudes* at the commencement of almost all modern books, which are certainly introduced only for the sake of adherence to *system*, not with the view of conveying adequate instruction, which they lamentably fail to do,—far less with the end or aim of advancing science. It could have been only a feeling of such necessity that induced Dr. Bellingham, himself a careful observer and a close reasoner, to make his first chapter, on the "Description of the Several Parts of the Heart," so weak and superficial. As usual, *à la mode* in the authorship of the day, "the heart is the central organ of the circulation," its shape is *cordiform*, it is "in reality a double organ," and so on, with regard to its grooves, position, and connexions. No fewer than thirty-five pages are occupied with this and similar matter, comprising descriptions of the cavities, orifices, valves, pericardium, endocardium, muscles, and nerves; from which we conceive that it would be utterly impossible for any student to acquire a sound and competent acquaintance with the anatomy and physiology of the

organ, no matter how great his zeal and industry. Now, would it not be far more consistent with any rational principles of scientific medical education, to refer the reader at once to some competent treatise on the anatomy of the heart; the Author would thus spare his forces for his more immediate purposes; or, if he must make his work *systematic*, why then let him go *con amore* into the subject, and write his descriptions fully up to the knowledge and research of the day. We trust that Dr. Bellingham will not be angry with our remarks, or take them in an unkind spirit. We quarrel not with him, but with a system which we believe to be detrimental to the true interests and ends of scientific authorship, and which we would wish to see at an end for ever.

The second Chapter is devoted to the dimensions of the healthy heart, its size and weight, the capacity of the cavities, and the diameter of the orifices. Here we have an admirable and practically useful *résumé* of the most important researches on these subjects, including those of Bezot, Sibson, etc., in many instances verified and tested by the author. If this chapter had been the first, we would have been spared the necessity of the foregoing observations. The Third and Fourth Chapters contain very clear and correct expositions of the most modern views of the motions of the heart, the frequency of the heart's movements, and of the pulse, the mechanism of valvular action, and the impulse and sounds of the heart. These chapters are concise and valuable records of the now widely-extended literature of these subjects, and as such we can recommend them to the student. Those who are familiar with the former researches of Dr. Bellingham may remember, that he has been led to form opinions different from those usually held with regard to the cardiac impulse. He is of opinion that "the impulse of the healthy heart, when the organ is acting vigorously, is double, not single."

"If," says the author, "we carefully examine this organ, however, when it is beating vigorously, we shall find that a second but slighter impulse is perceptible, which quickly succeeds the other; and, on applying the stethoscope, we shall find that this second impulse accompanies the second sound of the heart; it appears as if the agency which gives rise to the second sound were capable of communicating a distinct sensation to the hand or stethoscope. In the healthy heart the second impulse is scarcely felt unless the organ beats vigorously; when the ventricles are somewhat hypertrophied, and their cavities somewhat dilated, the second impulse becomes better marked; when this has arrived at an extreme degree, it becomes very evident, and constitutes then the 'back stroke of the heart,' or the 'diastolic impulse.'"

Dr. Sibson, a most accurate observer, says, that "a second impulse is often felt in persons whose lungs are diminished, and whose great vessels come close to the sternum. This is synchronous with the second sound, and must, I conceive, be due to the sudden springing forwards of the walls of the right ventricle after the systole." That such a second impulse does often present itself under the conditions assigned, we cannot doubt; but we do not, by any means, conceive that we are yet in a position to admit it as a usual and normal phenomenon of the cardiac movements. Under the head of "Examination of the Heart in Disease," Dr. Bellingham has given us a very complete and valuable chapter on the various signs furnished by auscultation and percussion, with copious notices of the conclusions and opinions of other writers. In the present condition of this department of auscultatory science, two schools may be stated to exist; the one carrying to an extreme all minutiæ of difference in kind and intensity of the cardiac sounds under diseased conditions, and attaching a fixed diagnostic value to every modification of murmur. The other may be called a school of rational eclecticism, in which only certain broad principles of diagnosis are admitted to be deducible from the large variety of abnormal cardiac sounds, taking, as it were, the "*juste millieu*" between the extremes of diagnostic acumen, and the problems which it must be allowed, on all hands, yet remain to be resolved, having hitherto baffled all inquiry. Thus, on the one hand, we hear of diagnosis of disease of the pulmonary valves from that of the aortic; and on the other, cases are presented to us in which the distinction between phenomena referrible to the aortic or the mitral orifice, separately or in combination, appears to present almost insuperable difficulties. Dr. Bellingham, while he appears fully to recognise the importance of the most close and accurate observation of phenomena, however trifling in appearance, and the necessity of careful reasoning upon such data, is, nevertheless, too much of the practical clinical physician, not to acknowledge that much, indeed, has yet to be achieved before the science of auscultation shall have arrived at the degree of precision and accuracy claimed for it by some too enthusiastically devoted to this attractive study. We can, therefore, safely recommend his chapters on diagnosis to the student and junior Practitioner, who wish to form for themselves a practical experience in auscultation.

In a section on arterial murmurs will be found some very useful and interesting observations on a condition of the aorta capable of originating murmur, which may be mistaken for that of valvular disease. "It not unfrequently happens," says Dr. Bellingham, "that the coats of the arch of the aorta suffer from disease, which impairs its elasticity; the tube becomes rigid, and its calibre cannot alter with the increased or diminished amount of blood transmitted to it. At the same time, the natural smoothness and polish which its lining membrane presents in the healthy state are diminished; and the interior of the artery becomes rough and uneven from adventitious deposits; while, very generally, its calibre becomes increased." The results of these conditions are, that a double sound is produced, "audible over the first bone of the sternum, and frequently as low as the base of the heart, but *never at the apex*." In addition to these signs, this state of the aorta may, according to our author, give rise to the jarring or vibratile pulse, with visible pulsation of the carotids; for, owing to the incapacity of the aorta to re-act on the column of blood passing through it, it thus allows of a certain amount of regurgitation into its own cavity from the vessels beyond it. This is a very ingenious view, and the condition of the vessel alluded to deserves to be more carefully studied than it appears to have been by recent auscultators. Though it is now some years since these views of Dr. Bellingham were given to the public, we do not conceive that his positions are altogether impregnable; but they certainly deserve great consideration. In conclusion, though we have, through a sense of the duties of our critical position, found it necessary to disagree with Dr. Bellingham on some points, we consider his treatise a most useful addition to the literature of cardiac pathology.

Records of Maculated Typhus, or Ship Fever, with Suggestions of Treatment. By J. B. Upham, M.D. 8vo., p. 60. Trow: New York. 1852.

This is an account, very ably drawn up, of the symptoms and lesions found after death in certain cases of typhus fever. The cases recorded by Dr. Upham were chiefly those of Irish emigrants; hence the name given to the disease —"ship fever."

The chief points of interest in the work are the minute details given concerning certain morbid conditions of the large intestine, especially common in the hospital to which Dr. Upham was attached, and the testimony afforded by Dr. Upham to the essential difference of typhus and typhoid fevers. In reference to the latter point he remarks:—

"From the intimate relations we are to hold with the Old World, the nationality of this disease will soon be lost, and the typhus fever of Great Britain become also the true typhus of America—differing, in all its essential points, from the dothinentérite, which is endemic here, by as much as variola differs from scarlatina."

Monographie des Eaux Minérales de Wiesbaden. Par M. Charles Braun, Dr. en Médecine et en Chirurgie. 8vo. Pp. 117. Kriedel and Midner, Wiesbaden. 1852.

This will be found to be a very useful work by those who desire information concerning Wiesbaden and its waters.

It is divided into two parts: in the first, the history and topography of the mineral springs, Wiesbaden itself, its inhabitants, its climate, and its sanitary state, as well as the physical and chemical characters of the waters, are discussed at some length; in the second part, the physiological properties, the medicinal effects, the indications for the employment, and the mode of administering the waters, are fully described.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

RESECTION OF BOTH SUPERIOR MAXILLARY BONES.

By Dr. HEYFELDER, of Erlangen.

THE third case of complete resection of both superior maxillary bones, by Dr. Heyfelder, occurred in July, 1852.

J. Hieroth, aged 21, a feeble person, was seized, six months ago, with violent toothache. Subsequently, the last molars of the left side became loose, the pains increased, and there was suppuration and necrosis of the alveolar border. Three months afterwards, the palate swelled, the voice became indistinct, and the pain intolerable. A probe introduced into apertures in the palate seemed to touch fungous masses; a stinking pus flowed abundantly into the mouth. The microscopic examination of some detached fragments supported the idea of the disease being cancerous. August 13, the operation was performed, the patient being under the influence of chloroform. Both on the right and on the left side an incision was made, extending from the middle of the zygoma to the commissure of the lips; the quadrangular flap thus included was dissected up to the lower border of the orbits; the malar bones were divided with a chain saw; the nasal processes of the superior maxillæ were sawn horizontally, and division was effected consecutively of the septum nasi, the vomer, and the ethmoid. Considerable force was required to separate the morbid mass; and Dr. Heyfelder tore away the right pterygoid process. The hæmorrhage, which was inconsiderable, was arrested by ligature and by the hot iron. The wounds were united by suture. The patient left the hospital in the course of a few weeks.—*Das Chirurgische und Augenkranken Clinicum der Universitat Erlangen.* Oct., 1851-52.

PHASE OF DENTAL EVOLUTION.

M. Hervieux read, at the Academy of Medicine, a note upon some circumstances connected with the phases of evolution of the teeth. The following are his conclusions respecting the order of appearance of the milk teeth.—

a. Inferior middle incisors
b. Superior middle incisors.
c. Superior lateral incisors.
d. Inferior lateral incisors.
e. Canines.
f. Lesser molars.
g. Second molars.

The inferior middle incisors pierce the gum at from the 11th to 12th month; the superior middle, at from the 12th to 13th month; the lateral, about the end of the second year; thus, a child of two years should have all its incisors. The canines appear at from the 20th to 24th month; the first molars, at from the 20th to 26th month; the second molars, at from the 30th to 36th month. The evolution of the milk teeth, therefore, occupies the interval between the end of the first and of the third years. But these rules are not absolute, indeed the exceptions are very numerous.

CHLOROFORM IN DELIRIUM TREMENS.

By Dr. PRATT.

Dr. Pratt has administered chloroform internally, with success, in two cases of delirium tremens. The first patient took four grammes in water, repeated every four hours; the second patient took a tea-spoonful of chloroform in water, followed, in an hour, by eight grammes of spirit. æther. sulph. co., tinct. valerianæ, and four grammes of chloroform. A quarter of an hour afterwards the patient fell asleep, and awoke in three hours and a-half with his reason. Small doses of chloroform were subsequently administered from time to time.

OBSERVATIONS ON THE EMPLOYMENT OF INHALATION OF ETHER IMPREGNATED WITH QUININE IN THE TREATMENT OF INTERMITTENT FEVER.

By M. A. PIGNACCA, Professor of Clinical Medicine in the University of Pavia.

A limpid fluid, of peculiar and not pleasant odour, is obtained by the distillation of quinate of lime, alcohol, and sulphuric acid; its exact chemical nature has not been yet ascertained. M. Manetti, a young student in medicine, deserves the honour of first suggesting the administration of quinine, in this form, by inhalations. He was struck with the death of a patient, who sank under a severe attack of fever, from the impossibility of giving him, in a short time, the medicine in sufficient quantity; and he set about discovering some preparation by which it could be absorbed through the air passages. A scruple, poured on a handkerchief, must be held alternately to the nostrils; first ensues lachrymation; then a little heat of throat and coughing; sometimes singing in the ears. M. Pignacca has known severe cephalalgia disappear, in some patients, during the inhalation. It is recommended in tertian fevers; in neuralgia, especially of the branches of the fifth pair; in marsh fevers, some of which cases are often accompanied by urticaria and symptoms of gastro-enteritis, etc. In six cases the fever was permanently arrested by four inhalations in the intervals of the attacks.—*Gazetta Medica Lombarda.*

M. Giraldès announced, at the Chirurgical Society of Paris, (June 15,) that he had just received from M. Burin de Buisson, of Lyons, a letter, informing him that Dr. Pravas had been suddenly attacked with a severe indisposition, which left but little chance of his recovery.

M. Trousseau strongly recommends, in cases of asthma, the employment by the patient of a cigarette composed of paper steeped in a concentrated solution of saltpetre. The fume is to be inhaled through the nostrils. Some cases are mentioned in which great relief has been noticed from this treatment; among others, that of Dr. Letanneur, who was the first to suggest the practice, having found it useful to himself.

In 1852 there were received into the public hospitals of Paris 90,486 patients; 12,117 aged, or insane persons, were admitted into the asylums, (*Maisons de Retraite.*) Total: 102,603. In 1851 the total number was 98,754. The augmentation is 3,849. Up to January 1, 1853, the number of infants abandoned was 14,111; of which, 282 were at the Hospital, and 13,829 in the country.

GENERAL CORRESPONDENCE

CHARING-CROSS HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I observe in your last Number, a letter from a Mr. Jabez Hogg, professing to be a reply to my communication. There also appeared, a fortnight ago, a letter with the same signature in another Medical Journal, in reference to Mr. Adkins; and both agree in the plan adopted, viz., a personal and vicious attack upon the students, with a curt denial and distortion of some leading facts. Mr. Adkins having passed, is entitled to treat both the letter and the writer with merited contempt; but I am inclined to ask, who is this Mr. Hogg? A person having that name is, I believe, on the best terms with Mr. Hancock, and is occasionally used by that gentleman to hold the leg of a restive patient; but, beyond this, we know nothing of him. What title can he have to question the right of the students to state their opinions upon a question which is their own, and which has been fathered upon them, and then to obtrude his own, I know not. Moreover, by what authority does he, a stranger, who never attended any of the meetings of the students, presume to make his word superior to that of those who as students did attend, and who were directly concerned in the whole question? His friendship for Mr. Hancock is evidently misleading him, when he undertakes to publish letters which have doubtless been dictated by others, and thus to show that there is not a student in the school able or willing to do that which a stranger is called upon to perform.

Besides vilifying the characters of the students, he makes gross evasions of the truth, to serve his purposes. He accuses Mr. Adkins of falsehood in the statement, that there are eighteen free students, and says, that now there are only eight; ingeniously hiding the fact, that the third-year's men, including the man who wrote the complaining letter, vacated their studentships only two months ago, and that those vacancies are not to be filled up during the summer, but at the beginning of the winter session. He also accuses me of a fabrication when I stated, that the Medical Committee told the students, that, if they do not approve of the course they (the Medical Committee) are pursuing, that they are at liberty to take themselves off, and go to King's College, or any other place, the Committee having posted up in their library the notice, that they will return a proportion of the fees to any student who may desire to complete his studies elsewhere. His

denial of the notorious fact, that the most serious dispute exists between the students and the Medical Committee, is absurd in the face of the notice just referred to, and published in your Journal of June 25, and also of the proceedings of the students, published by you June 18, with the silence maintained in the hospital by Mr. Hancock towards the pupils, and the petty annoyances to which the students are subjected.

I pass over his remarks about "certain quarrelsome gentlemen," since it is well known that the whole school is included in that phrase, and I need not, therefore, be ashamed of my company; and to his statement, that I seconded a resolution which was not carried, "condemnatory" of the teacher of anatomy, I will only reply, that no such resolution or amendment was ever proposed; that an amendment to leave out the latter part of the resolution, to which I presume he refers, was not understood by any party as condemnatory. Mr. Hogg next gets emphatical, and says:—"I emphatically deny the statement, that no complaint was raised against Dr. Smith;" on the contrary, he says, complaints were becoming so frequent, that even he, in the capacity of one of his friends, (one of his special friends, of course,) conceived it to be his duty to communicate with him upon the subject; but I have only to repeat, Sir, that I never heard, during the whole course, the least accusation of inefficiency brought against Dr. Smith. No, Sir; we all respected him; and at this time feel, that he and ourselves have been grossly insulted by the treatment our lecturer has met with.

I am, &c. EDMUND N. TAPERELL.

26, London-road, Borough.

[We have exercised our privilege of erasing merely personal matters from this letter. The letter of "A Second-Year's Man," on the same subject, agreeing on all points with the above communication of Mr. Taperell, need not be inserted. Mr. Adkins replies to Mr. Hogg as follows.—ED.]

[To the Editor of the Medical Times and Gazette.]

SIR,—Mr. Jabez Hogg has taken upon himself to answer a letter of Mr. Taperell's, in your Journal of last week. Permit me to state, that this Mr. Hogg has no connexion whatever with the School; and therefore it is presumption, on his part, to interfere with the students of the Charing-cross Hospital in their differences with the Medical Committee. It is true, he is the intimate friend of Mr. Hancock, one of the members of the Medical Committee; but does that entitle him to meddle in affairs with which he has no concern?

With regard to there being certain quarrelsome gentlemen in the school, allow me to say, that those students who took an active part in the late proceedings felt that they were fully justified in getting rid of an accusation which the Medical Committee charged them with, namely, "accusing their highly respected and talented teacher of anatomy of incompetence." It is the general opinion of the students, that Dr. Smith has been treated by the Medical Committee in an ungentlemanly, underhand, and unfair manner; and that, in expressing their opinion, the students have incurred the odium of the Medical Committee; but it is hoped that the staff and lecturers of the Charing-cross Hospital will now see that reform in their establishment is highly necessary to keep the school in existence. I am, &c.

Plymouth. J. E. ADKINS, M.R.C.S.

THOUGHTS ON THE PRESENT STATE OF THE LAW RESPECTING THE PROCURING OF ABORTION.

[To the Editor of the Medical Times and Gazette.]

SIR,—Have you ever had your attention directed to the state of the law respecting abortion, which lets the principal offender off entirely? There may be some difference of opinion whether the seducer, the woman, or the operator, has the greatest amount of moral guilt, when miscarriage has been procured; but it appears to me, that the person who induces another by a bribe to do a certain action is more deserving of reprobation than the individual so bribed. It is, therefore, very remarkable, that a woman who has attempted to procure abortion is not only looked upon by the law as guiltless, but is permitted to be a witness against all the partners in the crime she has instigated them to commit. It would surely be more even-handed justice to permit the actor in the deed to give evidence against those who had instigated him or her to do it. As it is, we see in your last Number that a woman may go from one person to another, in the hopes of procuring abortion; when one fails, she may apply to a second and a third, and, in the end, prosecute them all, either for their want of success, their too great success, or her own caprice. The law utterly fails to touch her, or to influence in the slightest degree a woman who has herself discovered the secret how to procure miscarriage, and who applies it without the intervention of a second party. Now, whether it be that the practice is on the increase, or that with increasing years we acquire more extended experience, it is certain that I have been cognizant lately of so great a number of cases, as to lead me to the belief, that the procuration of miscarriage by women is far more common than is generally supposed; and this not among the unmarried, the poor and wretched only, but among the wealthy, married, and well-to-do. In one instance of a young married lady, a certain well-known drug of the coniferous family was successfully employed in three pregnancies; and, in the fourth, produced such severe effects, that a medical man was called in; he was told of the nature of the case by the friends of the lady, who were perfectly cognizant of the facts.

In another, a lady, who had had one child, so dreaded the advent of another, that she did everything in her power, according to her knowledge, to procure abortion, but unsuccessfully. No secret was made of this among her intimates. From the conversations which have been reported by others, and from what I have heard myself, I am confident that a large number of women do not look upon the procuration of miscarriage with anything like horror, but that they consider it rather as a thing to be desired, if it could be done with safety. I am not now referring to the ignorant, the profligate, or the unmarried, but to steady, respectable, married women, who have a great dread either of the pain of childbirth, or a wish to keep their families within due limits. This is in no degree checked by the recent reports of trials; for in them they find, that in no instance is reprobation directed against the woman; and not only does this result follow, but another follows, still more to be deplored;—women have nothing to do but to read the evidence, and learn how to practise upon themselves. Now, if it were to be made criminal in a woman to make inquiries respecting the procuration of abortion, and the person to whom the application were made was permitted to be a witness against her; and if the medical evidence were by law suppressed in the public prints, far more good would be done in preventing the practice than by permitting women to go about seeking for some one needy or unprincipled enough to break the law for a bribe, and trusting for immunity to the woman's sense of shame. The greater the danger and the shame the woman would risk by applying, the more likely would she be not to apply at all. At present, she runs no danger, no risk except to herself, and no shame at all. I am, &c. ALIQUIS.

REPORTS OF SOCIETIES.

EPIDEMIOLOGICAL SOCIETY.

ON YELLOW FEVER, AS IT APPEARED IN THE ISLAND OF ANTIGUA IN THE YEARS 1835, 1839, AND 1842.

By THOMAS NICHOLSON, M.D.

THIS paper, which throughout evinced, on the part of the author, both scientific and professional attainments of a superior order, was read by Dr. M'William. The author commenced by stating, that he had been thirteen years on the island of Antigua before he had an opportunity of witnessing a single case of the disease known to the English and Spanish colonists, on both sides of the Atlantic, for nearly a century, and described by writers under the terms "yellow fever," "bulam fever," "vomito prieto," etc., although severe and fatal cases of bilious remittent had been prevalent every year in the malarious districts,—in some seasons assuming an epidemic form, and producing great mortality. A formidable visitation of the bilious remittent was experienced in 1823; yet, although the mortality was very great, in no instance did "black vomit" occur. Reasoning from these facts, and from subsequent observation, the author believes, that "vomito prieto" was not known among civilians in the colony from 1816 to 1835, and that yellow fever differs as much from bilious remittent, as the epidemic or Asiatic cholera differs from sporadic or English cholera; but that no circumstance had arisen to make him believe that the disease was propagated by contagion. Dr. Nicholson described, clearly and graphically, the three epidemics of yellow fever he had witnessed at Antigua. That of 1835 was preceded by a severe hurricane, that did great damage to the buildings in town and country, but more so to the vessels in the harbour of St. John's, the capital of the island, the barometer having fallen, during the fury of the tornado, not less than 1·5 inch. The sea, which rose in the gale above its usual level, aided by the wind, deposited a great quantity of marine organic matters and vegetable rubbish

about the wharves and precincts of the town bounded by the harbour; and it was remarked by the inhabitants in that quarter, that the smell arising from the sea, particularly at night, was peculiarly offensive. The visitation of the hurricane took place on the 12th of August, and cases of fever began to drop in about the 20th of September; but it was not until the 10th of October that the occurrence of a case of "black vomit" declared the true nature of the epidemy, which continued to increase until the first week of November; after which it gradually declined, and by the end of December had nearly disappeared. During the progress of the epidemy, Dr. Nicholson attended 220 cases; of whom 75 were Europeans, 65 white Creoles, and 80 coloured people. Of the Europeans, 12 died, of whom 10 had not been in the island twelve months. None of the native whites died; but two of the mixed race sank, under peculiar circumstances. The character of the fever, during the epidemy of 1839, was of a more open or inflammatory type than that of 1835, and the disease made its appearance by attacking only those young men who had come to the island during the interval. The invasion of 1842 was marked by the same predilection of the disease for new comers, and proportionate mortality among them, compared with the Creoles and the mixed race. On all these occasions, it is remarkable, that the epidemic was confined to St. John's; and, although Dr. Nicholson's practice extended over twenty-eight estates, on each of which white persons resided, who were unprotected by a former attack, none of them took the disease. Dr. Nicholson considers, that three varieties of the malignant form of yellow fever are observable,—viz., the ardent, the adynamic, and congestive or apyretic. The diagnosis of yellow fever, and the symptoms, the treatment of each form, with the appearances observable after death were detailed in a very lucid manner, and illustrated by appropriate cases that occurred in Dr. Nicholson's own practice during the several epidemics. Dr. Nicholson is opposed to the view which recognizes yellow-fever, bilious, remittent, and intermittent fevers, as the offspring of the same terrestrial miasmata. He grounds his opinion on the fact, that the two last-named disorders prevail more or less between September and March every year, whereas, during the last twenty-five years, there have been only three visitations of the yellow-fever. The endemic forms prevail in the country districts chiefly, while the inhabitants of St. John's are seldom attacked with them; whereas the epidemic yellow-fever was confined to the city, and the garrison at the Ridgel, and English harbour. The European youth employed by the mercantile profession in the town are comparatively exempt from remittent fever, while those who superintend agricultural operations in the country never escape. After a brief, but admirable sketch of the geological structures, and of the more prominent features of the several districts of the island, Dr. Nicholson states, that although there is only one district which presents unequivocal sources of paludal emanation, yet that all parts of the island are at certain seasons affected by malaria. Two things, he adds, are always present when fever prevails in these districts,—a hot sun during day, and circumstances favourable to the radiation of heat from the earth, and the deposition of dew at night; and he considers that the febrific poison, whatever it may be, is deposited with the dew. In this way Dr. Nicholson explains the greater prevalence of remittents in country districts than in St. Johns, it being well known that more dew is deposited in the open country, than in cities where houses conceal a portion of the sky; and that a soil covered with vegetation is also more favourable to the production of dew, than the trodden streets of a town. The introduction of European labourers into St. John's and into the country districts has afforded ample opportunity for corroborating the views taken by Dr. Nicholson as regards the kind of fever to which town residents and country residents are respectively liable. Finally, Dr. Nicholson holds to the opinion, that the disease is *sui generis*, and that it attacks an individual only once in his lifetime. "This," continues Dr. Nicholson, "was in a great measure corroborated by the epidemics that fell under my notice,—not one of those persons who suffered in the first epidemic was attacked in the subsequent visitations."

Dr. Milroy said, that the communication must contain much valuable information. Dr. Nicholson had been fifteen years in the island without seeing an example of black vomit. He thought that this remarkable circumstance deserved attention, because, in all probability, the occurrence of black vomit would have been considered by some as a clear proof that the disease had been introduced; whereas, the experience of Dr. Nicholson proved clearly that it arose spontaneously. The experience of Dr. Nicholson, however, did not quite agree with that of other practitioners in Jamaica; but one of the most striking features connected with the spread of the disease which had been mentioned by the author, was its limitation to the town. Another instance had been related, in which it was confined to the military station. Epidemic diseases, according to his (Dr. Milroy's) belief, did not spread with a uniform and uninterrupted diffusion, but in scattered patches. It frequently happened, that when the yellow fever had been brought by vessels to the port it did not spread. The treatment adopted by Dr. Nicholson, differed from that practised by Dr. Blair and others in being of an antiphlogistic nature. Now, in Jamaica, this method of treatment was not found to be the most successful; indeed, the most distinguished physicians in that island were opposed to lowering measures, and the best treatment was found to be that which consisted of a combination of quina and calomel.

Dr. Gavin observed, with regard to the statement of Dr. Nicholson, that it was not at first easy to diagnose between yellow fever and the ordinary remittent fever so common in the West Indies, that he had found that a certain redness of the fauces and eyes constituted specific signs of the advent of yellow fever. There was no more difficulty in predicating where yellow fever would break out in the town in the West Indies, than there was in foretelling the spots where typhus and cholera be most prevalent in England. He (Dr. Gavin) had made arrangements for obtaining a larger amount of information than had yet been collected on the subject, which he hoped to be able, in a short time, to lay before the public. Dr. Blair was also preparing a second edition of his work, in which much new and valuable information would be contained. Reference had been made to the difference between Dr. Nicholson's and Dr. Blair's treatment; but he conceived that Dr. Nicholson was quite justified in objecting to the employment of Dr. Blair's treatment in the ardent form of the fever,—the form which he appeared more especially to have met with. Attention should, he thought, be always paid to the nature of the locality, as to whether it was, or was not marshy, in deciding the treatment proper to be adopted in any given case. The epidemic now prevailing in the West Indies, differed (said Dr. Gavin) from the previous outbreaks, in affecting natives as well as Europeans.

Mr. Richardson thought that yellow fever might be modified variously in its characters, owing to the mixture of other diseases. Thus it was not infrequent to meet with arthritic inflammation in cases of scarlatina. He (Mr. Richardson) had found, by analysing the meteorological tables published by the Registrar-General, that epidemics spread quite independent of the influence of any meteorological conditions. He thought the combination of calomel and bleeding singular, as the effect of one was in a measure opposite to that of the other.

Dr. Camps made some allusion to an indigenous plant, which he understood was held in high esteem by the natives, on account of its supposed powers of curing yellow fever. He wished to know whether this plant had been found efficacious in the hands of European physicians.

Dr. Gavin replied that the plant in question, which was a species of verbena, had been employed by English practitioners, but he had never seen any good result from its use which he could ascribe directly to the plant itself; and he referred whatever benefits might have been derived during its administration, to the large quantities of warm water with which it had been combined. There was, however, another plant which Mr. Purday had discovered, and which he thought would be found to possess virtues nearly equal to those of quinine, though belonging to a different order. He did not, however, wish to pronounce any opinion on the merits of this plant, as its properties had not yet been fairly investigated or its medicinal powers tested. No good could, therefore, result from any premature announcement respecting it. He (Dr. Gavin) quite disagreed with the remarks that had fallen from one of the preceding speakers (Mr. Richardson) respecting the independence of epidemics on meteorological conditions; for he had noticed that in the West Indies the prevalence of the wind from a particular quarter was necessary for the outbreak and progress of yellow fever.

Dr. M'William said, the time of the meeting being just up, he begged to be allowed to make one observation on the paper which they had just heard read. To his view it fully maintained the high reputation which he knew Dr. Nicholson to enjoy when he himself (Dr. M'William) was serving in the West Indies upwards of twenty years ago. He was not aware, however, of any former writer on yellow-fever having attributed to that disorder the quality of protection against a second by a first attack, and, at the same time, considering it to be a disease *sui generis*, without also assigning to it the property of contagion. As regarded treatment, he had understood that the production of "Cinchonism" which had been so successful in the treatment of the epidemy at Demerara, had failed in that which afterwards occurred at Barbadoes.

The Society adjourned at the usual hour.

TABLE OF PRACTITIONERS IN MEDICINE ACCORDING TO THE CENSUS OF 1841, COMPARED WITH THE NUMBER OF QUALIFIED PRACTITIONERS IN THE MEDICAL DIRECTORIES IN 1851.

COUNTIES.	Population—1841.	Physicians.	Surgeon, Apothecary and Student.	Aurist.	Oculist.	Cupper and Dentist.	Dentist.	Chemist and Druggist.	Corn-cutter or Chiropodist.	Herbalist.	Leech Bleeder.	Medicine Vendor.	Midwife.	Quack Doctor.	Totals—Census.	Qualified Practitioners in the Medical Directories of 1851.
ENGLAND.																
Bedford	107,936	6	93	...	...	...	2	48	2	...	...	...	8	...	159	63
Berks	161,147	5	160	...	...	3	...	92	2	...	...	...	7	...	269	93
Bucks	155,983	4	94	...	...	...	1	44	...	...	...	...	5	...	148	67
Cambridge	164,459	11	117	...	...	...	3	72	1	...	...	...	11	...	215	93
Chester	395,660	14	291	...	...	4	..	249	...	2	...	...	17	...	577	204
Cornwall	341,279	13	229	...	...	...	3	121	...	...	...	..	6	...	365	145
Cumberland	178,038	18	134	...	...	...	2	120	...	...	...	...	4	...	278	82
Derby	272,217	7	197	...	...	...	1	106	1	...	...	3	19	1	335	111
Devon	533,460	46	551	...	1	...	...	361	...	2	...	5	11	...	977	394
Dorset	175,043	10	128	...	...	...	1	55	...	...	...	...	4	...	198	92
Durham	324,284	16	337	...	...	...	...	189	...	...	...	...	18	...	560	191
Essex	344,979	17	294	1	...	...	6	154	...	...	...	...	9	1	482	185
Gloucester	431,383	46	444	...	...	10	...	321	2	2	...	2	27	...	854	336
Hereford	113,878	2	89	...	...	...	1	56	1	2	...	...	6	...	157	63
Hertford	157,207	5	145	...	...	...	...	66	...	...	...	...	5	...	221	86
Huntingdon	58,549	...	45	...	...	...	...	28	...	...	...	...	..	...	73	26
Kent	548,337	44	638	...	...	..	9	333	...	...	...	...	19	1	1,044	320
Lancaster	1,667,054	76	1,246	...	1	47	...	1,259	3	10	27	9	82	5	2,765	748
Leicester	215,867	13	179	...	...	...	4	118	...	...	...	2	14	...	330	112
Lincoln	362,602	16	309	..	...	...	4	327	...	3	...	1	6	1	664	209
Middlesex	1,576,636	324	3,592	1	1	254	...	1,481	18	29	...	33	108	...	5,841	2,713
Monmouth	134,355	6	99	...	...	...	2	71	1	...	...	...	9	...	188	60
Norfolk	412,664	17	299	...	...	...	10	204	3	3	...	...	22	1	559	206
Northampton	199,228	8	154	...	...	...	...	85	..	1	...	1	3	...	252	101
Northumberland	250,278	17	258	...	...	...	4	183	...	1	...	...	21	...	484	169
Nottingham	249,910	14	172	...	...	...	6	197	...	2	...	...	22	...	413	119
Oxford	161,643	8	151	...	...	4	...	78	...	...	...	...	5	...	246	113
Rutland	21,302	...	15	...	...	...	...	10	...	...	...	...	1	...	26	9
Salop	239,048	9	217	...	..	..	..	147	..	...	...	1	6	...	380	149
Somerset	435,982	33	445	...	.	...	19	229	2	2	...	3	22	3	758	272
Southampton (Hampshire)	355,004	28	351	...	...	...	7	176	...	1	...	1	21	...	585	231
Stafford	510,504	14	335	...	...	...	2	255	...	...	...	...	21	3	630	208
Suffolk	315,073	7	278	...	...	...	2	133	3	...	...	1	11	...	435	172
Surrey	582,678	49	1,004	1	...	38	...	443	2	3	...	21	31	...	1,592	137
Sussex	299,753	34	308	...	...	...	9	168	2	1	...	...	9	...	531	218
Warwick	401,715	31	355	...	...	24	...	320	2	4	14	1	23	...	774	258
Westmoreland	56,454	3	57	..	1	...	...	26	1	...	...	...	1	...	89	35
Wilts	258,733	9	177	...	...	...	1	94	1	3	...	...	11	...	296	121
Worcester	233,336	13	173	..	..	...	3	175	1	1	...	...	9	...	375	123
York, East Riding	194,936	4	206	...	...	...	3	199	...	2	...	6	5	...	425	
,, City and Ainsty	38,321	6	69	...	...	...	1	77	...	...	...	2	4	...	159	781
,, North Riding	204,122	11	180	...	...	...	...	116	1	...	...	...	5	...	313	
,, West Riding	1,154,101	56	805	1	1	...	8	643	1	3	6	4	22	2	1,552	
TOTAL ENGLAND	14,995,138	1,070	15,420	4	5	384	114	9,629	50	78	47	96	670	18	27,574	9,815
WALES.																
Anglesey	50,891	...	24	...	...	...	..	19	..	...	...	...	5	...	48	17
Brecon	55,603	3	41	...	...	...	...	29	...	...	...	...	5	1	79	20
Cardigan	68,766	2	43	...	...	...	...	29	...	...	...	...	3	...	77	15
Carmarthen	106,326	...	52	...	...	...	.	53	...	...	...	...	6	...	111	37
Carnarvon	81,093	...	57	...	...	...	...	44	...	...	...	...	6	...	107	24
Denbigh	88,866	3	62	...	...	...	...	42	...	...	...	...	7	...	114	36
Flint	66,919	1	69	...	...	...	...	35	...	...	...	...	6	...	111	17
Glamorgan	171,188	6	113	..	...	...	..	90	...	1	..	...	13	...	223	74
Merioneth	39,332	...	26	...	..	..	..	14	...	...	...	...	3	...	43	14
Montgomery	62,219	4	54	...	..	...	..	17	..	...	...	...	3	...	78	24
Pembroke	88,044	2	44	...	...	1	...	44	...	...	...	...	1	...	92	29
Radnor	25,356	1	17	...	..	...	...	8	...	...	...	...	...	...	26	8
TOTAL WALES	911,603	22	602	...	...	1	...	424	...	1	...	...	58	1	1,109	315
London	1,873,676	340	4,221	1	1	282	...	1,806	19	31	...	44	127	...	6,872	2,621
Scotland	2,620,184	364	2,585	...	1	73	...	731	4	2	3	9	641	...	4,413	1,623
British Isles	124,040	19	149	...	1	5	...	60	...	...	...	...	9	...	243	56
TOTAL GREAT BRITAIN	18,844,434	1,475	18,756	4	7	463	114	10,844	54	81	50	105	1,378	19	33,339	11,808

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 29th ult. :—

CAREY, JOHN, Shacklewell.
EAST, HENRY, Sydney, South Australia.
NOBLE, WILLIAM, Linton, Herefordshire.
PRENTICE, EDWARD, North Walsham.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 28, 1853 :—

BARBER, WILLIAM HENRY, Longtown.
FAVELL, WILLIAM FISHER, Sheffield.
SMALLPAGE, WILLIAM, Knottingley.
STEPHENS, JOSEPH, Probus, Cornwall.
STILES, HENRY TOURNAY, Pinchbeck, Spalding.

APPOINTMENTS.

MEDICAL.—At a half yearly General Meeting, held at the Farringdon General Dispensary, on July 26th ult., Mr. Charles Miles, and Mr. N. John Damper, were unanimously elected Surgeons to the Dispensary.

MILITARY.—Hospital Staff.—William Steward, M.D., to be Assistant-Surgeon to the Forces, vice Deakins, deceased. William Mackenzie Skues, M.B., to be Assistant-Surgeon to the Forces, vice Roe, promoted to the Gold Coast Corps.

NAVAL.—Surgeons William Hannant (1851), to the Philomel: James Campbell (1852), to the Plumper, screw steam-sloop, at Portsmouth. Assistant Surgeons: Edwin T. Watkins (1848), to the Agamemnon, 91, screw steam-ship, at Portsmouth, vice William Richardson (1848), to the Antelope steam-vessel, at Portsmouth.

DEATHS.

DEAKINS.—June 8, at St. John's, Antigua, Robert Thomas Deakins, M.D. The *Antigua Observer*, of June 9, makes the following reference to the melancholy event :—"Yellow fever, we lament to say, has revived in all its fatal malignity. The decease, yesterday morning, of Dr. Robert Thomas Deakins, 67th Regiment, Assistant Staff-Surgeon, in charge of the detachment stationed in this city, St. John's, has occasioned much concern. The lamented gentleman resided here for the short space of eighteen or twenty months, but, from his urbanity, his openheartedness, and his generosity, he won for himself a large measure of esteem. His unlooked-for removal in the meridian of life, and in the bloom of health, from a youthful partner, an infant daughter, and all else beloved, has caused a general feeling of deep regret and sympathy."

PEILE.—July 24, Richard Spear Peile, M.D., Assistant-Surgeon 91st Regiment, aged 31.

STEEL.—July 4, at Kingston, Jamaica, deeply regretted, of a second attack of yellow fever, William Palmer Steel, M.D., aged 26, third son of William Steel, Esq., of Abergavenny.

TAIT.—May 20, at Calcutta, Dalhousie Tait, M.D. This young gentleman, of early promise, who was some time ago called to fill an important appointment in the medical department in India, has been unexpectedly and prematurely cut down. Respectably connected, he enjoyed the pre-eminent advantages of early training and a complete medical education. He was the son of Captain Tait, of Pirn, whose name was long identified with public institutions, and plans for the promotion of the happiness of others, both in a religious and civil capacity, in Edinburgh and its vicinity. Dr. Tait was educated at the University of Edinburgh, where he passed through the medical curriculum required for graduation with distinguished academic honours. He obtained a prize in the class of systematic surgery, taught by Professor Miller. He also prosecuted, with great vigour and ability, the anatomical and physiological studies. Along with the writer of this biographical obituary, Dr. Tait attended the practice of physic under Dr. Alison, where he was characterised for regularity of attendance and considerable proficiency. Some time after, he became a clinical clerk in the surgical hospital in the city of Edinburgh, where he discharged the duty with his wonted precision and acceptability. Enjoying the advantage of attending, along with Dr. Tait, the dispensary practice, as his earliest friend, the writer of this notice had the best opportunities of witnessing his superior skill and tact in the treatment of the patients. He also had the benefit of witnessing and admiring his fine temper and disposition, his great amiability and kindness. Dr. Tait, after passing through his examinations, and producing a thesis of no small merit, on the "Surgical Pathology of Aneurism," received the degree of M.D. In addition to this high distinction, he likewise obtained a surgical diploma. After passing through the examination of Apothecaries' Hall, London, he soon repaired to Calcutta, where he died on the 20th day of May last. So eminently gifted, his loss will be deeply felt by his mother, Mrs. Tait, and other relatives; while his memory and his virtues are affectionately embalmed in the fond remembrances of his early and devoted associates.

WRAY.—May 15, in one of the valleys of Cashmere, by the fall of an avalanche, Christopher Wright Wray, Assistant-Surgeon of H.M. 87th Royal Irish Fusileers, aged 27.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE.—The annual distribution of Prizes to the pupils of this School took place on Thursday, the 28th ult., T. J. Miller, Esq., in the chair. The following Prizes and Certificates of Honour were awarded :—

Anatomy and Physiology.—Prize and 1st Cert. ... Mr. Tweddle
2nd Certificate ... ... Mr. Wilson.
3rd Certificate ... ... Mr. Morgan.
Anatomy.—Prize ... ... Mr. Tweddle.
Certificates ... ... Mr. Cauty, Mr. Tobin, Mr. Griggs.
Surgery.—Prize ... ... Mr. Cauty.
Certificates ... ... Mr. Griggs, Mr. Tobin, Mr. Legge.
Medicine.—Certificate ... ... Mr. Cauty.
Chemistry.—Prize ... ... Mr. Morgan.
Practical Chemistry.—Prize and Certificate ... ... Mr. Jacques.
Dental Surgery.—Prize ... ... Mr. Wilson.
Materia Medica.—Prize... ... ... Mr. Morgan.
Midwifery.—Prize (senior class)... ... ... Mr. Rollason.
Certificates (junior class) Mr. Morgan, Mr. Wilson, (æquales).
Practical Midwifery.—Prize... ... ... Mr. Hutchinson.
Forensic Medicine.—Certificate ... ... Mr. Thomson.
Botany.—Prize... ... ... Mr. Morgan.

MEDICAL BENEVOLENT COLLEGE.—At a meeting of the Council, held on Tuesday last, James W. Freshfield, Esq., M.P., in the chair, the Treasurer reported, that on the late occasion of laying the foundation stone of the College, three hundred and fifteen ladies presented purses of five guineas, and that the collection altogether amounted to 3,400*l.* Thanks having been voted to the Lord Bishop of Winchester for kindly officiating on that occasion, His Lordship was elected a Vice-president of the College, as was also Benjamin Eveleigh Winthrop, Esq., who presented on that day the munificent donation of 500 guineas. Dr. Colledge, of Cheltenham, was also elected a Vice-president. Thanks having been voted to the Rev. Wm. N. Harrison, the vicar of Reigate, for having kindly advocated the cause of the Institution on the 24th ult., that gentleman was constituted an honorary Life Governor of the College.

MEDICAL BENEVOLENT FUND.—At the last meeting of the Committee, held July 26th, letters of acknowledgment of the sums voted at the previous meeting having been read, the Treasurer announced, that the balance due to him was 4*l.* 10s. Case 1.—The widow of a medical man who is training to become a school-mistress so as to be able to assist her family. Relieved several times previously. Recommended by Mr. Newnham and Mr. Toynbee,—voted 10*l.* 2nd. An orphan of a medical man, who died leaving four children; she has been an inmate in an orphan-asylum, but has not been re-elected. The sum of 90*l.* is required to secure her re-election, towards which 10*l.* was voted. Recommended by Dr. Bernard and Dr. Rogers. 3rd. The widow of a medical man who died lately at sea, when in charge of an emigrant ship. He left five children, the eldest of whom is only five years old. A policy of insurance for 100*l.* was forfeited from some informality. Recommended by Mr. J. B. Brown, Mr. Brown, of Hammersmith, and Mr. Toynbee,—voted 10*l.* 4th. The widow of a physician, who practised in London, who died lately, leaving seven children totally unprovided for. Recommended by Professor Fergusson and Mr. Toynbee. Voted 20*l.*, 10*l.* to be given now, and 10*l.* in January. 5th. The widow of a medical man in distress. Voted 5*l.* Several other cases were brought forward, but they were not entertained on account of their being inadmissible.

NAVAL MEDICAL OFFICERS.—From the printed votes and proceedings of the House of Commons, for the past week, it will be perceived, that in addition to the list of Petitions published in our last number, the total number amounted to thirty-three, with upwards of 900 signatures.

CHOLERA AND DROUGHT.—CALCUTTA would seem to stand in urgent need of a Board of Health, or of some better sanitary regulations. The weather had been intolerable. For years such heat had not been remembered. It surpassed even the drought of 1850. The thermometer in Calcutta had reached 106° in the shade. The consequence had been, a great increase of mortality. The deaths in Calcutta, during the first four months of 1853, had been 5230, against 4,277, in 1852. This increase had been almost exclusively among the Hindoos, the mortality among the Mohammedans being little above the average; and while, of the deaths among the former, 56 per cent. were from cholera, only 45 per cent. of the deaths among the latter were attributable to that disease; which is thought to indicate, that the superior quality of the food eaten by the followers of the Arabian Prophet protects them, in some degree, from the scourge. "During these four months, the number of corpses thrown into the river was 1511, while 2711 were burned, and the remainder, of course, consigned to the same universal

sewer. And the water of this stream, so polluted, is drunk by at least half a million of people below Calcutta. During three months, we have had about three showers. With the drought has come its invariable attendant,—disease. On the line of railway, the workmen are dying of cholera and small-pox in scores." In Calcutta, the police reports, according to the *Hurkaru*, show 75 deaths a-day, equal to 3400 deaths a-week in London; but these statistics are, we fear, not very reliable. But the most fearful mortality has been in the Sunderbunds, and in Assam. We have it on good authority, that, on the estate of one grantee, 500 persons have perished in 6 weeks, and on another, and smaller estate, 300. Predisposed to disease, by a pestilential climate, by the heat, which changes the marshes into a steam-bath, and by the want of water, these men seem to perish with a rapidity far beyond that of the worst districts to the north and west. At Nowgong, in Assam, also, according to the *Englishman*, 6500 persons have perished; and the effect of the mortality has actually made itself felt in the collection of the revenue. The Government have established cholera hospitals in Calcutta.

Cholera.—Copenhagen, July 25.—The cholera continues to rage. The King has summoned a Council to debate on the sanitary measures now required. To-day's list is—234 sick and 131 dead: total 3,835 cases, of which 2,041 have ended fatally. Two more medical men have fallen victims to the fatigues consequent on their arduous duties, and a well-known Danish artist, Professor Eckersberg. The Correspondent of the *Morning Chronicle* remarks:—"There is no doubt that the dreadful mortality has resulted primarily from the fortification system, and the consequent shocking packing of the lower classes in an incredibly small space—of course attended by the most disgusting uncleanliness and impure air, bad water, &c.; and, next, from the mistake committed by the medical authorities in treating the disease in the hospitals. The sick have been shovelled into the different hospitals, which all lie in or near the best part of the city—in fact, its Belgravia. These buildings have been consequently completely infected, and hundreds of the sick usually residing there have died. One-fourth and one-third have, in some instances, been carried off. Had the sick been treated in their own homes, the miasma would have been comparatively innocuous, a real contagion would not have been created, the mortality would have been one-half, the hospital members would have comparatively escaped, and a whole quarter of the town would not have been poisoned and completely emptied of all its better inhabitants, who have long since fled for their lives. But if cholera hospitals were to be used at all, they should have been chosen or made far from the town, isolated from other buildings. Next, it is important to remark, that all the airy parts of the town (apart from the streets voluntarily inoculated by the plague through the hospitals in them), as well as the extensive suburbs, are perfectly healthy. Scarcely a case has occurred in these quarters, and then it has usually been some person who has worked all day in the pestiferous districts. This at once decides the question as to what makes cholera imminently dangerous—it is filth, and stenches, and crowded rooms, and misery, and panic fear. It is often said, that electricity has great influence on this disease. A week ago we had a tremendous thunder-storm here, so that the whole town shook and trembled under the repeated discharges of the electric fluid. All expected that this would be the death-blow of the disease; but it has not had the least perceptible effect either way. This is a case so directly in point, that it is of some consequence. We, therefore, come back to the old A, B, C, sanitary reform, Boards of Health, fresh air, open spaces, fresh water, good sewers, sufficient house-room, sound provisions, etc.,—these are the conditions for life, these are the odds against all plagues and epidemics, the cholera included." July 28.—The cholera is now raging at Helsingfors. The Cabinet Council mentioned above, ended in smoke. Ministers had nothing to propose; but the King himself stated, that an extraordinary health officer should be appointed, with dictatorial powers. Should the epidemic continue, the medical men will be completely worn out. The list for July 27 was—sick, 279; dead, 149: total, 4413 cases, of which 2323 are deaths. July 29.—346 new cases, and 184 deaths had occurred. The total number of cases amounted to 4759, and the deaths to 2508.

Bengal Medical College.—From the Annual Report, just published by authority, of the state of this Institution, it appears, that the most important event connected with it during the past session, has been the opening of the large Hospital (founded by Mr. J. R. Martin) attached to the College, for the reception of the sick. The hospital, which contains 21 wards, has been completed at a cost of 2,36,772 2 6 rupees, and is calculated to accommodate 350 patients, at an estimated annual expense of 24,288 rupees. The Medical Officers of the Institution have recommended, for the adoption of the Council of Education, the suggestions which appeared in the *Medical Times and Gazette* of the 20th of November last, a copy of which they forwarded to the Council, of combining the practical with the theoretical in their examinations of the candidates for their diplomas, by the exhibition of preparations, etc., illustrative of the questions propounded to the pupils. From the annual return to the Council, of diseases treated in the Medical College Male and Female Hospitals, from January 1st to December 31st, it appears there were 2634, of which large number 2295 were discharged cured, 241 died, and 98 remained under treatment. The admissions and deaths of Europeans were 960 medical cases admitted; 820 discharged; and 141 died. Of the surgical, there were 419 admitted, 395 discharged, and 2 died. Of the natives, there were 783 medical cases admitted, 729 discharged, and 89 died. Of the surgical cases, there were 370 admitted, 351 discharged, and 9 died. The return of surgical operations exhibits great success; they amounted to 303, of which number 297 were cured, and only 6 died; of the latter number, 2 were very bad cases of strangulated hernia, which were admitted in a very advanced stage of the disease: there were also, during the same period, 2057 minor surgical operations performed at the Out-Door Dispensary of the Medical College.

Quackery.—On Monday last, an inquest was held at the Golden Lion Inn, Leeds-road, on the body of a young woman. It appeared that the deceased was brought home on Monday of last week from the place where she was in service, in a dangerous state of illness, from which she had in the first instance received the attention of Dr. Kay. When brought home, her mother sent for a herb-doctor, who, in conjunction with his wife, prescribed for the deceased, but without avail, as she died on Friday morning. The Jury brought in the following verdict:—"That the deceased died from congestion of the lungs, and the vessels of the brain, but whether this was caused by the improper administration of a quantity of lobelia, by a self-appointed vendor of medicine, does not fully appear." At their request, the coroner severely rebuked Airey, the herbalist, for having, by false statements, tried to throw the blame upon his wife; and warned him, that if the Jury had been satisfied that the improper administration of lobelia had caused the death, there would have been a verdict of manslaughter against him. *This herb-doctor was only a few months ago a woolcomber,* and his wife signed her deposition with a mark.

La Mert *v.* Dawson.—Special Jury.—The declaration stated, that the defendant had published a certain libel upon the plaintiff. The defendant pleaded, first, Not guilty; secondly, a justification.—Mr. Macaulay addressed the jury at some length, stating the particulars of the case, and giving some account of the plaintiff and defendant. Mr. La Mert, he said, had been apprenticed to a surgeon, and attended at hospital, but, from some family misfortune, or some other cause, he did not become a regular practitioner, but took a shop in the neighbourhood of the Minories, in London, and, in addition to selling drugs, gave advice to those who came to seek for it. There could be no doubt that in that neighbourhood he came in contact with a low class of persons affected with diseases of a loathsome nature. He subsequently removed to the West End, and resorted to advertising in order to bring a particular class of persons to him. But, having a brother a surgeon, practising in London, he did not advertise in his own name, but in the name of J. L. Curtis. Mr. Dawson was a regular practitioner, but who, he alleged, descended to the practice of writing a book, as if written by another person, in which he praised himself, and had also written another containing a libel on Mr. La Mert. The libel complained of was put in and read, as follows:—"I have been repeatedly consulted by patients who complain of having paid these advertising people large sums of money; and I have at this moment a gentleman under my care, sent to me by Mr. W. B. Hutchinson, of Sidney-street, Cambridge, in consequence of suffering from spermatic discharges. He gave one of these firms a bond for 1000*l.*, payable on his coming of age. I have also another sent to me by Dr. Chapman, of Grosvenor-street, Grosvenor-square. This gentleman is proceeding against Curtis, the author of 'Manhood,' for a similar fraud. The case was set down to be tried on the 6th of this month, but Curtis prevented the trial coming on, by refunding, at the last hour, the money, and paying the costs. This case had not been settled more than a few days, when Dr. Henry Bird, of Chelmsford, sent me a patient who had the misfortune to fall into the hands of the same party. It has rarely occurred to me to see a person suffering more intensely from mental anxiety than this unfortunate patient, in consequence of a peremptory demand from Curtis for the payment of a part of the bond which he had obtained on the promise of a cure. The following witnesses were then called:—Mr. W. Thomas, advertising agent, London, deposed, that Mr. La Mert practised in Albemarle-street, under the name of J. L. Curtis, and had employed him to advertise a book entitled "Manhood," and he had done so. The passage contained in the book put in, and just read, referred to Mr. La Mert.—Mr. Alexander Watkins, General Medical Practitioner, of High-street, Marylebone, deposed that he was articled to the late Mr. Dermot, a man of high standing in the Profession. Mr. La Mert was a pupil of Mr. Dermott's at the same time. Mr. Dermott had not so large a practice, but was a lecturer an anatomy. He devoted his time principally to instruction in surgery and anatomy. He and plaintiff attended the lectures, and also attended the hospital. (By Mr. Field.) Am a Licentiate of Apothecaries'-hall, but not a member of College. (By Mr. Serjeant Miller.) Attended the hospitals under Sir Anthony Carlyle, Mr. Guthrie, and several other gentlemen of great eminence in the Profession.—Mr. Abraham James Tipton, patent lint manufacturer, carrying on business in Southwark, deposed that he formerly kept a shop in the Minories, and did a considerable amount of business. In 1834 he

sold the business to Mr. Joseph La Mert, the plaintiff. He had occasion to go to the shop on various occasions, and saw by the amount in the books that the business had increased considerably. Had considerable practice among the sailors and other persons connected with the Docks. (By Mr. Field.) Mr. La Mert paid 600 guineas for the business, and had his own name over the door.—This was plaintiff's case. Mr. Field delivered a very able address to the jury for the defence, remarking on the fact, that all the leading Counsel on the circuit had been secured by the plaintiff, leaving the case of the defendant in such humble and inexperienced hands as his own. Notwithstanding all these advantages on one side, and disadvantages on the other, he had full confidence that he should obtain their verdict.—Mr. Dawson was the first witness. He deposed, that he was a licentiate of the College of Physicians, and Member of the Royal College of Surgeons, and studied in Edinburgh, London, and Paris. Was now carrying on business in Finsbury Circus, London. He knew a Mr. Brown. Mr. Brown came to consult him. He was suffering very much, and told him he had been treated by Mr. Curtis. G. White also came to him, with a letter of introduction from Dr. Bird. Brown was sent by Dr. Chapman. White was suffering from great anxiety, saying that Curtis was pressing for payment of part of a bond. Did not know La Mert until this action was brought. Had not the slightest knowledge of his being the author of the book called "Manhood." (By Mr. Macaulay.) Was the author of a book just put in, but was not the author of a pamphlet called "Exposures, &c.," though he had been charged with it. He knew the writer of that pamphlet, but declined to say who he was. He had been under his care, and he (Mr. Dawson) had cured him. He referred Mr. White to Mr. Willis, to proceed in the County Court of Westminster against Curtis. He did so because he believed he had been robbed. He did sometimes recommend surgical operations in cases in which Mr. La Mert recommended medicine. A gentleman who was under his care died about nine months ago, but the jury stated decidedly that he did not die from the operation that had been performed a day or two before. Had been in practice twelve or thirteen years. Had advertised his book a good deal lately.—Mr. E. Brown, sworn, deposed that he was of no profession. About 1850 he had occasion to consult a person calling himself Curtis. He described the symptoms to Mr. Curtis, who stipulated that he would cure him for 50*l.*, to be paid by two instalments. He paid that money, and was under Curtis's treatment for some months, but was not cured. He consulted Dr. Chapman, who referred him to Dr. Dawson, and subsequently instructed Mr. Willis to proceed in the County Court to recover the money. The action was settled by the defendant paying 43*l.* Thomas Willis, attorney, of Queen-street, London, deposed that he took proceedings against Mr. Curtis, in the Westminster County Court, in the case mentioned by last witness, and the action was stopped on the payment of 43*l.* 5*s.* (By Mr. Macaulay.) Could not say of his own knowledge that this was not the first action for libel in which Mr. Dawson was concerned.—Mr. G. White sworn, deposed, that in the course of last year he consulted a person calling himself J. L. Curtis, and residing in Albemarle street. He said, "This will cost some money." He said it would cost 30*l.* Told him he could not afford to pay so much. He agreed to take 25*l.*, with an assurance that he should be cured. He signed an agreement at that time. He produced an image to show him the frightful effects of the disease, and told him he would not undertake to do anything without he would either sign that paper, or pay the money down. He took some medicine, but it did not cure him. He received an application from Curtis for payment of 10*l.* He consulted Dr. Bird, who referred him to Dr. Dawson. He had been alarmed by the sight of the image which was shown to him. By Mr. Macaulay: Believed he had paid Dr. Dawson perhaps 3*l.* Had never paid any money to Curtis under the "I.O.U." He acted under the advice of Mr. Dawson in that matter. Mr. Curtis had not since applied to him for any money. —Mr. Macaulay, in addressing the jury in reply, dwelt with some severity upon the proceedings of the defendant, and contended that he had entirely failed to justify his conduct in publishing the libel upon plaintiff.—His Lordship summed up at considerable length, and the jury found a verdict for plaintiff, damages "One Farthing." (In this case, the names of Brown and White are fictitious.) The Court adjourned at six o'clock.

Mortality Notabilia.—In the week that ended on Saturday 1004 deaths were registered—a result which, though not unfavourable as compared with the usual mortality of the season in London, again gives indication of that increase which is characteristic of the summer mortality of towns as distinguished from that of the country. The deaths returned in the last three weeks were successively 904, 971, and 1004. In the ten corresponding weeks of the years 1843-52 the average number of deaths was 1068, which, with a correction for increase of population, gives a mortality of 1175. This series of weeks embraces the high mortality from cholera in 1849, and the average is therefore greater than it would be if derived exclusively from years less remarkable for epidemic disease.

Births.—Last week the births of 769 boys and 752 girls, in all 1521 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1344.

TO CORRESPONDENTS.

This being the period when the circulars are issued, from which Medical Directories are made up, it behoves each legitimate member of the Profession to forward any correction or addition that may be required,—these publications affording the principal means of distinguishing between the licensed and unlicensed practitioner.

[To the Editor of the Medical Times and Gazette.]

Sir,—I will feel much obliged by your giving insertion to one or two observations I feel called upon, in justice to myself, to make in reference to a review of my "Researches on the Primary Stages of Histogenesis and Histolysis," which appeared in your last Number. Whatever may be the critical sentence pronounced on the importance or value of any given observations and inquiries, I believe that the Author has no just ground of complaint against the critic so long as he conceives that such judgment has been delivered with fairness and impartiality—which I am willing to admit in the present case—but, when it appears that the reviewer has either overlooked important vital points, or palpably misinterpreted them, I conceive it only just that the Author should be allowed to set his researches in a true light. I, therefore, with all due respect, beg to take the strongest exception to the following passage,—which I can only attribute to a singular over-sight or a mis-interpretation of what I have written, not at present intelligible to me. You say:—"We would urge upon him the importance of simplifying, and not complicating, the theory of the formation of tissues, as he inevitably will, by enumerating, without classification, all appearances in the field of the microscope as equally important." Now, Sir, as there is no one more sensible of the value and necessity of classification than I am, conceiving it to be useful even when only provisional, and, moreover, as one of the chief results of this part of my paper was, the separation of the primary morphic elements of organic bodies into two distinct groups, I can only suppose, that you think that I have egregiously failed to effect this division, and, consequently, ignore it altogether; or that you have not read the particular pages which contain my classification. In the former case, as the paper has been noticed at all, it would have been only proper to have stated some grounds for ignoring my attempts at classification. I must also add, that I cannot by any means subscribe to the opinion, that this department of inquiry abounds so fully in well-directed and pertinent microscopic inquiries as to make any additional work superfluous. In fact, I believe that the study of histogenesis is still in its infancy—an opinion shared by very many.

Dublin. I am, &c. Robt. D. Lyons.

It was from no accident that we omitted Dr. Lyons' "classification" of his observations, and we now publish it, leaving it to the reader to say whether or no it simplifies Histogenesis:—

Amorphous Organic Fluid.

From which become developed—

I.

A-plastic Elements.

1. Primary organic granules:
   (a) Isolated.
   (b) Aggregated; and thus forming—
2. Granular corpuscles; or
3. Granular stroma or base.
4. Hyaline membrane (cell membrane, etc.).
5. Hyaline stroma or base.
6. Hyaline vesicles.

II.

Histoplasts or True Histo-plastic Germs.

7. Plastic corpuscles, granules, nucleoli, nuclei, and other germs, if any.
8. Fibres (themselves formative elements).
9. Cells.
10. Definite tissues.

Mr. Garlike's paper on Enlarged Tonsils shall be published as soon as our space will permit.

A Subscriber, Torquay, was replied to in the Number of the "Medica Times and Gazette" which appeared after the receipt of his first letter namely, July 9th.

Mr. Teale's interesting case of Uterine Tumour shall be inserted next week.

W. M. B., Weston-super-Mare.—The letter shall be inserted.

Mr. Chapman's letter shall be inserted next week.

The continuation of the reports of Dr. Burrows and Mr. Kirkes shall be inserted shortly.

We have been favoured with a number of letters referring to the Correspondence between Mr. Finlay and Mr. Wiblin, to which we alluded last week. We thought Mr. Wiblin wrong in not answering Mr. Finlay's request for an explanation of the statements imputed to Mr. Wiblin; but the matter was a very delicate one. It appears that the Orinoco arrived at Southampton on the 17th of July, and, in answer to a series of official questions, Mr. Finlay stated, on oath, that he had no cases of yellow fever, or of any other form of fever on board. Yet, on the day following, a man named John Binstead was sent from the Orinoco to the Southampton Poor-house, suffering, according to the report of the House-surgeon, "from severe typhus fever, and not in a fit state to be removed." Yet, Mr. Finlay certified that he "had not suffered from fever on board." Pratique was granted to the vessel by Mr. Wiblin, on Mr. Finlay's oath, and the consequence was, that great alarm was excited in Southampton by the report that yellow fever was in the workhouse; and not without ground, as the man had fallen ill at St. Thomas's, where yellow fever was raging, had come home in a ship on board of which fifteen deaths from yellow fever had occurred, and he himself died "yellow from head to foot."

We have not room to insert Mr. Hancock's letter on the Charing-cross Hospital this week.

COMMUNICATIONS have been received from—
Dr. Inman, Liverpool; Haynes Walton, Esq.; Dr. G. J. Fincham; T. P. Teale, Esq.; James Simpson, Esq.; G. A. M. Whitburn; Henry Hancock, Esq., etc.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES ON THE RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE
The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture III.

I am desirous, in this and the three succeeding lectures, to direct your attention to a very numerous and a very interesting class of cases which come within the comprehensive denomination of "nervous diseases." In their extreme results, many of the disorders to which I refer may end in epilepsy, delirium, insanity, or paralysis. I shall have frequent occasion to allude to these more serious forms of nervous disease; but my chief object will be to describe those slighter derangements of the nervous system out of which, in a certain proportion of cases, the more formidable diseases are gradually developed.

My experience of these cases has been obtained partly in the out-patient room and in the wards of King's College Hospital, and partly in the discharge of my duties as Physician to the public dispensary in Carey-street. For a period of six years, during which I held the last-mentioned appointment, I not only saw a large number of poor patients at the dispensary, as we see the out-patients at the hospital, but I visited at their own homes about 500 patients annually. This kind of work afforded me abundant opportunities for observing the habits and the habitations of the poor, and for obtaining a knowledge and a record of many of their family histories.

The general results of my observations with reference to the class of diseases to which I have alluded are: 1st. That in a large proportion of cases the more formidable derangements of the nervous system have their origin in some form of mental shock or anxiety. 2nd. When the nature and the origin of these nervous disorders are detected sufficiently early, the more serious forms of disease may often be prevented, and the slighter derangements entirely removed. 3rd. The method of treatment best adapted for the prevention and the cure of the diseases in question admits of some variation in different cases, according to the nature and the cause of the symptoms; but there is one remedy which, when given in the mode and with the precautions which I shall hereafter indicate, is more efficacious than all others combined. That remedy is opium. And, with reference to this point, with reference, too, to the fact, that the course of lectures which I have been appointed to deliver is one on materia medica, I might have designated this concluding portion of the series thus: "On the Influence of Opium as a Means of Preventing and Removing some of the Injurious Consequences of Over-work and Anxiety."

It will be apparent to most of those who hear me, that there is nothing in this general statement of results which is not already recognised and acted upon by the Profession. It is not on the ground of novelty that I venture to occupy your time by a record of any observations of my own; but I do so in the hope that a description of the class of cases to which I have referred may excite an interest in the minds of some of the younger members of our Profession, who, perhaps, are about to commence, or are already engaged in, the kind of work which has occupied so much of my own time,—I mean that of prescribing for dispensary patients and for hospital out-patients. There is no class of cases which will better serve to illustrate the intimate connexion between correct pathology and successful therapeutics; nor any in which an erroneous pathology is more frequently attended with practical ill consequences. Many erroneous notions respecting the pathology and the treatment of nervous diseases have been clearly shown to be such within a comparatively recent period; and I cannot refrain from alluding particularly to the Lumleian Lectures, by Dr. Todd,—the first series on Convulsive Diseases, and the second on Delirium and Coma,—as among the most valuable contributions to the very important subjects of which they treat.(a)

It appears to me that I shall best succeed in conveying a distinct idea of the class of diseases to which I am desirous to direct your attention, by giving first a brief abstract of a few cases selected with a view to exemplify their chief varieties. I shall afterwards refer, at greater length, to the principal causes and consequences of the disordered states in question; I shall offer some suggestions as to their pathological interpretation; and finally, I shall have to speak of the treatment. I wish it to be understood, *in limine*, that I am not about to occupy your time by a description of rare and curious cases which have an interest only for the scientific pathologist. The maladies to which I refer are among the most numerous with which the practitioner has to deal; they involve a great amount of mental and bodily suffering; although, perhaps, more common among the lower classes of society, yet they do not spare the highest; and although in the advanced stages they are sometimes very intractable, yet, in their earlier periods, they are often singularly amenable to treatment. It will, therefore, be apparent, that the diseases in question possess a high degree of interest, and that they claim our best attention.

Case 1.—The first case is that of a woman, L. H——, 41 years of age, whom I first saw at the dispensary, on the 6th January, 1851. She had been a widow eighteen months, and, for a long time before her widowhood, she had suffered much from anxiety, in consequence of the intemperate habits of her husband, who had squandered his money, and failed in business. For many months before I saw her she could not sleep without being disturbed by frightful dreams and spectral visions. Her friends told her that she talked as much in her sleep as when she was awake; she drank neither beer nor spirits. She had friends who were well off, so that she had never been in want; but her appetite was extremely bad, and she suffered much from flatulence and constipation. She had a painful sense of pressure on the top of the head, and her countenance was expressive of great anxiety. She had, at different times, been under the care of three medical men; one had called her disease tic-douloureux; another, she said, spoke of it as ague; and a third attributed her sufferings to inaction of the liver. She had been cupped and leeched, and several times blistered, but without benefit.

It appeared to me, that trouble and anxiety had disturbed her sleep, and taken away her appetite for food; and as there was no evidence of any organic disease, I anticipated great relief from a few nights of quiet sleep, if by any means that could be obtained. With this view, on the 6th of January, I ordered five grains of the compound soap pill to be taken every night, and a mixture, containing rhubarb and magnesia, with peppermint-water, to counteract the constipating effect of the opium. I told her to walk out daily, and I gave her hopes of speedy amendment.

She came to me on the 13th of January, and said, that she had slept better the first night after taking the pill, and on the second night still better; she had rapidly improved in every respect, and had a bright and cheerful expression of countenance. To continue the medicine.

My last report of her is dated the 17th January, and it is as follows:—She considers herself quite well; she sleeps well without dreaming; the sense of weight on the head is gone; her appetite is good, and she has no discomfort after eating; she "feels quite a different person."

The simple explanation of this cure appears to be, that ten nights of sound sleep had sufficed to remove the wearying effects of many months of anxiety and restlessness. With reference to the question of prognosis, it is important to observe, that the chief cause of her troubles had long ceased to exist; her husband's intemperance, his misfortunes, and his death, had occurred many months before; what she

(a) These Lectures are published in the *Medical Gazette* for 1849 and 1850.

needed was something which would, as it were, break the habit of dreaming restlessness, and opium has a marvellous power of effecting this object. This case is a type of a large number which have come under my observation, and in which the effects of a similar plan of treatment have been equally satisfactory. I will next give a few particulars of a case which differs from the preceding in the important fact, that the original cause of the patient's anxiety and illness was in active operation while he was under my observation, and consequently the treatment, although at first very successful, yet did not avail to prevent the development of confirmed epilepsy.

Case 2.—On the 17th March, 1851, I was called to see a merchant's clerk, J. R. S., aged about 28 years. I was told, that during the last three days he had been seized with fits of violent delirium. When I arrived, he was quiet, and answered questions rationally. His skin was cool and moist; his pulse was moderately quick and soft, and his pupils were natural. I found that his head had been shaved, his temples leeched, and his neck blistered, and he had been kept on a rigidly low diet. The result of this treatment had been an increase in the violence of the delirium. I ascertained, not only from his family, but also from his employers, who were friends of my own, that he was a very well conducted man, and of strictly temperate habits. His wife told me, that for several weeks before his illness his nights had been very disturbed; that in his sleep he had talked almost incessantly of his business; that in the mornings he appeared unrefreshed; that his appetite had been bad, and he had been gradually losing strength. When I inquired if he had been in distress or anxiety, I was, at that time, told that the fatiguing and harassing nature of his employment was the only cause for anxiety of which his family were aware. It seemed evident, that the case should be treated as one of delirium from exhaustion; and accordingly I ordered him to take a mutton chop with a glass of porter, and at bed-time a draught containing forty minims of tincture of opium. The next day, I found that he had slept well, and there had been no return of delirium. He rapidly recovered, and at the end of a week he returned to his employment.

About three weeks after he had returned to his work, I was asked to see him at his employer's warehouse, and I found that he had suddenly fallen in an epileptic fit, while engaged in washing his hands. I again inquired particularly for causes of anxiety, and again the only cause assigned by his family was the fatigue of his work. I saw him again in May, when I found that his nights were still much disturbed by dreams, and he was occasionally light-headed. I gave him strict directions as to diet and the general management of himself, advised him to take the compound soap pill occasionally at night, and to change his occupation, if he really believed that the fatigue of it was the occasion of his restlessness. The last piece of advice he had a natural unwillingness to adopt. He came to me again the last week in October, and told me that he had that morning been seized with a fit in the street, and further, that since he last saw me, he had had five or six fits, but on each occasion, except the last, he was in bed when seized. His wife told me, that his nights were constantly disturbed by dreams; that he talked, moaned, and frequently called out in his sleep. He was now afraid that he should lose his situation.

It was not until the month of February, 1852, nearly a year after I first saw the patient, that I ascertained the real cause of his anxiety. His father then told me that my patient's wife was a drunkard, and that when intoxicated she was extremely violent; that she had more than once threatened to stab her husband, and on one occasion she had actually wounded his hand with a knife. My informant had from the first been aware that this was the cause of his sons restlessness and misery; but he had been unwilling to speak of it until matters were becoming desperate. The fits continued, and the poor fellow was soon compelled to resign his situation.

It is evident, that the information thus tardily given is the central fact in the history of this case, and that it was essential for the complete explanation of the phenomena. I had been assured by the patient's employers, that his work was not such as could injure any man of ordinary strength; so that there seemed no satisfactory explanation of his continued suffering until this part of his sad domestic history was revealed. The next case is one in which some very distressing nervous symptoms speedily yielded to treatment.

Case 3.—A shoemaker, J. B., 31 years of age, came to the hospital on the 15th of January, 1852, and stated, that about ten months before, he, his wife, and five children had typhus fever. They all recovered; but at the same time he lost, from the same disaase, a brother, (who died in the bed next to his own at the Fever Hospital,) his mother, and his wife's father. Since this accumulation of illness and anxiety, he "has been unable to rally himself;" has felt melancholy; has experienced a sense of weight and noise in his head, and dimness of sight; he has had "shocking dreams," so that he has dreaded to go to sleep; when walking in the street he is often seized with dizziness, so that he would fall if he did not lean against the wall for support. He has a dread of sudden death. He is of middle height, well nourished, but with a very anxious expression of countenance. He works twelve or fourteen hours a day at his business, and usually has a walk daily. He says that he never was addicted to drink, and he presents no indications of intemperance; his appetite is good, and his tongue clean. He attributes his nervous condition to the fever, and to the mental anguish which he suffered; particularly, as he says, when, on going to the Fever Hospital, he left his wife and all his children ill at home.

On the 15th January, I ordered pil. saponis co. gr. v. om. n., and a mixture containing rhubarb, carbonate of ammonia, and peppermint-water, twice a day, to counteract the constipating effect of the opium.

On the 20th January the report is, that he begins to sleep better, and his countenance is somewhat improved. Rep.

24th.—He does not know when he has slept so well as he did last night, he feels better, has less dread, and less sense of weight, and noise in the head. Rep.

On the 12th of February the report is, that he has been going on very well, and is improving in every respect. He has taken no opiate pill for the last ten days, but he has slept well all night without unpleasant dreams; the sense of weight on the head is gone, and his spirits are good; he has less noise in the ears, and his sight is improved. Since the 27th of January he has taken, Ferri sulph. gr. ii., infusi quassiæ ℥i., ter die. To continue this.

Some days after the last report I met him in the street, when he told me that he was quite well, and had not thought it necessary to come again to the hospital.

The phenomena of this case admit, as I think, of no better explanation than this,—that, to use the patient's own words, "he had been unable to rally himself" from the state into which he was thrown by the conjoint influence of the fever and intense mental anxiety. An opiate pill, taken for about eighteen nights in succession, soon procured for him sound sleep, unbroken by the horrid dreams which had distressed him for the previous ten months; he was refreshed by this sleep, and quickly regained his usual state of health.

While I was engaged in writing this lecture, I called on this patient, and ascertained that he still suffers in some degree from a sense of weight and noise in the head, and he looks somewhat anxious, but his sight is good; and, although he has had much anxiety from the death of his two children, he has never relapsed into the nervous, restless state, which he presented when first he came under my observation.

The next case will serve as an illustration of the terrible results which may ensue when the state of dreaming restlessness which existed in the preceding case is permitted to continue unchecked.

Case 4.—A. S., a warehouseman in a printing-office, 29 years of age, came to the hospital on the 5th July, 1851, and stated, that he was subject to epileptic fits. I perceived that his intellect was confused, and his memory bad, and I requested him, when he next came, to bring his wife with him. I found that she was a very intelligent woman, and it was from her that I obtained the chief part of the following remarkable history. Her husband has always been a sober and well-conducted man, and he never had any serious illness until he became subject to fits, the origin of which she thus accounts for. About seven years ago, he was returning with his wife and some friends from Epsom races, when a child accidentally fell under the wheel of his chaise, and was killed. The poor man was much shocked and distressed when he saw the dead body of the child, whose head had been crushed by the wheel. In the course of the following night, he started up in his sleep, and called out "Oh, save the child." He continued to do the same almost every

night, and sometimes two or three times in one night. When he started up in this manner, he often screamed so as to awaken and terrify his children, at the same time he struggled and clutched with his hands; and when his wife aroused him he generally appeared quite unconscious that he had been dreaming or making a noise. At other times, he complained of having frightful dreams, and, putting his hand to his head, would say, that he felt as if he were going out of his mind. Sometimes he exclaimed, "That child haunts me night and day!" at other times, "There is that child again!" and often when, in the street, he has seen a child near a horse, he has been in great terror, and his hands have clutched convulsively. The phenomena, which I have described, continued without addition for two years, but about the expiration of that period, he was seized one morning soon after getting up, with a sudden and violent fit of convulsions. About two or three weeks afterwards, he had two similar fits while in bed, and in about six or seven weeks after this, he had another attack. The fits, which are evidently of an epileptic character, have frequently recurred up to the present time; he has sometimes had three or four fits in a day, and on one occasion he had as many as five attacks in one day. The longest interval between the fits has been eight or nine weeks. His wife has observed that the fits have always been more frequent when he has been weakened by any means. The only occasion on which he had as many as five fits in a day was this,—he went as out-patient to one of the hospitals, and while there he was seized with a fit. Immediately after the fit was over, he was cupped on the neck; the operation was quickly followed by another fit, and in the course of the evening he had three more attacks. These facts seem to be in opposition to the theory, that cerebral congestion is an essential cause of epilepsy. One of the most remarkable features in the history of this poor man is the fact, that he has continued to be haunted in his sleep almost every night by the same horrid vision of the child, with similar startings up, screams, and exclamations. This had occurred, as his wife assured me, so lately as during the night before these notes of his history were taken.

Rather more than a year ago, his wife found him, after one of the fits, preparing to cut his throat with a razor. He said "he had been told to do it, and he must." He then became quite maniacal, and continued so for two or three days. About six months ago he once attempted to jump out of a window, and about a month after this he wandered away from home for two nights and a day, and then returned in a distracted state, without being able to give a better account of himself than that "he had been taken to a station-house by the police, and that he had been by a pond of water; but he did not know whether he had intended to jump in or not." He has once fallen down stairs, and has often been brought home bleeding from having fallen in a fit in the street. His wife, who is apparently a strong-minded and courageous woman, has been so much harassed by his long and painful illness, that she is disturbed by unpleasant dreams, and often gets out of bed in her sleep.

When I saw him in July, 1851, he had the appearance of rather robust bodily health; he was of middle height, and his limbs were firm and muscular; his head was well formed; hair and complexion dark; his expression was heavy and fatuous; he had been well educated, but since the commencement of his illness his memory had gradually failed, and all his mental faculties appeared to be more or less impaired. There was no loss of sensation or of the power of motion. He complained of constant pain in the crown of his head, but his appetite was generally good. I lost sight of him quickly after I learned his history, and I had no opportunity of observing the effect of treatment. There was little ground for hope in so inveterate a case; but it is probable that much of his mental and bodily suffering might have been prevented, if, at any time before the occurrence of the epileptic attacks, he had taken for a few nights some opiate pill or draught; and if by that means the habit of dreaming had been broken, as my experience of many analogous cases has taught me that it probably might have been. The history of this case well illustrates the tendency which the habit of dreaming restlessness, when once established, has to perpetuate itself, and to induce other serious consequences.

I will now give a few particulars of a case, which will serve to show, that great relief may sometimes be obtained even after the symptoms have existed for a very long time.

Case 5.—R. M., a tailor, was 32 years of age when he first came under my observation, in October, 1850. He had been a delicate child, but, after the age of 9 years, he became healthy and strong, and continued so until nine years ago, when he had reached the age of 23. At this time, his father, who had a very good business, absconded, taking all his property with him, and leaving his family destitute. My patient was the eldest son, and he now had to provide for thirteen persons besides himself, including his own wife and one child. From this time he was fearfully harassed, and has suffered the usual horrors,—restless nights, spectral illusions, and confusion of thought, to a degree which has often rendered it impossible for him to attend to business; he has, besides, been distressed by temptations to commit suicide, which he has been enabled to resist only, as he says, by the force of religious principle which he happily imbibed in his childhood. At one time, for a period of two or three years, he was so nervous as to be incapable of taking care of himself, and he had two men to guard him. His habits were always strictly temperate. It may be well to state, that this history was obtained, partly from himself, and partly from his wife, who is a very intelligent and, to all appearance, a very truthful woman.

When I first saw him, he was tolerably well nourished, but his face was pale; his expression was torpid, rather than anxious; his sleep was disturbed; he complained of great confusion of thought, and of "losing himself;" he was desirous to take a situation as foreman in a shop, but he had no confidence in his ability to discharge the duties of such an office; he had a slight cough, and a great dread of consumption.

I did what I could to encourage him. I assured him of his freedom from bodily disease, and of my hopes that he might recover. I advised him to take a walk daily in the open air; and, on the 28th of October, I prescribed pil. saponis co. gr. v. om. n., et tinct. ferri sesquichl. ɱxx., inf. quassiæ ʒj. ter die.

On the 11th November, the report is, that his appetite has been much better since taking the medicine; he now sleeps soundly. Rep.

Nov. 18.—He is looking much better and brighter; he now feels that he can do his work, and he is confident that he shall get on and recover. He has had no confusion of thought the last few days. Rep.

Jan. 13.—He has continued to improve since the last report, and considers himself now quite well; his countenance is natural, cheerful, and intelligent; he sleeps well, and has neither dreams nor fears; "life is now a pleasure to him, instead of being a constant dread." He has no work at present, but he feels quite fit for work. He has continued to take the mixture regularly, but the night pills only occasionally.

March 17.—Two days after my last report, he undertook the management of an extensive tailor's business, which he conducts with ease and comfort to himself, and to the entire satisfaction of his employers. He sleeps well, without dreaming; his appetite is good; he declares that he never was better in his life, and his wife is of the same opinion. He looks perfectly well and strong. Since the last report he has taken no medicine, except an aperient pill occasionally.

In no other case which has come under my observation have symptoms so serious, and so long continued, disappeared so speedily and completely as they did in this instance. The improvement, too, has been permanent. I saw this man so recently as the 15th March, 1853, when he told me, that he has continued in the same situation for a period of two years, and, although his employment is very laborious and harassing,—his hours of business being from seven in the morning until ten or twelve at night,—he has not been one day absent on account of illness. He sleeps and eats well, and his countenance is cheerful and intelligent.

The five cases which I have thus briefly described will suffice to convey an idea of the general character of the symptoms which may result from the influence of mental shock or anxiety. I proceed now to the consideration of the most frequent *causes* of mental anxiety, with a view to facilitate the recognition of them by those who are investigating the history of nervous diseases.

The causes of mental anxiety are very various, both in kind and degree; the influence, too, of the same causes is greatly different upon different classes of minds, the difference being dependent partly upon the original constitution

of mind and body, and partly upon education and habits of life. It will be needless to dwell upon those causes of mental anxiety whose influence is immediately and universally recognised,—such as the illness or the death of friends, or, what is sometimes worse than illness or death, the misconduct of any one in whom a deep interest is felt; reverses of fortune; failures, and disappointments in business. The operation of these causes is so obvious, and so powerful, as to be at once perceived, even by the least observant. It is of practical importance to notice the different effects upon mind and body which are produced by grief for past and present calamities, and by the dreadful anticipation of future evil. I am persuaded, that the last-mentioned influence is, on the whole, the most frequent and the most powerful. There are few men or women who have not dreaded a hundred evils which have never come upon them; and every physician must have observed the miserable consequences of an over-anxious care for the future. Any doubt which may at first arise as to the correctness of the statement, that the dread of future evil is, on the whole, more injurious, both to body and mind, than even the influence of present care and sorrow, will, I think, be removed, if we consider how much the dread of future and uncertain consequences is mingled with, and adds to the weight of most of those evils which are actually present. I have found the recognition of this fact to be essential for correctly interpreting the mental and bodily condition of some of my poorer class of patients; and I will illustrate my meaning by one or two examples which are not exact transcripts of any single case, but which are drawn from a multitude of observations, and which I believe to be strictly true to nature.

A tailor, of middle age, who has had no previous illness, complains that, for several weeks past, he has been losing flesh and strength; his appetite has fallen off, and his sleep has been disturbed by frightful dreams and spectral visions. He has a sense of weight on the head, and his sight is becoming dim; he is distressed by palpitation and shortness of breath, and his pulse is slightly quicker than natural, but soft and compressible, and there are no physical signs of disease within the chest; he has some dyspeptic symptoms, perhaps a sense of weight and fulness, with flatulence after meals, but his tongue is clean, and the urine presents no important deviation from the normal condition. We see in the expression of the patient's face unmistakeable indications of an anxious mind, and we begin to make inquiries respecting his history,—inquiries such as a patient will rarely hesitate to answer when he perceives that they are not suggested by an impertinent and unfeeling curiosity, but that they are prompted by a hearty sympathy with his sufferings, and an earnest desire to obtain such an insight into their nature and origin as will best enable the physician to afford the relief which is sought for at his hands. The result of our inquiries is, that he is of strictly temperate habits, and that he has had no great trouble or cause for sorrow; his wife and children are well; he has had regular employment, and he is not in debt. If we ask why, then, he appears and is so nervous and axious, he will perhaps reply that he cannot tell, for he does not know. Pursuing our inquiries, with a firm belief that such a group of symptoms, and such an expression of countenance cannot be unassociated with mental anxiety, we find that he has a family of six children, and that, in order to support them, and to keep himself free from debt and difficulties, he has been working at his trade for sixteen, or perhaps eighteen, hours a day; that for a long time he continued to do this without much inconvenience; but a few weeks or months ago he began to sleep less soundly than formerly, he felt tired in the morning, his appetite and strength diminished, and he went through his day's work with difficulty. At this point mental anxiety began, for increasing weakness naturally suggested a doubt as to his ability to continue his work; and then came a dread of consequences. How are he and his family to live when he is unable to work? His fears increase all his difficulties, for they suggest frightful visions in his sleep, and a dread of some bodily disease almost paralyses him when awake; his sight is growing weak, and he anticipates total blindness; his heart often beats violently, and he believes that it must be in a state of incurable disease.

I have many times observed the group of symptoms which I have described in needlewomen, who frequently work the whole day and half the night, in hot and ill-ventilated rooms, who rarely have an opportunity for taking exercise in the open air, and whose earnings are so small as barely to suffice for the maintenance of themselves and others who may be dependent on them. In such circumstances, an apparently trifling cause, some slight illness, which partially unfits them for work, or a temporary lack of employment, or inability to complete a certain amount of work by a given time, will suffice to give rise to a train of nervous symptoms, which, probably, will continue and increase, unless checked by the timely administration of remedies. The group of symptoms which I have referred to may occur both in men and women whose habits are strictly sober; and I have repeatedly seen them in patients who, for a long time, have entirely abstained from the use of fermented liquors. It is scarcely necessary to say, that intemperance will aggravate the effects of anxiety to an extreme degree, and that, in many instances, the consciousness of this degrading habit, and the miseries which it brings with it, are the chief causes of the anxiety, which, acting upon an ill-nourished and weakened body, excites those nervous symptoms to which the drunkard is liable. The effects of over work and anxiety upon persons of strictly temperate, and even abstemious habits, are sometimes quite identical with the well-known symptoms of delirium tremens. One of my patients, whose habits had for several years been temperate, was suffering, when he came under my observation, from anxiety consequent upon the loss of his money; and he assured me that his dreams and spectral visions were then precisely similar to those which he had formerly experienced when he had delirium tremens from intemperance. He was quickly cured, too, by the treatment which would have been appropriate for delirium tremens. Now, the most reasonable explanation of the identity of symptoms arising from causes so apparently different appears to be this,—that, in both classes of cases, there is mental anxiety, although different in its nature and origin; and this mental anxiety is the most important element concerned in exciting the morbid phenomena. It is too obvious to require comment, that the delirium which is caused by the presence of alcohol in the blood,—the delirium of intoxication,—is entirely different from that which is called "delirium tremens." The latter form of delirium does not come on so long as mind and body are under the stupefying influence of alcohol, but when, after, it may be, a week's debauch, the man awakes to a consciousness of his condition; his money gone, disgrace, and perhaps debt incurred; then it is that delirium occurs, excited, as is probable, by the conjoint influence of a mind agonised by remorse and fear, and a body enfeebled by the insufficient supply of food which is generally involved in a fit of drinking. An Irishman once came to the hospital, and described to me certain nervous symptoms from which he had suffered for a period of three or four weeks. His sleep was disturbed by frightful dreams, his spirits were depressed, and his appetite bad. He was habitually very abstemious, but immediately before the commencement of these symptoms he had been once intoxicated, and he attributed his nervous symptoms to the regret which this lapse had occasioned him. I believe that his explanation was correct, and I have met with other similar instances, which confirm me in this opinion. I am desirous to guard against the notion, that the delirium and the other nervous symptoms which supervene upon intemperance are attributable to the merely physical consequences of that vice. No one, I am sure, could be found to maintain such a proposition in the abstract; but there is reason to believe, that both our pathology and our practice are sometimes tinged with a belief to this effect.

It is of essential importance, with reference both to the pathology and the treatment of delirium, to recognise the fact, that, in a very large proportion of cases, there is a mental as well as a bodily element; in some instances the mental influence preponderating, and in others the corporeal. There can be no question as to the important share which the mind has in the production of those nervous symptoms, which are frequently occasioned by immoderate intellectual exertion. In such instances, while the body is enfeebled by the neglect of wholesome exercise, and by the loss of the required amount of sleep, the mind becomes morbidly excited and anxious, and this occurs indifferently, whether the excessive labour be the result of necessity, or whether it be prompted by an inordinate desire of wealth or by an ambitious craving for distinction. In these cases, too, as in the case of the overworked tailor or needlewoman, the mental anxiety will increase in a rapid ratio as the gradual exhaus-

tion of mind and body renders the attainment of the object so eagerly sought for more difficult and doubtful. And here, too, it may be observed, that indolence and neglect of duty often occasion as much mental disquietude as excessive labour and fatigue. Those who *kill time* are not unfrequently

> "Haunted much by visions strange,
> And sore perplexity of roaming dreams,—
> The spectres manifold of murdered hours."

The infringement of moral laws brings discomposure and anguish upon the mind, as a physical injury gives pain to the body. Both classes of pain, too, are protective and beneficent in their design and tendency.

That form of delirium which has been so well described by Dupuytren, under the name of *traumatic delirium*, might appear to a superficial observer to have its origin in purely bodily causes. But it is acknowledged by those who have most accurately observed this form of delirium, that it bears no proportion to the extent of the bodily injury with which it is associated. Some patients remain free from delirium after the most frightful accidents, while others become furiously delirious after comparatively trifling injuries. Thus Dr. Todd quotes from Dupuytren the case of a young man, in whom delirium came on in consequence of a slight injury to one of his toes, and killed him in two days. I am persuaded that a careful attention to the previous history and the mental condition of these patients can alone reconcile these apparent discrepancies. A man who has been working to the full extent of his powers to support his family, and who has a laudable anxiety to keep free from debt and difficulties, is, as we may say, predisposed to become delirious, if he suddenly find himself disabled by some accident, however trifling the injury may appear, when considered only with reference to the body. If the habits of the patient have been previously intemperate, he is for various reasons the more likely to become delirious; for it is probable that the mind of such an one has been discomposed by the habitual neglect of his duties, while the body has been weakened by the substitution of alcohol for nutritious food; and if, in consequence of some accidental injury, his accustomed stimulus be withdrawn, and he be confined to bed with the unpleasant companionship of his own thoughts, delirium is a very frequent consequence, and one, too, which it is not difficult to account for.

We frequently meet with instances of severe and long-continued nervous derangement, as a result of a momentary but violent mental shock. Cases of epilepsy, in which the fits were the result of fright, are very common, and, in several instances which I have seen, the patient has been terrified into the fits by the cruel and wicked trick of dressing up a ghost. In one case, a little boy was frightened into confirmed epilepsy and paralysis by a policeman, who threatened to take him to the station-house, because he was making a noise in the street. The child ran a few yards, and fell in a fit at his mother's door. In another case, a man fell immediately in an epileptic fit at seeing another man killed by a fall from a scaffold. It is well known, too, that some nervous persons have been frightened into epilepsy by seeing the fits in others. And a very important practical lesson to be derived from a knowledge of this fact, is to protect the young and the nervous from so terrible a danger. Some time since, I heard of two twin brothers, about 14 years of age, one of whom became epileptic from some cause which I could not ascertain. They both continued to sleep in the same room; and the result was, that the second soon became epileptic too. In future lectures I shall return to the subject of epilepsy; and I shall refer to some of its most frequent causes and modes of origin, with a view to its prevention, in that numerous class of cases in which epilepsy is preceded by a long train of premonitory symptoms. As an illustration of this class of cases, I may refer to the history of the second and the fourth cases which I have given in the present lecture.

The causes of sudden and violent mental shock are very numerous, and most of them are so obvious as to require no comment. One of my patients, a woman, has been restless and excessively timid since receiving a fright from the collision of two steam-boats, and a false alarm, that the boat on which she was travelling was sinking. The alarm of fire is a very frequent cause of long-continued nervousness. During the last two or three years, I have had several patients, both men and women, who had continued to dream of fire, and to be excessively nervous and timid, since the burning of the Olympic Theatre, near which they had lived at the time of the accident.

Within the last two years I have met with some instances of nervous restlessness, which the patient's attributed to the dread they had entertained of the cholera when last it prevailed in London. These cases afford additional illustration of the tendency which this nervous condition has to perpetuate itself, and so to continue long after the original cause has ceased to operate. The cure of these affections is often not difficult; but I shall speak of that in my concluding lecture.

One of the chief objects which I have proposed to myself in the latter portion of this lecture has been to indicate some of those less obvious sources of mental disturbance and anxiety which are likely to escape the observation of any inexperienced pathologist who has not been prepared for their recognition. In directing attention to this subject, I have acted in the spirit of a suggestion which is contained in the following remarks by Dr. Latham.(a) "Prior to diseases, to their diagnosis, their history, and their treatment, prior to them, and beyond them, there lies a large field for medical observation. It is not enough to begin with their beginning. There are things earlier than their beginning which deserve to be known. The habits, the necessities, the misfortunes, the vices of men in society, contain materials for the inquiry, and for the statistical systematising study of physicians, fuller, far fuller, of promise for the good of mankind, than pathology itself."

The kind of inquiry here referred to and commended to our notice by Dr. Latham, is, I believe, an essential element of truly scientific pathology; and, with reference especially to diseases of the nervous system, its paramount importance is indisputable. It would not be difficult to show, that many serious errors which have prevailed with regard both to the pathology and the treatment of these diseases, are attributable to a disregard of that portion of the patient's history which precedes the occurrence of actual disease.

NOTES OF LECTURES ON SURGERY,

DELIVERED IN

The Theatre of the Royal College of Surgeons of England.

BY FREDERIC CARPENTER SKEY, ESQ., F.R.S.

Professor of Anatomy and Surgery to the College, one of the Surgeons of St Bartholomew's Hospital, etc. etc.

LECTURE III.

IN the two preceding lectures I have endeavoured to bring before your recollection certain facts and phenomena connected with the muscular system, partly in obedience to the requirements of the office I hold, but more especially with the view of claiming for the muscles the value due to their great importance in reference to dislocation,—and which more especially require consideration in dislocations of long standing.

The phraseology employed in dislocations appears to me objectionable. We speak of a dislocated shoulder, a dislocated hip, or ankle. But these are regions, or structures. The shoulder is composed of the scapula, the clavicle, and the humerus. Are all these bones dislocated? To dislocate the shoulder would be equivalent to carrying the entire shoulder to another part of the body. The regions of the hip, and the ankle, are fruitful sources of this objectionable nomenclature. We should employ that term which expresses the fact, or, in other words, the name of the bone, or bones, dislocated, such as dislocation of the humerus, femur, foot, &c.

In the last lecture, I alluded to the general subject of antagonism of muscles; I have yet a few words to say on that subject, for it is impossible for any surgeon to undertake the management of dislocations who is not cognisant of all the known and recognised phenomena connected with muscular action. We have examples of unusual power exerted by muscles, under circumstances of nervous excitement, quite beyond any evidence derived from the experience of everyday observation. I allude to cases of hysteria, in which this system is exerted with remarkable force. We are all familiar with these examples, in which the muscles are brought into action with a force that is immense,

(a) On the Diseases of the Heart.

and under which a power is developed for the occasion, that appears quite gigantic. I call to my recollection the case of a weakly girl, of 18 years of age, who, under the morbid excitement of hysteria, required the most vigorous efforts of four strong men to hold her in bed. We have similar examples in mania, and other forms of disorder, whether of the mental or nervous systems. We must distinguish bebetween these examples of powerful, but regulated, actions of healthy antagonism from the uncontrolled antagonism of rupture,—as in the cases of the fractured patella, or torn tendo-Achillis. In the first, although the action is violent, yet there is no discordance in the harmony of the action of the muscular system. In the second, that harmony is deranged. If we observe, with any attention, the phenomena incidental to the effort to reduce a dislocated bone, and more especially the femur, of a muscular subject, we shall recognise two distinct conditions of the muscles under extension. The first is that, in which, yielding to the superior force employed in extending the limb, the muscles yield their ground inch by inch, or rather line by line, while the head descends, though slowly, towards its socket. These forces may be represented by the numerical proportions of 12 and 10,—the lesser yielding to the greater. When the head has reached the level of the socket these forces are reversed. That which was secondary now becomes supreme, and at the very instant at which the extending force is greatest, the muscles of the limb combine in one vigorous effort, and drag the head of the bone backwards into the socket. This retraction, in the case of the femur, is equal to three-quarters of an inch. What continued effort does it not require to lengthen the limb, through the agency of the pulleys, to this extent? This force of retraction, observe, is exerted at the very moment at which the efforts at extension made by the surgeon are exerted at the highest point. What is the difference between these two conditions of the muscular system. In the one there is harmony, in the other none. It is simply an illustration of the old fable of the "bundle of sticks," in other words, co-operation. The principles involved are two. The first, vital; the second, mechanical. The vital principle embraces this co-operative antagonism, by which the muscles, having reached their natural range of action, combine to restore both themselves and the entire limb of which they form a part to their natural position. The mechanical principle tending to the same end, is recognised in the mathematical law, on which is founded the axiom, that a straight line is the shortest that can be drawn between any two given points. If these facts, and this reasoning, be founded in truth, what, let me ask, is the value of manipulation to which we so commonly, but so unprofitably, resort, in our efforts to replace a dislocated bone? To what end are all our forcible pressure by the hand; our kneadings, twistings, sudden relaxations, counter-extensions, and other equally ingenious devices, which serve but to aggravate the evil, they are, with the best intentions, almost certain to produce. But the evil is even greater in a negative than in a positive relation. By our reliance on a false principle, we lose confidence in the efficacy of the true; we rely on art, the common failing, forgetting nature. If the head does not return into its socket, it is because the muscles are undefeated; they are still masters of the field; extension, in fact, has been insufficient. Among the large number of dislocations that I have witnessed in thirty years, I cannot call to mind any single example of the femur being replaced by the hand of the surgeon, although his supposed aid may be occasionally so well timed, as to give the appearance of a substantial contribution. The same acknowledgment has been candidly made to me by others. The negative evil is this—we resort to false principles; we judge of the extension required by the watch; we resort to powerful twistings and rotations; the surgeon like the patient, becomes exhausted, and the operation is terminated without success. The duty of the surgeon is this,—to ascertain that the extending agents are sound, and well applied; to stand with his hand on the limb, and to watch the progress of the bone. If the head return to its socket, he will, next to the patient, be the first to recognise it. Sir A. Cooper says, when the head of the femur is drawn down to the level of the socket, nothing is required beyond lifting the head over the acetabulum. The act is impossible.

Sir Astley Cooper has laid down certain principles relative to old dislocations, that appear to me open to solid objections. The difficulties in old cases are deemed to be threefold:—1. The retention of the bone in its false position by a new capsule. 2. The contracted condition of the muscles. 3. The occupation of the socket by new material. The objections to attempt restoration of the bone, ranged under these three heads, all demand criticism.

1. With reference to the new capsule. The Hunterian Collection contains, in common with other Museums, many examples of the re-formation of fibrous capsules, nearly, if not equal, in thickness and density, to those originally torn asunder, and possessing sufficient strength to resist almost any amount of force that the surgeon dare to employ, without rupture. Many of these examples are now upon the table. By the aid of the dynamometer, I ascertained that the ligaments of the elbow-joint—which, compared with the fibrous capsule of the hip-joint, are slight—would sustain an extending force of nearly 5 cwt. without rupture. We may infer from this fact, that a completely-formed capsule of the hip, or even of the shoulder-joint, would render any effort to reduce or to remove the bone, nugatory. But then, it must be observed, that these examples are selected and perpetuated, not in reference to dislocations, but as evidence of re-formation of parts, and they are all obtained from the dissecting-room. In fact, they are probably of ten or twenty years' standing. Who would dream of an attempt to reduce a dislocation after twenty years? But these capsules, which begin to form early are susceptible of laceration if judiciously made, for many months. They acquire strength by time, and by movement of the limb. This, then, is the first difficulty; and let me ask, *quoad* this objection, are we justified in our refusal to attempt restoration in what are termed old cases. Time is a comparative term. We have the old cases of the *Surgeon*, and the old cases of the *Pathologist*. The first relates to months, the second to years. The capsule is lacerable within nine or twelve months. Not so lacerable in as many years.

The 2nd difficulty relates to the condition of the muscles,—and on this subject Sir A. Cooper has expressed some very positive opinions. In order to appreciate this condition, we should examine the evidence of their structure, at the expiration of hours, of weeks, and of months, and here the functions of the surgeon cease. The inquiry beyond, *i.e.*, of years, enters into the province of the pathologist. To the surgeon it is of far less importance. During the first three or four hours, subsequent to a dislocation, there is reason to believe that the muscular system is so far shocked as to be unprepared for opposition. The muscles remain flaccid, and the limb moveable; and during this period the surgeon possesses therefore great advantages. Such limbs are commonly reduced without difficulty. In the course of a day and onwards, the muscles become rigid, and have acquired increasing power of resistance. Probably this power is greatest at the expiration of two or three weeks; for the muscles have undergone no change in their structure, while they have adapted their powers to their abridged length without having lost their tissue by absorption. At the expiration of a month or more, provided they have remained unemployed, the muscular tissue begins to undergo the changes incidental to all muscles, whether paralytic or merely unemployed: while the contractility of the inorganic material of which the entire muscle is composed, namely, the areolar and cellular tissue, the sarcolemma, the fibrous expansion of the tendonous attachments, retain all their contractile power, and become settled down into permanent unyieldingness. As time advances, the entire structures of the limb are all involved—fasciæ, vessels, nerves, fat, and, though last not least, the *external skin*. It is, therefore, highly important that we distinguish the specific from the inorganic contractility of the textures with which we have to contend. This is the explanation of the difficulty attendant on the effort to reduce either fractures or dislocations after death, (as in the case of Mr. Forsters, quoted by Sir A. Cooper.) The most powerful extension I think I ever had occasion to make was in a case of overlapping of the bone in fractured femur. This case was placed under my care conjointly with that of Mr. Wiblin, of Southampton. The bone was refractured, at the expiration of many weeks, for the purpose, and we were obliged to put the pulleys into requisition for nearly an hour.

Between muscles that have been employed and muscles at rest there must be every distinction. In fractures with insulation of bone, or compound fractures with separation and loss of bone, the muscles adapt themselves to their shortened condition, and regain all the indications of health. But this

is a totally different state of things from that of muscles wasted by inaction. Of the various textures that contribute to the difficulty of extension in old cases of dislocation, none perhaps is more unyielding than the skin, where the bulk of the limb is large. The remarkable elasticity of this texture is daily observed in simple wounds of various kinds, which, as it is termed, "gape" to double their original size; while in the operation of amputation by double flaps the great tendency to contraction of the external integument is often urged as a plea, or rather an excuse, for its excess. We have reason, then, to infer, that, while the obstacle to reduction in dislocations in what are termed recent cases may be chiefly attributed to the contraction of the muscles, that, in old cases,—viz., from one to six months or longer, or up to any period at which the attempt to reduce the bone is warrantable,—the difficulty resides, not in the muscles, but in the inorganic tissues of the limb; indeed, in all the tissues, but very especially in the skin. Sir A. Cooper says: "The difficulty of reducing dislocations arises principally from the resistance which the muscles present by their contraction, and which is proportioned to the length of time which has elapsed from the injury."

The third difficulty appertains to the condition of the socket, which is said to be occupied by a new growth, precluding the return of the bone. This growth is sometimes called "adhesive,"—a term that does not convey the idea of formidable opposition. It has been also termed "ligamentous," but without any evidence given of its belonging to this class of tissue. Never having examined it, I cannot speak with confidence; the opportunities are few; but it is most improbable that Nature—ever liberal of structure essential to man's well-being—would have employed a structure destined to functions so specific, as ligament, for the mere purpose of stopping a gap. Nature abhors a cavity in the structure of the solid regions of the body, as she abhors a vacuum in the physical world. It is probable, therefore, that the lowest compound that can be formed from the blood is the material observed. But when, and under what circumstances, are sockets filled with new matter. At the expiration of years? These preparations, like the newly-formed capsules of enarthrosis joints, are all obtained from the dissecting-room, having achieved the venerable age, perhaps, of from 10 to 20 years. Is this condition of the socket an argument against the attempt at reduction? In Sir A. Cooper's large work on Dislocations, the publication of which exercised very considerable influence on the opinions and on the practice of the Profession,—this really great surgeon—than whom, probably, no authority could be higher—has declared his opinion as opposed to any attempt to reduce a dislocation, whether of the humerus or of the femur, the former beyond three months, and the latter beyond two; and for the following reasons. He says:—"If the dislocation has been long unreduced, the muscles lose their flexibility, and tear rather than yield to extension." "I believe that much mischief is produced by attempts to reduce dislocations of long standing in very muscular persons. I have seen great contusions, laceration, and bruises of muscles, tension of nerves, etc. In such cases, even though a bone were replaced, *it is often rather an evil than a good*, from the violence of the extension." Sir A. Cooper was notoriously a most industrious, as he was essentially a practical man. He contributed largely to the formation of a Museum by the labour of his own hands. Where, then, I may reasonably ask,—where are the cases on which he founds an opinion so remarkable? what dislocation does he allude to? and of what duration? One would have supposed, that, had such cases occurred within his knowledge, his remarkably candid mind would have dictated their publication for the benefit of the world. No doubt, injury has resulted from attempts to reduce dislocations, whether old or recent; and the fact exhibits evidence of the necessity of a more careful adjustment of the powers employed, than we have been in the practice of making. Rupture, however, is a very rare occurrence. The pain and consequent injury are invariably referred to the localities of the agents of extension and counter-extension, and not to the intermediate space; and are due to the coarseness and inefficiency of their application. Whatever other objections may reasonably be urged against the attempt to reduce old dislocations, I think we may safely conclude, that neither the formation of the capsule, the condition of the muscles, nor the occupation of the socket, is preclusive of the attempt, if skilfully and judiciously made.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS
No. IV.

REMARKS ON THE DISEASES OF THE BRITISH TROOPS IN BURMAH.

Extracted from the Reports of J. R. TAYLOR, Esq., Surgeon 80th Regiment, Senior Surgeon of H.M. Regiments with the Army of Ava; and JAS. STEWART, Esq., Surgeon 18th Royal Irish Regiment.

The following is a summary of the mortality in H.M. regiments from the date of embarcation on service in Burmah, to the 31st December, 1852. The aggregate strength in all Burmah and Tenasserim was 2283 for the whole of this period. The total deaths from all causes were 414, giving a mortality of 18·13 per cent. of strength in nine months.

Up to the 30th September, the force was at and near Rangoon, or in lower Pegu; afterwards at and near Prome, with the exception of the 51st Regiment, which remained at Rangoon all October.

The deaths per cent. of strength by all causes for the nine months were 18·68 in the 18th Regiment, 16·43 in the 51st Regiment, and 19·35 in the 80th Regiment.

The mortality at head-quarters at Prome during the quarter ending 31st December, 1852, was 7·71 per cent. of strength.

The principal diseases by which the sickness and mortality have been occasioned may be seen in the following Table:—

Diseases.	Officers.		Non-commissioned Officers and Rank and File.	
	Admitted.	Died.	Admitted.	Died.
Fevers	17	1	760	23
Dysentery..	7	0	354	45
Cholera....	2	1	153	66

No death occurred from wound or injury in action. The other prevalent diseases were affections of the lungs and liver, diarrhœa, rheumatic and venereal affection, ulcers, and diseases of the eyes.

Among the officers the proportion of sick to strength per cent. was 9·29, and of deaths 3·01; among the non-commissioned officers and rank and file, the former was 12·63, the latter 7·78.

An interesting account of the prevailing fever was published in our first Army Medical Report, from the returns of Mr. Murphy (p. 7). The general causes of disease are there enumerated at some length. Mr. Taylor alludes to other causes, and we extract his remarks on intemperance, climate, the effect of travelling, marsh exhalations, and bad water, with some important general observations on the identity of the nature of the prevailing diseases, and on the propagation of cholera. Mr. Stewart's few remarks on the treatment of dysentery and cholera are also worthy of consideration.

INTEMPERANCE.

I regret to have to notice an outbreak of intemperance, during the last month, and which still continues. It has been the cause of many admissions into hospital. This intemperance, too, is the more mischievous, from its being carried on in the jungle, and during the heat of the day. It is sad to observe the frequent instances of men only just recovered from long and serious sickness, giving themselves up immediately to this temptation, heedless of wavering health, and reckless of consequences. When such considerations avail so little, any other means of checking this vice seem hopeless. It was thought, that the facility of obtaining good beer at the regimental canteen below cost price would induce the men to substitute this for the more hurtful country liquors,—but such substitution obtains only very partially, if at all. The fact may not be of general application, and may be merely a singular coincidence; but it is a fact, that, in H.M. 80th Regiment, since the General Order, No. 26, dated 11th of January, 1850, affording increased facilities for obtaining beer at the regimental canteen, intemperance has been more prevalent. The country round Prome abounds in toddy trees, and for the liquor which these afford, the cheap porter available at

the regimental canteen, to the extent of three quarts a-day, is but partially accepted.

CLIMATE.

Another circumstance unfavourable to the health of the men has been the rapidly-increasing heat of the weather. Latterly, the thermometer, in tents, at three p.m., showed a temperature of 101° to 105°. The house in which I am now writing is a good wooden-roofed poongee house, with an additional thatch-roof, matting, chicks (bamboo blinds), and other appliances to keep down the heat; nevertheless, the mercury stands now, two p.m., at 101°.

EFFECT OF TRAVELLING IN PREDISPOSING TO CHOLERA.

My own experience and observation furnish indeed, ground for the belief, that there is something in the state of the system, induced by recent travelling, positively predisposing to cholera, which disease was, and is, one of the great sources of mortality on occupation of the country. And this predisposition would appear irrelevant of any influence of change of climate, simple travelling in the same climate almost equally producing it. The influence of marching in producing this predisposition among soldiers has been observed by many, and is statistically evidenced. Some explanation of this influence was offered in the Annual Medical Report, H.M. 80th Regiment, ending 31st of March last. There seems, however, to be produced by travelling a predisposition to cholera, the nature of which is not yet detected and I am induced to record some observations on this point with reference to the curious coincidence of the death of Majors L—, and S—, H.M. 80th Regiment. They both arrived from England in, or about, November, 1851, and both had been travelling, nearly without stop, from the time of their leaving England to the dates of their death. Paymaster H—, who died by cholera the day after the capture of Rangoon, had been in India since 1844, but had been on the move during three months prior to his decease. During the epidemic cholera in H.M. 29th Regiment, at Ghazeepore, the only officer who took the disease was an Assistant-Surgeon of the Honourable Company's Service, who had recently been sent to the station to do duty in the regiment in consequence of the prevalent sickness.

Assistant-Surgeon L—, Hon. Company's Service, dawked from Katmandoo, in Nepaul, to Dinapore, reaching that station in November, 1849. This officer died of blue spasmodic cholera the next day, though there had not been a case among the Europeans at Dinapore for more than three months previously; and if there had been any cases in the bazaar, the fact had not been noticed. I have noticed this case in the "Annual Medical Report of Her Majesty's 80th Regiment," 1851-52, in reference to the question of the existence and nature of a premonitory stage in cholera. In the same place, I have noticed on the same point two other cases, which equally serve the present question of the influence of travelling.

During the epidemic of cholera at Meerut, in August and September, 1845, three only of the rank of officers took the disease. Two of these, Colonel C— and myself, had, in the April previous, made long dawk journeys. Colonel C— had dawked up from Calcutta after arrival from England. He died of the disease. I had dawked up from Meerut to Cawnpore and back, to give evidence on a court-martial. Lieutenant D—, the third who had cholera on that occasion, died of the disease. He had not travelled so recently as the April previous; but, in the preceding cold season, had marched up with the regiment from Ghazeepore. The wife of the surgeon of Her Majesty's 10th Regiment, carried off by the same epidemic, had travelled up from Calcutta with her husband's regiment, arriving some weeks subsequent to the 29th Regiment.

Both these regiments arrived at Calcutta from England in the latter part of 1842, and both immediately after suffered severely from cholera, the 29th particularly, which had been moved up to Chinsmah. In the cold season of 1842-43, the 29th marched up to Ghazeepore, and, in the hot season of 1843, suffered severely from cholera; while the 10th, which had remained at Calcutta, did not, I believe, suffer from that disease in 1843. In 1845, both regiments marched to Meerut, and both regiments suffered from epidemic cholera.

It would appear, then, that recent travelling has some influence upon the system, predisposing to cholera; and if the cholera, probably also to that type of dysentery and fever with which cholera is so intimately related.

MARSH EXHALATIONS AND BAD WATER.

It is to be remarked that the greater number of cases of cholera were admitted from a detachment of two companies, occupying a fine, lofty, and many-roofed building, called the King's Monastery. It has since been destroyed by the Burmese. This building stood in an open space, about 400 yards from all other buildings, and was very spacious and airy, and raised ten feet from the ground, on wooden pillars. It appeared, in all respects, a most desirable building for a barrack, except that it was situated upon ground which had evidently been flooded by the river and the rains, though now dry and cracked, and covered with long, coarse grass. There was in the vicinity and to the prevailing windward of this building, a wet, marshy, and foul mullah. The water of the wells was also observed to have a very impure and mawkish taste. This, indeed, was observed of the water of nearly all the wells here. But in one well, near the Monastery, all the water was particularly fetid, and two dead bodies of Burmese were subsequently found in that well.

NATURE OF THE PREVALENT DISEASES.

A perusal of the preceding abstract suggests the interesting question, Have all this sickness and mortality been occasioned by several epidemics simultaneously prevalent? or have the admissions and deaths by fever, dysentery, diarrhœa, and cholera been but so many modifications of one general morbid state? To this last opinion I am inclined, from observation of the pallid, sallow complexion, and the anæmic and asthenic condition of the men; and also by having on former occasions, as well as during the past quarter, witnessed the transitional, mixed, and interchangeable relation of these diseases. This essential identity of morbid state, besides being evidenced by approximating and controvertible relationship of the cases, would seem here also a natural inference, from their simultaneity of occurrence among men so alike circumstanced in all respects, and exposed only to the same morbid agencies.

This identity of essential nature of the fever, dysentery, and cholera of India,—including, indeed, diarrhœa, and congestion and suppurative disease of the liver,—is an interesting feature of tropical diseases. The alliance, or rather confused existence, of these forms of disease may not perhaps strike the practitioner in first years of service, especially if he has met only sporadic cases; but epidemic prevalences of these diseases soon convince him, that they are all modifications of one general morbid state of system, the result of one set of causes; the varieties of phase or form of the disease being induced by the varying proportions and force of the morbid agents, or by varying predisposition in the individuals subjected to those agents. A further evidence of this identity of essential nature is the substantial uniformity of treatment found beneficial in all these diseases. It would be difficult to state the limit of the variety of forms of disease that may be developed under the tropical morbid condition in question.

PROPAGATION OF CHOLERA BY CONTAGION.

I still inclined to the belief, that cholera, once epidemically generated by ordinary causes, is capable, under favourable circumstances, of being transported to another locality, or of inducing the like or an allied form of disease in another person. I am now satisfied of the ill effects of mixing cholera cases with others; though I was not of this opinion formerly when I had less experience of the disease.

DYSENTERY.

Mr. Stewart treated, in the last quarter of the year 1852, 143 cases of acute dysentery, and 36 of chronic; 16 of the former, and 13 of the latter died. A combination of quinine and morphine was found very useful in the treatment, and in the most hæmorrhagic form, small and repeated doses of turpentine exercised considerable influence in diminishing the flow of blood.

CHOLERA.

Of 19 fully developed cases in the 18th Regiment, 11 died. In the treatment, it was found such cases as used calomel and quinine in repeated doses, with moderate stimulants, made the best recoveries.

CASES OF AFFECTIONS OF THE NERVOUS SYSTEM, OF ORGANIC AND INORGANIC ORIGIN;

WITH CLINICAL AND PATHOLOGICAL OBSERVATIONS.

By J. W. OGLE, M.B.

Curator at St. George's Hospital, and Physician to the St. George and St. James's Dispensary.

[Continued from page 107.]

Case 3.—G. S., aged 31, a labourer, living a few miles from London, was seen at St. George's Hospital, and became a patient there, February 25, 1852, when he was noticed as having a somewhat anxious expression, and rather staring eyes, and, when speaking, frequently hesitated and stammered, not being able, as he said, "to get out his words, which bothered him." His intellect appeared somewhat obtuse, and he frequently sighed. He complained of pain over the forehead. His mouth was slightly drawn to the right side, and the pupils were somewhat dilated, but to an equal extent. He stated that he had been subject to a stricture, with discharge from the urethra, for some years. For one month previous to the date of admission, the stricture had been much worse. At the time that the stricture became worse, he was seized with a "fit," which was followed by another one five days later; and after that, up to the date of admission, February 25th, he had thirteen more fits. The first fit, as the patient expressed himself, "took him like a shot," when he had been about half an-hour in bed; and at that time he lost the use of the whole of his right side, which was not regained for some time, even after his mental faculties had been restored. Of the approach of the second fit, he was made aware by a sensation in the sole of the right foot, which he thought was the cramp, and which extended up the leg, and into the arm, etc., until he became quite unconscious. The fits seem to have been nearly allied to each other in all respects. The countenance became pale quite at the outset, but shortly he was described as becoming "flushed and red in the face." The head was dragged to the right side, and there was twisting of the neck, and foaming of the mouth. There was also general "struggling," and the "eyes and mouth were drawn to the right." The attacks chiefly lasted from about three to five minutes. Independently of these attacks, he was subject, in the intervals, to frequent "numbing of the right leg," "tremblings of the whole body," and ofttimes the right leg would "start violently" of itself. No history exists of any choking sensations having been experienced. A medical man had placed a seton in his neck, without any success. When seen at the Hospital, February 25th, a catheter was passed into the bladder, with some difficulty, and retained there; and he was treated with alkalis, and aperients, and moderate diet. He was also slightly cupped at the back of the neck, and subsequently some gentle bitter was given to him. Up to March 7th, he had several more severe attacks, and much of the "trembling" also; but he acknowledged that the "feelings were not so violent in one place, and were more circulated over to the left side." The headache was, however, still great. His speech was more fluent; and the nurse observed that latterly he had "more quickly come round after the fits." He had not at all foamed at the mouth, but once he had bitten his tongue, and once his lip. The bowels were regular, tongue clean, and appetite good. The stricture, with a boujie, still kept in the urethra, was easy and comfortable.

After the above date, March 7th, he never had another fit, though he fluctuated greatly as to general health, and used such expressions as the following with regard to himself,—"muddled a bit in the head," "stinging in the left arm," "my inside seems to work, which goes off on breaking wind," "giddiness at times," "tingling at the soles of the feet," and so forth.

I saw this patient several times in the country, subsequently to his dismissal from the hospital, but he never had any more fits. His mind still remained in the same obtuse, useless condition, and his right side still partially paralysed. Eventually his mind became more affected as he was obliged to remain perfectly idle, according to some absurd rule adhered to by his parish authorities, who refused to allow him to work unless he was discharged from their books of relief altogether.

Remarks,—Here we have an instance romewhat rarely met with, of urethral irritation leading, in a susceptible subject, to severe spasmodic attacks. The irritation of the stricture, which had become greatly aggravated, seems to have been the exciting cause of congestion, which led to paroxysmal apoplexy and epilepsy, and probably left some ecchymosis, or effusion, as results; and these, according as they are more or less permanent, require the use of setons and other counter-irritants.

In one attack we have the instance of its coming on during sleep, which is very frequently the case, the two conditions having congestion as a common base—onee only was any warning perceptible, and that in the paralysed limb. Dr. Watson remarks, that warnings by no means commonly occur, and this is the more curious, as, doubtless, they depend upon congestion, having, as it were, a "stunning" effect at the origin of any set of nerves. Probably the amount of warning may depend on the amount of congestion; should it progress beyond a certain degree, then other symptoms are produced. Of this we have an example in the variety of feelings and symptoms arising from different degrees of pressure upon nerves in the extremities, as the ulnar for instance; prickings, numbness, startings of the limb, and total loss of power, etc. The true aura epileptica, so often mentioned, appears to be but seldom met with. This case, also, seems somewhat allied to the syncopal epilepsy, *i. e.*, an epileptic attack complicated by more or less of syncope, but not to be a complete instance. In such perfect cases it appears, that besides such congestion of parts of the nervous centres producing spasmodic muscular action, or muscular paralysis, there is congestion of some portion, from whence influence to the heart is obtained, and owing to which depression of its action arises.

We will not pass over the "startings and jumpings" of the paralysed limb, which might have been owing to reflex action, the result of unconscious contact with some object, as the bedclothes.

Case 4.—W. L., aged 48, a thin, active man, of ruddy, healthy look, and a farrier by trade, was seen about the 25th of October, 1852. For four months his "eyes had been bad," and for the first week of his illness he was the subject of violent vomiting, with giddiness and headache. The vomiting preceded the headache, and ceased when it came on. The headache had continued ever since. He had never had a fit, as far as he knew, or lost sensibility or power of motion. When seen, his face was flushed, and the veins of the forehead were very dark and prominent. The pupils were dilated, and the eyes rather fixed, but there was no strabismus. On his speaking or taking snuff, the mouth was observed as being drawn slightly to the right side, and there was slight stammering at times. There was also noticed considerable knitting of the eyebrows, and superabundant discharge of tears from both eyes. He complained of a constant severe pain at the vertex of the head, like a knife running in, which became much worse on pressure, and, when the right side was more affected, he had a loud noise like the "ringing of bells" in his right ear. He had constant giddiness on keeping the eyes open, and invariably fancied that he saw black discs, "as large as a tea-cup, with red marks in the centre as large as marbles." The mental faculties seemed entire. There was no dysphagia or deafness. The bowels were costive, and the tongue furred. The pulse and heart's action were quiet, and the urine natural.

He was ordered colocynth and mercurial aperients, and a blister to the nape of the neck.

Oct. 31.—The veins of the head and forehead were still large, and the headache was great. The bowels had been relieved, and the tongue was less furred. Nothing like delirium had occurred, or vomiting; and there was no account of the extremities being in any way affected.

Nov. 1.—The distension of the veins was noticed as being very variable, and the head was very often extremely hot to the touch. He had been going on taking aperients daily. The spectra were still perceived.

About the 5th November, there was a great diminution of the intense pain at the head, and no spectra were complained of, and he was taking, besides aperients, the iodide of potassium.

On the 23rd, he only complained of dimness of sight; no spectra, and no headache. The tongue was clean, and the appetite good. The facial paralysis had quite disappeared. He was pronounced quite well Dec. 1.

Remarks.—It is obvious that marked congestion existed in

this case, the external or superficial vessels corresponding with intercranial ones. Of the brain itself, the state of the pupils, the curious ocular symptoms, the vomiting, and the freedom from any affection of the mind, pointed strongly to the base as the part more especially involved. The partial facial paralysis might have been the result of some fit occurring unknown during the night, but we have no certainty of the fact. It was probably the effect of slight ecchymosis from extreme congestion, which gradually was removed.

Case 5.—W. R., aged 42, a healthy man, was servant to Lord Westmoreland, as Ambassador at Berlin and Vienna. He had been subject to occasional headaches, supposed to be from the heat, but not to any marked irregularity of the digestive organs. While in Vienna, about the middle of summer, 1851, and exercising some horses before breakfast, he was seized with a "fit," and fell from his horse. He was removed to the Hospital of the Charitable Brothers, ("Spital der Barm-herzigen Brüdern,") and was bled, leeched, and "strapped down," according to his wife's account, and some form of counter-irritation was used to the legs. When seen by his wife in the evening, for the first time, he was perfectly insensible, and could not be roused. For four days he remained in his bed unable to notice anyone, and rambling in speech. His skin was perfectly cool and pale. After "coming round," he still remained three or four days before he became quite sensible; there was no biting of the tongue or foaming at the mouth. For fourteen weeks, owing to the severe effects of the counter-irritation, he was obliged to remain in the hospital; but no impairment of either mental or bodily powers remained from the apoplectic attack, which was imagined, at the time, to have been a *coup de soleil*. The legs became healed, and he went on quite well. About the end of January, 1852, he returned to England, and at that time was in some degree of mental anxiety as to his future prospects. Shortly after his return, and while in the midst of good bodily health, his wife noticed him one morning as fixing his eyes in a very curious manner on the wall. He became of a "pale blue colour, and his eyes rolled, and he foamed at the mouth." The mouth was not, however, drawn to one side, or the tongue or lips at all bitten. He became quite insensible, and remained so for two days; he was treated with very strong cathartics. On "coming round" he rambled much, but no affection of the memory, speech, or bodily powers remained. Some weeks following, the old wound of the leg, set up by the counter-irritation in Vienna, broke out again slightly, but did not yield much purulent discharge. For this he was treated. When on the point of imagining himself well again he was seized about ten p.m., while apparently well, with very loud and strange fits of laughter, without any cause. He then screamed very loudly, and twisted his neck violently on one side, gnashing his teeth violently. The eyes became bloodshot, and the face red and swollen, as if he were "strangled," to use the expression of a bystander. The face and eyes "worked much," and the legs were drawn up to the trunk, which was greatly swollen. He bit his tongue, but only foamed very slightly at the mouth. This went on for two or three hours, his body being perfectly warm. He was seized with vomiting of much dark fluid, and had great difficulty in swallowing. There was also "great working of the throat," and noise in breathing, but no "blowing or flapping of the cheeks," or "workings of the jaws." He presently became quieter, becoming, at the same time, cold and stertorous, and he gradually passed into a comatose state, in which he died about twelve a.m. the following day, being about eight hours after the commencement of the attack.

On *post-mortem* examination, I found that the veins of the membranes of the brain were very distended, and that very much fluid existed under the arachnoid membrane, and in the ventricles of the brain, but nothing more. The structure of the brain was perfectly natural, and nothing like a sanguineous "clot" or disease of the bloodvessels existed in any part. The kidneys and other organs of the body were natural.

Remarks.—In this case we have an instance of paroxysmal apoplexy, which, in the latter attack, was greatly modified by epileptic symptoms. There was evident trachelismus, and some amount of so-called laryngismus; and the loud laughter must not be unnoticed. This was probably owing to some pleasurable feeling allied to temporary mania caused by congestion. I will quote, at another time, a well-marked instance of most severe, but perfectly temporary mania, connected with intestinal irritation. It might have been imagined, that such severe symptoms as this case presented, with coma and stertor, could only have resulted from some extravasation of blood; but yet none was found. Other instances I have to bring forward, in which most urgent apoplectic symptoms, followed by coma and death, existed, and yet nothing but extreme watery effusion was found within the cranium, causing extreme pressure, and so every symptom of pressure from clot. In the earlier attacks in this case, which were most probably not the results of a *coup de soleil*, there had been, doubtless, similar serous effusion, causing the long-continued insensibility; but this became subsequently absorbed. It is worthy of remark, that we have no history of stertor or such like paralysis from the pressure in the early attacks, and how tardy its appearance was, even in the last and fatal attack. I ought to have mentioned above, that the freedom from facial paralysis or ptosis, or such one-sided symptoms, in any of the attacks, might have led one to expect general effusion rather than extravasation of blood at any single part. Other cases will, however, show, that even on this point we cannot always be correctin our diagnosis. The surgeon who had the treatment of this patient as to the sore legs, &c., agreed in the expediency of trying tracheotomy in such cases; but at the time this remedy had hardly been suggested in their treatment.

NOTE.—With regard to Case No. I. of this series, detailed at page 108, in the Number for July 30, the word "trachelismus," introduced in the 26th line from the top of page 108, should have been "torticollis."

[To be continued.]

MEDICINE IN LEWCHEW.

INTRODUCTION OF VACCINATION.

(Continued from page 138.)

Forms of Disease most Prevalent.—Cutaneous diseases are very frequent, especially the scaly lepra, tetters, psora (itch) and leprosy (the Arabian or tubercular leprosy.—F. F.)(a) All these diseases, except the venereal forms, are, I think, directly traceable to bad food, bad dwellings, and bad clothing, especially to the unshod foot. Among children, the prickly heat of the summer degenerates into frightful tumours. Scald-head is very common, and very severe and tedious, forming a disgusting crust, attributable, no doubt, to the long protracted lactation. Ringworm is no less frequent; and a very tedious and fatal form of it is apt to follow the bites of rats, to which the Lewchewans are much exposed, from their habit of lying among vermin on the ground. Baldness (porrigo decalvans?—F. F.) I have treated successfully in three cases; and, considering the notoriously dirty habits of the men, I am surprised that matted hair is not more frequent. Erysipelas rarely occurs, while elephantiasis (the Arabian—F. F.) is often seen, and is developed very suddenly. We have numerous people walking about with the characteristic Barbadoes or Cochin leg. Partial albinos are also found here.

Measles, scarlatina anginosa, and small-pox, are well known; the latter is communicated by inoculation, all the children under the age of 13 throughout the country being subjected to it every thirteenth year. Childhood is preferred for inoculation, because the disease usually occurs more mildly at that age. Yet, notwithstanding this precaution, many adults fall victims to it; and the frightful number it destroys, besides blinding, maiming, and disfiguring others, should have long ago induced the Lewchewans to discontinue a practice which they do not know how to regulate.

Symptomatic fever is always confounded with idiopathic. Intermittents are not rare, but baffle the skill of the native physicians. Rheumatism is frequent; gout not heard of.

Disorders of the digestive organs are most frequent, as might be expected in a people who are continually eating and weakening their stomachs with tepid and spirituous drinks. Hence arise flatulent dyspepsia, vomiting, diarrhœa, and dysentery. Cholera, however, is rarely heard of.

(a) The subjects of this disease form a numerous class, many or most of whom are maimed hand and foot, having lost through the disease toes and fingers, and sometimes the whole metatarsus.

Hernia is often produced by violent athletic exercises, attempted by men untrained and unaccustomed to them.

Disorders of the urinary organs also occur in painful abundance, through all the stages of dysuria or strangury, up to lithiasis, all of them to the native physician most difficult to grapple with. It is this class of disorders that has compelled people to seek relief from the foreigner, notwithstanding all the vigilance of the authorities to prevent it. Hydrocele appears from its frequency to be endemic.

Dropsies are frequent, especially ascites.

The respiratory organs appear to be least liable to derangement.

Diseases of the nervous system are frequent, in the form of floating or settled pain, especially headache, hemicrania, and palsy. Hypochondriasis occurs alarmingly among the upper classes, and complete idiocy is not rare. I have also seen a case of mania, of epilepsy, and of tetanus.

The eye and ear suffer their full share of disease. Cataract and staphyloma are frequent; amaurosis less so. Deafness is common; dumbness rare; congenital lameness is unknown.

Injurious Curative Methods.—Every infant is supposed to be infected at its birth with hereditary poison, té duku, which is the source of the pus in small-pox, and of other critical matters, and which requires to be eliminated. Hence every child, as soon as it is born, is immediately doctored, to get rid of the té duku. After certain disorders, the remaining poison, yu duku, is still liable to produce tumours and other swellings, and also requires to be removed from the system, for which there are various processes.

Moxa, or the application of the actual cautery, is here a universal remedy. Little rolls of the dry leaves of futsi-bá are so numerously applied, that there is no Lewchewan of any rank who has not dozens of burn-marks on his body. They consider a counter-stimulus of the highest medical virtue. The internal disease, they say, is thereby dragged out upon the surface of the skin. Even infants are moxa'd on the four limbs. It is applied on the forehead, eyelid, behind the ear, on the neck, back, belly, etc.; no part of the body is too delicate for it. It is constantly had recourse to to induce hard tumours, especially syphilitic ones, to suppurate.

Next to the moxa, the chief remedy in all disorders is eating, or, rather, *high feeding*. They literally force food down the throat, notwithstanding all the protestations of the patient. Children, especially, suffer from this ill usage, and are said to die sometimes with the food in their mouth, probably even choked by the violence employed. They maintain that, as it is impossible to live without eating, the more one eats the better life is preserved; and that, in illness, man has more need than at other times of recruiting his strength. We referred them to the example of animals, who refuse food when indisposed. This they ascribe to the stupidity of the beast. Again, we asked, whether they did not think it reasonable to let the belly rest as well as their limbs when tired, or their brains when overworked, (supposing such a thing to happen in Lewchew.) All such arguments were in vain. Their term for medicine, kútturi, signifies properly anything taken inwardly to benefit the body, in addition to the daily food; so that feasting is, according to their view, quite within the scope of medicine. The same idea—the more the better—is connected with medical remedies. Hence, when ill and supplied with real medicine, they are displeased with small quantities, and often swallow several doses at once.

Exclusion of Light and Air.—Though, when in health, impatient of heat, and delighting to sleep with open doors, or exposed to the cool air of the summer nights, in sickness they go to the other extreme, and creep under the catcha (musquito curtains, mostly of thick texture, or, among the poor, of paper, and impervious to the air), while every means is employed to increase the heat, and produce perspiration. The doors are closed; and, even in the height of summer, a portable coal fire—sometimes two or three—is kept burning in the room, and tea, warm water, and soups, are always ready. The patient lies with his head on a level with, or even lower than, the fire, which, for want of air, is always in a mouldering condition; and it is far from improbable that his death is sometimes caused by the carbonic acid emitted from it.

Noise and Revelry.—Quietness is soon banished from the sick chamber, especially in cases of dangerous illness, and during parturition. No opportunity of gluttony being ever lost, the meeting of acquaintances under the plea of sympathy is quickly converted into drinking matches, to dispel grief; and wild mirth prevails in one room in proportion to the groans and pains in the next.

Parturient women are dealt with still more exterminatingly than other patients. While yet in labour, and still more so immediately after delivery, the poor woman is surrounded with a hell in miniature, fires, as many as the room will hold, earthenware warming-pans pressed close to the body, behind and before, and woman and pans covered over with the whole stock of clothing the family and friends can muster. The frequent supervention of hæmorrhage, mostly fatal under this treatment, is not surprising. I need scarcely add, that what Nature cannot do to remedy preternatural labours no art can here supply. The population of Lewchew is literally decimated while being born. In a certain village near the sea, we are told, quite a contrary practice prevails, by which mother and child, immediately after the act of parturition, are immersed in the sea.

The Smacking Cure is said to be a substitute for bleeding. In inflammatory disorders, the upper arm, near the elbow, is tied; the part between the ligature and the shoulder is wetted, or wrapped in a wet cloth, and briskly smacked.

Trampling and Kneading the Belly is a more serious method of cure. It is employed in cases of colic, and other forms of enteralgia. The patient is laid on his back, and his friends in succession kneeling on his belly, trample and pound him with knees and fists into an agonising perspiration, until he swoons into sleep.

Cutting Open the Belly is a kind of Cæsarian operation. The section is made across the epigastrium, and is considered a very effectual remedy in shúku—hypochondriasis. It is a genuine Lewchewan invention, introduced by a renowned physician of high antiquity, who slit open a man's belly, introduced a dish to serve as a second covering to the intestines, or a kind of lining to the natural walls, and healed up the wound to the perfect satisfaction of all parties. This is so far from being a joke, that I was consulted in a case where the intestines fell out through a similar incision,—an accident which, we are told, often happens after the operation, when the edges will not unite by the first intention.

Abscesses are usually bored into while quite hard, with a rough packing-needle, used alike by the surgeon and the straw-mat upholsterer. I know of a poor woman who died in consequence of an abscess in the breast being thus cruelly bored open.

Among the obstacles to a rational cure must be mentioned the national aversion to baths and purgatives, which cannot fail to augment the bodily ailments of a voracious people, living in a hot climate.

It must be regarded, also, as a misfortune, that medical practice is open to every adventurer who may choose to come into the field armed with plaster, pill, and moxa. A little success at the beginning is sufficient to raise him to the rank of a professional doctor. This remark, however, only applies to the native practitioner. The foreigner, as we have found by experience, meets with continual opposition; at least, from high quarters, and his medical efforts are generally rejected on the ground, that western physicians are unacquainted with human constitutions in the east, and that western medicines are unsuited to eastern stomachs. Nevertheless, as the sequel will show, circumstances enabled us to overcome much of this opposition, and to lay the foundation of the good report for medical skill which we subsequently, though undeservedly, enjoyed.

Results of the Medical Department of the Mission.(a)—The example of a foreign family living among them for years, open in all their ways and habits to universal observation, served and guarded by spies, and, through the favour of Providence, free from the frequent inroads of disease from which the native suffers, must have produced its results both on our strict observers and on those whom they informed. Accordingly, notwithstanding the proud talk of the mandarins, and their professions of unaltered adhesion to the medical practice of the Chinese, the native doctors come now and then, with or without their permission, to get their crude notions a little rectified. On such occasions, they have been taught to apply bandages and other surgical manipulations. They have also learned how to make various plasters, as emplastrum picis, empl. hydrargyri, and empl. cantharidis; and the latter is now frequently substituted for

(a) Dr. Bettleheim refers, for an account of his direct medical labours among the Lewchewans, to his letter to Dr. Barker, Canton, published in 1849, and to the Reports of the Lewchew Mission Society for 1851-2, published by the Society, 48, Salisbury-square.

the moxa. Sulphur ointment, now acknowledged by the natives to be a powerful antipsoric remedy, is making mighty strides towards the complete eradication of the native plague, the itch. The Vice-Administrator (Pu-ching-ta-fu) had two boxes of it made up for his own and his family's use. Dover's powder, and, of late, even purgative medicines, are in good demand. The natives have also been taught several useful domestic remedies, as a vinegar and brandy lotion in contusions, simple resolvent cataplasms, etc., to which they were quite strangers. One who had derived much benefit from the introduction of the catheter, learned to use it himself, and subsequently, having obtained it as a present, proceeded to catheterise his strictured brethren.

Ichirazichi, a person holding several high official appointments, having consulted me for a boil at the back of his neck, which the native physicians had declared to be of a very malignant (poisonous) nature, and for which they had moxa'd him, and caused unbearable pain all over his head, was cured in a few days with a little medicine and a plaster, whereupon he broke out into imprecations on those physicians and their barbarous remedies. Ichirazichi, who at my house drank out of the same cup as the Regent, has often been under my medical treatment, and thanked me this day (July 8, 1851) for a clean skin, having some weeks ago been covered all over with loathsome itch. He now appears entirely bent on studying and practising pharmacy, especially the composition of plasters and eye-waters. He was much taken with the emplastrum cantharidis, and, having obtained some of it, he set to work of his own accord, and applied it to a lame foot, lame in consequence of contraction of the ligaments of the knee. A little instruction, however, soon improved his treatment.

My practice continued to increase, connived at, though not recognised, by the authorities; but, for the greater number of cases, I was obliged to prescribe from description, without personal inspection of the patients. Notwithstanding these difficulties, I was never without patients; but, about the end of 1851, I suddenly attained to a large medical practice, in consequence of the general inoculation for small-pox.

[To be continued.]

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

SEVERE EPILEPSY WITH AMAUROSIS. — DEATH. — AUTOPSY.—LARGE TUMOUR IN THE ANTERIOR LOBE OF THE RIGHT HEMISPHERE OF THE BRAIN.

[Under the care of Dr. TODD.]

Joseph R. S., aged 28, until within the last seven months holding a responsible situation as warehouseman in a city establishment; married, of temperate habits, and previous to the commencement of his present illness, in good health. For more than two years past he had suffered from symptoms of cerebral disease, on account of which he had repeatedly been seen, in consultation with his usual Medical attendant, by Dr. Johnson, of King's College, and from the latter gentleman most of the following particulars have been obtained. In March, 1852, Dr. Johnson was first called to him, and found him labouring under violent delirium which had come on a few days before, and for which no satisfactory cause could be discovered: antiphlogistic treatment had been previously employed, which having been laid aside, and narcotics with a tonic regimen resorted to, he soon recovered, and, in a week, was able to resume his work. Three weeks later, Dr. Johnson again saw him on account of his having been suddenly seized while at work with an epileptic fit. It appeared, on inquiry, that the man had previously suffered several of a similar character, but, as they always passed off completely, and occurred only in the night, he had been able to conceal them from his friends. In May of the same year, the father of the patient consulted Dr. Johnson respecting the condition of his son's health, stating that, for some time past, his nights had been restless and disturbed by dreams, and that at times he appeared to be "light-headed." The symptoms were much relieved by the administration of an opiate each night at bed-time, for a short time; and until the next October nothing occurred to require Medical aid. At that time he again had an epileptic fit in the day-time, on recovering from which, he stated that, since last May he had had five or six, but that they had always happened in the night. In November, he was laid up for a few days with a febrile attack, and in the following month, he began to complain of severe headache, attended with confusion of ideas and great forgetfulness. In February, 1852, he had been for four months without any recurrence of the fits, but he did not appear well, having acquired a heavy and oppressed aspect, and his eyes being dull and fixed. He had continued at his work but had experienced increasing difficulty in collecting his thoughts sufficiently to get through with his book-keeping. About this time also he lost the sight of his left eye, the vision having, at first, been subject to temporary interruptions, during which he would remain without sight for two or three minutes, and then regain it, and which having gradually recurred more and more frequently, at last terminated in total blindness. We should here remark that, although the man's employment was not of an arduous character, yet he had been subjected to much and constant anxiety on account of domestic trials. In November, 1852, his listlessness and inability to get through with mental work had increased to such an extent, that he was obliged to give up his employment, and soon afterwards he undertook to keep a public-house on his own account. In this engagement he was unsuccessful, lost his money, and became extremely depressed in spirits. The epileptic paroxysms, which, for some months, had recurred once every few weeks, now became much more frequent; so much so, that, on one occasion, four occurred in one night, after the last of which he remained insensible for twenty-four hours. In March, 1853, the fits began to alter somewhat in character, and were followed by much shorter periods of insensibility; and, in the next April, the sight of the right eye began to be affected as that of the left had previously been, and, after about a week of interrupted symptoms, it also became quite blind. Throughout the whole of this time he had enjoyed a very good appetite, and had scarcely, if at all, lost flesh; the bowels were habitually rather costive. None of the fits had ever been preceded by any kind of warning.

Admitted into the hospital May 10, 1853. Aspect vacant and almost idiotic; pupils much dilated, the right being rather the larger; pulse 88; respiration regular, 20 in the minute. There is no paralysis or anæsthesia of any part of the body. He can walk readily, but with a somewhat uncertain and timid gait. He admits that he cannot distinguish between light and darkness, but maintains that he can discern persons near him, though very indistinctly. On careful examination, however, it appears certain that he is quite blind; a lighted candle may be brought close before his face without its being perceived in the least; it always, nevertheless, produces very active contraction on the part of the pupils. The bowels acted last night; he has perfect knowledge of his wants in this respect. The head is ordered to be shaved.

13th.—The bowels act regularly; appetite good,—almost ravenous. He is extremely restless, constantly tossing about in bed.

14th.—The restlessness still continuing, Dr. Todd ordered that ♏xx. of chloroform should be inhaled every twenty minutes or half hour. ℞ Pil. hydr. gr. v. bis die sumend.

17th.—As he became more quiet soon after the prescription, and has since continued so, the inhalation of the chloroform was never practised. The head is to be again shaved, and the scalp painted over with tincture of iodine.

21st.—During the last few days he has had repeated fits of an ordinary epileptic character. As he was very restless and delirious most of the past night, Mr. Lawson, the physician's-assistant, administered chloroform to him, and even while under its influence a slight fit occurred.

℞ Sol. morph. hydrochlor. ʒss. o. n. sumend.

24th.—He is now quite rational, and has had no fit since the 21st.

31st.—On the 27th, he had another very strong fit, and they have since recurred frequently. He is restless, and very difficult to manage.

℞ Sol. morph. hydrochlor. ♏xv. ex aquâ ter die sumend.

June 1.—He is still restless, and much depressed in spirits, frequently shedding tears, and attempting to get out of bed. Pulse 98. Rep. haust.

2nd.—About one o'clock yesterday afternoon the fits set in with great severity, and during the whole night continued to recur at intervals, varying from ten minutes to half an hour, their duration for the most part not exceeding two minutes. During the paroxysm, the pulse becomes very much accelerated, and the pupils are widely dilated, but, as soon as it subsides, the pupils contract, and the pulse becomes intermittent, and so feeble as to be scarcely perceptible. Death took place at a quarter to one this afternoon, apparently produced by exhaustion, the patient having suffered, during the preceding twenty-four hours, no less than thirty-five distinct epileptic paroxysms.

Autopsy.—The corpse is fleshy and in good condition. There are several large patches of ecchymosis visible, especially on the chest and arms. The head having been opened, there were seen on the right side of the dura mater some hardened white specks, apparently the result of atheromatous deposit in the substance of that membrane. The arachnoid, with the exception of small patches of opacity here and there, appeared in a normal condition. The brain, when removed, seemed unusually large, and was found to weigh three pounds eight ounces (avoirdupois). In the anterior lobe of the right hemisphere was a large indurated mass, projecting, by a considerable convexity, into the longitudinal fissure, and thus compressing and indenting the opposite lobe. This tumour, which was very hard, and gave considerable resistance to the knife, extended downwards to below the level of the anterior cornu of the lateral ventricle, and had a vertical diameter of about two inches and a-half, and an antero-posterior one of two inches. Several cysts of considerable size, the largest as big as hazle-nuts, and containing yellow serous fluid, were scattered through its structure.

In the lateral ventricles was a small quantity of serous effusion, and the inner surface of the right ventricle was much softened superficially. There was, perhaps, some degree of softening of the fibres of the optic tracts, but they did not appear to have been in any way influenced by the tumour, and nothing excepting its general pressure was found by which the total blindness could be explained. The corpora geniculata were of an unusually dark colour, but the cerebellum and other parts of the cerebrum appeared healthy. The viscera of the chest and abdomen were examined, but nothing was observed worthy of note.

A careful microscopic examination of the diseased portions of the brain was afterwards made, from the report of which we extract the following. The most indurated portions, besides containing a number of minute vessels, appeared to consist chiefly of oval or rounded masses of a glistening, but not highly refractive substance, about $\frac{1}{300}$ of an inch in diameter, but varying considerably in size. These bodies were contained in the meshes of a delicately fibrous tissue, the fibres of which were rendered obscure by a multitude of oil globules. The fat having been dissolved away, the fibres were rendered more distinct, and were seen to be very delicate and wavy; they were readily soluble in a dilute solution of caustic soda. No nerve fibres whatever could be detected in the indurated portions of the tumour. The cysts, however, which were formed in it, contained a clear fluid, in which the microscope discovered small broken up portions of nerve tubules, in addition to fragments of pigment, blood globules, crystals of hæmatine, free oil, and a considerable number of finely granular cells, without nuclei, and somewhat larger in size than pus globules. The walls of the cavities were nearly smooth, but here and there small shreds of brain-like matter projected within them. Both optic nerves contained very numerous oil globules; the substance of the right appeared to be somewhat softer than that of the left.

The particulars of the case which we have just recorded, have been kindly furnished to us by Mr. Colstone, one of Dr. Todd's clinical clerks. The case itself is of unusual interest, as furnishing an example of epilepsy dependent on organic disease, and followed by a fatal termination. It may be noted, that the symptoms, as it regards the gradual loss of clear mental perception, the occasional occurrence of convulsive paroxysms, and the absence of paralysis, well accorded with what might have been expected from the location of the disease. For the total blindness, it is, as we have seen, difficult to account,

ST. BARTHOLOMEW'S HOSPITAL.

EXCISION OF A FIBROUS TUMOUR OF PECULIAR CHARACTERS FROM THE PERIOSTEUM OF THE TIBIA.

[Under the care of Mr. LAWRENCE.]

THREE weeks ago Mr. Lawrence removed from the front aspect of the tibia of a healthy man, aged 21, a tumour of somewhat unusual character. It was about as large as a turkey's egg, flattened in shape, and closely adherent to the periosteum. It had appeared without obvious cause, and occupied five years in painless growth, during the first four of which it had increased very slowly, but owing, as the patient believed, to the irritation consequent on a blow received a year ago, it had latterly grown more rapidly. The operation, which was performed while the patient was insensible from chloroform, presented nothing peculiar, as the tumour was subcutaneous, and, with the exception of the periosteum, did not adhere intimately to any of the surrounding structures. On examination after removal, the mass was seen to be lobulated, and its section presented a yellowish, half-fatty, half-fibrous looking appearance; to the touch it was much firmer than fat, and its lobules were much more vascular; when torn it readily split into long fibrous shreds.

Mr. Coote instituted a careful microscopic investigation into its structure, and found it to consist of waved interlacing fibrous bands, which enclosed spaces filled with cytoblasts, arranged either in linear series or united together in the form of elementary fibres. Although of a yellowish hue, and to the touch far from hard, yet its tissue contained but little moisture. In those parts in which the cytoblasts were most abundant the blood-vessels were very numerous. Mr. Coote observed, that many of them were arranged in loops, and presented at their most convex parts varicose dilatations such as those found in the temporary cartilage of the fœtus. These vessels contained well-formed blood discs, and their coats were sufficiently firm to admit of their being withdrawn from the adjacent structures.

THE LONDON HOSPITAL.

DELIRIUM TREMENS PRODUCED BY ABSTINENCE FROM TOBACCO.

Delirium tremens and its twin sister, traumatic delirium, are now so well understood to be dependent on asthenic irritability of the nervous system, that but one opinion prevails as to the principles which should regulate their treatment. Sudden disuse of accustomed stimulants is always to be deprecated, and, in the event of a patient of known intemperate habits coming under surgical treatment, especially on account of an accident, care should always be taken that he is not deprived of his wonted allowance of alcohol. There is, however, another very potent drug in but too common use among the lower orders, the probable effects of suddenly relinquishing which, have, we suspect, been too little considered, and respecting which the event of a case lately under the care of Mr. Curling, appears to offer a valuable hint to the practical surgeon. A withered old woman, a gin drinker and an habitual smoker, was admitted on account of a severe burn. Stimulants were from the first freely allowed her, and opiates administered, but in spite of them, she continued extremely restless, wandering at times, and quite unable to sleep. Her manner and aspect, indeed, much resembled those of delirium tremens. At this juncture, several days after admission, Mr. Curling ordered that she should be permitted to smoke. The salutary influence of the measure was at once apparent,—the woman became quiet and tranquil, and on the next night sleep fairly. All tendency to delirium disappeared, and she afterwards progressed steadily to recovery. Prevention is, however, better than cure, and we cannot leave this subject without dropping a hint that, in relation to the prevention, of such diseases as those under consideration, the predisposing causes of which are well known and removable, the conservators of the public health have very important duties to perform.

ST. THOMAS'S HOSPITAL.

SEVERE FRACTURE OF THE RIBS.—EXTENSIVE EMPHYSEMA.—RECOVERY WITH PERMANENT DEPRESSION OF THE FRACTURED RIBS.

[Under the care of Mr. SOLLY.]

DURING the past six months we have given in our reports the details of several cases of severe injury to the thorax and its contents. The most important lesson which these cases have appeared to teach has been the extreme value of depletory treatment generally, and more especially of blood-letting. In one the recovery of the patient had apparently been rendered easy by the profuse hæmorrhage which attended the accident; and in another, in which the patient was a man of nearly eighty, life appeared to have been saved, or, at any rate, a condition of the most urgent distress was relieved, by a very free venesection (*Medical Times and Gazette* for June 11, 1853.) In the following case the injury sustained was unusually severe, and as to the effect of treatment it well bears out our previous remarks.

Stephen Henton, aged 56, was admitted on Monday 18th of April. A short time before admission he had been walking on the "off" side of his horse and cart round an abrupt angle in the street, and the horse turning too suddenly, his chest had been jammed between the cart-shaft and the wall corner. He was suffering intense dyspnœa; countenance dusky and anxious, pulse 84, respirations 28. On looking at the chest, the third, fourth, and fifth ribs on the left side, a little in front of the border of the scapula, appeared to be completely driven in, the integument covering

them contained air, and was flapping in and out during the respiratory movements. Emphysema was already commencing around the seat of injury. A flannel roller was immediately applied, and Mr. Solly, who saw him shortly after, ordered venesection (℥xx.) to be at once performed, and repeated in a short time, should the distress continue.

℞ Pulv. rhei cum cal. ℈i. statim sumend.

Vespere, 8 p.m.—Much relief was experienced after the bleeding, but the breathing has again become very difficult. The emphysema now extends over the whole side, up the neck even to its right side, and down the arm as far as the elbow. Pulse 96, smaller and feeble, respirations 36 per minute. Although he breathes more quickly, yet it is with less distress than before he was bled.

V.S. ad ℥xx.

℞ Hyd. chlor. gr. ii., pulv. opii gr. i., statim, et rep. pil. cum opii gr. ¼, 4tis horis.'

April 19.—Has passed a very restless night. Respiration 36, but attended with considerably less pain than previous to the second venesection. The emphysema has spread over the whole chest. Face anxious, but not livid. The urine being retained, the catheter has been employed. Rep. Pil.

20th.—Respiration as frequent as before, but much easier. Pulse 100, full, and a little firmer than it was. As there is slight ptyalism, the pills are to be given every six hours.

22nd.—Very much better. Respirations 30, attended with but little pain. Pulse 102, full and soft.

℞ Extracti aconiti, gr. iss., ter die.

24th.—Emphysema diminishing; there is but little pain while he continues laid still. He has a slight cough, to which, however, he was previously subject.

May 1.—On removing the flannel roller, it was noticed that the integuments over the injured part still flapped in and out during breathing, and that the broken ribs remained much depressed. Respiration of almost natural frequency. Some bronchitis being present, there was prescribed

℞ Pil. ipec. c. conio, gr. v., ter die.

21st.—The man is now able to be dressed, and can walk about the ward without any pain. His respiration is natural, but easily rendered frequent by exertion. A piece of stiff gutta-percha has been accurately moulded to the injured side, and confined by a flannel roller. Thus supported, he states that the side feels much more comfortable, and that he can move about with less inconvenience.

31st.—Discharged quite well. For the above particulars we are indebted to the notes taken by Mr. Moreton, one of the House-Surgeons of the hospital.

Substitute for Gutta Percha.—Dr. Riddell, officiating superintending surgeon of the Nizam's army, in making experiments on the Muddar plant of India, (*Asclepia gigantea*,) had occasion to collect the milky juice, and found that, as it gradually dried, it became tough and hard, like gutta percha. He was induced to treat the juice in the same manner as that of the gutta percha tree, and the result has been the obtaining a substance precisely analogous to gutta percha. Sulphuric acid chars it; nitric acid converts it into a yellow resinous substance. Muriatic acid has but little effect upon it; acetic acid has no effect, nor has alcohol. Spirit of turpentine dissolves it into a viscid glue, which, when taken between the finger and thumb, pressed together, and then separated, shows numberless minute and separated threads. The foregoing chemical tests correspond exactly with the established results of gutta percha. It becomes plastic in hot water, and has been moulded into cups and vessels. It will unite with the true gutta percha. The muddar also produces an excellent fibre, useful in the place of hemp and flax. An acre of cultivation of it would produce a large quantity of both fibre and juice. The poorest land suffices for its growth, and no doubt, if well cultivated, there would be a large yield of juice and a finer fibre. A nearly similar substance is procurable from the juice of the *Euphorbia Tirucalli*, only when it hardens, after boiling, it becomes brittle. The subject is most important; and, if common hedge-plants like the foregoing can yield a product so valuable, the demand for which is so certain quickly to outrun supply, a material addition will have been made to the productive resources of the country.—*Journal of the Society of Arts.*

Nuisances.—We invite the attention of the Board of Health to the following, from the Registrar-General's weekly return :—" On 16th July, at 10, Weller's-court, Camden-town, the son of a labourer, aged four months, died of 'convulsions (24 hours), first seen 8 hours before death.' Mr. Sutherin, the medical attendant in this case, says :—'The parents of the deceased child pay 4s. per week for a miserable hovel, surrounded by pigsties (one stye containing as many as ten pigs), open cesspools, stagnant water, and dunghills, from which the most offensive effluvia emanate.'"

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Medical Times & Gazette.

SATURDAY, AUGUST 13, 1853.

KNIGHTHOOD.

It is scarcely a month since we thought it necessary to complain of the neglect of men of science by the Government, and to show how disproportionate are the rewards conferred upon those who save and those who destroy human life, by the curious and shameful contrast of the small Parliamentary Grant bestowed upon the man who has saved in every European generation more lives than were sacrificed by the sword of Napoleon, and by the neglect of the discoverer of the anæsthetic powers of chloroform, with the titles and decorations, the honours and pensions, showered upon the successful soldier and sailor.

It would have been easy to have extended the parallel,—to have compared the honours acquired by the Legal Profession with those so scantily bestowed upon the members of our own, and to have proved that those who spend their lives in the task of giving health to man, preventing disease, removing deformity, and abolishing human suffering, are at least as fully entitled to the gratitude of the Nation as those who assist in making or administering our laws, or who afford support as partisans in Parliamentary warfare.

It is indisputable that the rewards of Government, whether in the form of Parliamentary thanks or grants, pensions or titles, are very rarely bestowed upon medical men. It becomes, accordingly, a matter of the utmost importance to take care that, when they are so bestowed, there should be no question of the merit of the individual thus singled out from his brethren for the favour of the Crown. Unfortunately in former times this question was often irresistibly suggested, and with too good grounds; for the favour of a minister or some extra-professional merit was more frequently the stepping-stone to knighthood than any purely medical desert. But it is very gratifying to be able to state, that of late years a different spirit has prevailed, and scarcely any one has been honoured by this distinction whose professional character and standing have not most fully entitled him to it. In the case of Sir John Forbes and Sir James Bardsley, who were knighted by Her Majesty on Tuesday, the honour will be universally acknowledged by the Profession as well bestowed and thoroughly deserved.

Sir James Bardsley, Consulting Physician of the Manchester Royal Infirmary, has been for thirty years Physician to this, the largest Hospital in the second city of England. For many years he was Lecturer in the Medical School, and has thus occupied an important post as a teacher of the science he professes. He has not been a voluminous writer; but he published a volume of Hospital Facts and Observations in 1823, which had a considerable effect in advancing the knowledge of the therapeutic forms of the alkaloids.

He wrote the articles, "Diabetes and Hydrophobia," in the "Cyclopædia of Practical Medicine," and gave the Association Retrospective Address at Cheltenham in 1837. For twenty years he has occupied the place of first Physician in Manchester, and has filled it in such a manner as to deserve and receive the respect and confidence of the other practitioners in the district, supporting the dignity of the Profession by his character as a gentleman. On these grounds we feel sure the medical men of Manchester will look upon the honour conferred upon their chief Physician as in some degree reflected upon themselves, and all will join in congratulating Sir James upon a distinction which, as one of the most eminent of our provincial Physicians, he unquestionably merited.

It is scarcely necessary to say that the honour conferred upon Sir John Forbes by the Queen will be considered as a compliment to the whole Medical Profession. Assuredly Her Majesty could not have selected one of its members more deserving of rank. No Physician of the present day has done so much for medical literature as Dr. Forbes. He was the first to make the Profession in this country fully acquainted, by his admirable Translation and Notes, with the Works of Avenbrugger and Laennec,—works which may be said truly to form a great era in the progress of medical science. Dr. Forbes was also the active Editor of the Cyclopædia of Practical Medicine, the most valuable work of the kind in our language. But it was as Editor of the *British and Foreign Medical Review* that the labours of Dr. Forbes deserve peculiar notice. He conducted that Review for twelve years, with an ability, honesty, and independence for which it would be difficult or impossible to find a parallel. By the firm, just, and dignified character he imparted to that Journal, he did inestimable service in raising the character of medical literature, not only in Great Britain, but wherever the influence of our language is felt. That Review will remain a lasting monument of the benefits conferred upon the Medical Profession, long after he has passed away, while his other literary Works, the "Physician's Holiday," and the "Memorandums made in Ireland," will show that he was qualified to shine as well in general as in medical literature. The clear exposer of the impostures of the Mesmerists, and of the absurd follies of the Homœopathists,—the active supporter of the Consumption Hospital, Idiot Asylum, Governesses' Institution,—indeed, of all deserving medical and benevolent schemes, he has long since earned his laurels. The esteem and affectionate regard which his sterling, unaffected, disinterested character has won for him from an unusually large circle of friends, both in and out of the Profession, insure him the general wish for a long and happy life to enjoy his new rank, and to honour it by his name.

THE CAUSE OF LAMERT *VERSUS* DAWSON.

A CAUSE has lately been tried at Leicester which will be read with interest and amusement. The principal parties are not unknown to fame, but the details of the trial will make some addition to their personal history.

There are few persons, probably, who are in the habit of reading the newspapers, who have not frequently met with the name of Curtis in conspicuous connexion with the treatment of a class of cases to which it is not necessary particularly to refer; and the same name frequently meets the eye in some very useful but unsavoury places of public resort. The name of Lamert is also not unknown under somewhat similar circumstances; but, until we read the report of the late trial at Leicester, we were not aware of the fact stated by the counsel for the plaintiff, that Lamert and Curtis were one and the same person, like the "two single gentlemen rolled into one," immortalised in a poem by the late John Colman the Younger. What the reason may be for this duality of names we are not aware; but it strikes us that we have heard of some similar instances in the present day among a certain class of practitioners; and we have, indeed, been informed that some gentlemen of the Hebrew persuasion have an unaccountable fondness for adopting names which are different from their own patronymics; and what is more extraordinary still, the names of some of our most eminent surgeons are sometimes borrowed in this playful manner. Thus, for instance, Mr. Levy may transform himself into Mr. Liston, and Barabbas may figure as the Messrs. Brodie. At least, such is the report which has come to our ears; but we do not vouch for its correctness. It is, however, stated upon legal authority that Curtis and Lamert are one, and that this incorporated duality practises in "a certain class of cases," but without any legal qualification.

The defendant Dawson is a person of whom, it strikes us, we have also heard. He likewise practises, according to the statement of the counsel, in "a certain class of cases," but he has this advantage over his opponent, that he is a Member of the College of Physicians, and a Member of the College of Surgeons. Of a part of this statement, however, we are in some doubt, as we have looked in vain through the list published by the authority of the Royal College of Physicians for the name of Dawson. We do not, however, assert, that Dr. Dawson is not a Member of that College; we merely state, that we have been unable to discover his name, which may, probably, have been omitted through some oversight on the part of the officials at Pall-mall; and we think that Dr. Dawson is bound to call upon the President of the College to cause the rectification of the error, if such have been made.

The action, it will be observed, was for libel; the defendant having asserted, in a book written by him, that the plaintiff obtained large sums of money from those who applied to him for assistance; and that in one case a patient had commenced an action against Curtis for the recovery of a sum so paid, but that Curtis had prevented the trial from coming on, by refunding the money and paying the costs. Witnesses were called to prove these facts, in order to support the plea of justification which the defendant had placed upon the record.

Mr. Justice Maule, however, did not think the justification strictly proved; although, as in the case of the trial of Coffin for manslaughter, where the same learned Judge presided, we are not wholly able to comprehend the force of his arguments. In fact, Mr. Justice Maule is so profound a Judge, and carries the abstract principles of equity to such extreme lengths, that we, being only persons of common understanding, confess ourselves to be often incapable of fathoming the subtleties of his logic.

The Jury, acting under the direction of the Judge, immediately returned a verdict for the plaintiff, with one farthing damages,—an award which pretty plainly intimates the views of the Jury, and which will, we think, meet the justice of the case.

The defendant Dawson was placed in the witness-box, and, in the course of his examination, some amusing disclosures took place concerning a person styling himself J. Teevan, B.A., who has testified very strongly, in a written pamphlet, to the defendant's abilities. Who Teevan may be, it is not permitted for this generation to know, and we

have heard that several Medical gentlemen of that name have disclaimed any knowledge of the writer of the pamphlet in question. Our own opinion is, that Teevan is a myth, like Romulus, Numa, or Mrs. Harris, and it may be reserved for some future Niebuhr to discover or to deny his identity. At any rate, it is quite evident that the author of the Teevan pamphlet is too modest to reveal his real name, and is contented, like Junius, to contribute anonymously to the literature of his country, disregarding the applause of the present age, and looking for his reward in the approbation of posterity.

IRISH POOR-LAW.—MEDICAL SALARIES.—DISRESPECTFUL ADVERTISEMENTS.

We have, on several occasions, already called attention to the miserably inadequate salaries of Irish Medical Officers under the Poor-law Unions. The Irish advertising columns teem weekly with offers of sufficiently liberal remuneration to Clerks, Masters, Matrons of Workhouses, and inferior officers. In some instances, the salaries reach 150*l.* per annum; some of the offices, besides a very fair pecuniary remuneration, entitle the holders to a comfortable suite of apartments, with adequate rations of the first class. Side by side with these liberal rewards for labour, we find, weekly, that the salaries held out to medical men present a striking and humiliating contrast. We have repeatedly before shown what enormous and engrossing duties are entailed on the Irish Medical Officer; yet the average amount of these salaries is 50*l.* per annum. In several instances, the pay is considerably below even this paltry sum, while it is but in very exceptional cases indeed that a higher reward is held out. But the amount of the salary is not the only thing we have to complain of; the advertisements are frequently couched in most negligent, and often highly disrespectful terms. Thus, in the usual medium of these advertisements, (the *Dublin General Advertiser*,) of Saturday last, we find an announcement, that "Tenders will be received from properly-qualified Men." More thoughtlessly impertinent language could not be used, if the object were to hire so many carpenters or stone-masons to do contract-work. We have a note of an advertisement which we saw some time since in the *Times*, in which it was stated that a young gentleman, about 24 or 25 years of age, was wanted to assist in a Country Practice; it being further added, that "unexceptionable character, with height and weight (*sic*), will be required." We will only suggest, that these important items be required to be inserted, for the future, in all "Tenders" for Irish Medical Officers under the Poor-law Boards. What is the Irish Medical Association doing? Must the wrongs and injuries of the Irish Profession be announced, and justice called for on them in England, without an effort being made by themselves? Will they die and make no sign?

The Nebulæ.—A Deputation, consisting of the Earl of Rosse, President of the Royal Society; the Rev. Dr. Robinson, late President; and Mr. Hopkins, President Elect of the British Association for the Advancement of Science; and Colonel Sabine, Vice-President and Treasurer of the Royal Society, had an interview with the Earl of Aberdeen on Wednesday, at his official residence in Downing-street, to recommend the establishment of a telescope of great optical power in the Southern Hemisphere, for the purpose of increasing our knowledge of the nebulæ.

Quackery.—John Jones, surgeon dentist, who had got 2*l.* from a Dissenting minister at Bromyard, a set of teeth from one lady's mouth, and a gold palate from another, and then, "going a-fishing," never returned, was tried at Hereford on the 29th ult., and sentenced to seven years' transportation, (this being his second conviction).

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Thursday, August 4, in Committee of Supply,

BOARD OF HEALTH.

On the vote of 11,996*l.* for the expense of the General Board of Health, Sir W. Molesworth, amid universal cheering, called the attention of the Committee to the fact, that the constitution of the Board of Health would terminate next year, and expressed the hope, that, under the circumstances, hon. Members would not engage in any discussion on the question. (Cheers.)—Sir G. Pechell hoped that the happy day of annihilation would soon arrive.—Mr. Hume inquired whether any portion of the money due from the towns which had been examined had been paid?—Sir W. Molesworth was not aware that any such payments had been made.—Mr. Hume: There never will be.—The vote was then agreed to.

On Friday, a Petition was presented by the Duke of Argyll, from Glasgow, praying that vaccination might be made compulsory.

REVIEWS.

1. *Observations on the Nature and the Treatment of the Asiatic Cholera.* By William Stevens, M.D., D.C.L. Oxon., etc. etc. 8vo. Pp. 499. London. 1853.
2. *Report on the Cholera in Jamaica, and on the General Sanitary Condition and Wants of the Island.* Fol. Pp. 133. London. 1853.

1. We have here placed together two works of a totally different class: the one, a record of the devastations of the terrible disease in Jamaica; the other, a history of one of the most promising efforts made to cure it.

How vast is that pile of printed paper which may be called man's record of his impotent efforts to cure cholera! All the active agents which have been employed in combating the most opposite diseases, from V.S. ad deliquium animi to sp. vini gallici ad ebrietatem, have had their advocate, as the cure.

But, while the majority of this legion of specifics has vanished, as Carlyle would say, into outer darkness, there are three methods of treatment which still find warm advocates among the most intelligent members of the Profession. These methods of treatment are—the opiate, the stimulant, and the saline. To Dr. Stevens unquestionably belongs all the honour due to the man who introduced salines as a remedy for cholera to the notice of the world. But this gentleman and his salines have met with two great enemies:—1st. Those who declared that he was an impostor or a madman, and his salines trash; and, 2ndly. Those who admitted the potency of the remedy, but claimed for themselves the merit of having first employed it. The handsome 8vo volume now before us has been published by the Doctor, to confute and overwhelm with confusion both classes of enemies. It consists of an Introduction, in which Dr. Stevens believes that he has succeeded in proving, that no one has opposed the employment of salines in cholera, unless they have had, as the mainspring of action, self-interest. The late Sir David Barry is represented as the arch bad man in this bad band—as the man who, by the aid of rewards and threats, diverted almost every advocate of the saline treatment into a warm opponent. For effecting this great object, it would appear from Dr. Stevens's account, that the Treasury cashed, unquestioned, all cheques signed by the President of the Board of Health, and placed an unlimited amount of patronage in the hands of the same individual.

The first part of the body of the work is written by a layman, Mr. James M'Millan. This gentleman states, that he was engaged as a public journalist in Worcester during the summer of 1849, and that, when cholera visited that city, he became a convert to Dr. Stevens's views, and he now writes for the purpose of proving, that official documents of unquestionable veracity demonstrate the power of salines in the treatment of cholera; and, secondly, for the purpose of showing, that a clear case has been made out for official inquiry.

"I assert, and offer to prove," writes Mr. M'Millan,—

"1st. That in Coldbath-fields Prison, from April 5th to

31st Dec., 1832, 465 patients with cholera, about 162 of which were cases of collapse, were treated on the saline plan for cholera, with a result of only 4 deaths and 461 recoveries.

"2ndly. That in the same prison, and within the same dates, about 39 of the 504 patients were not treated on the new plan, and in these 39 cases there were 39 deaths.

"3rdly. That, by the concurrent testimony of respectable Practitioners in England, Scotland, Ireland, and Canada, the new practice, when fairly tried, either at home or abroad, was equally efficacious in the epidemic of 1848-9 as in the visitation of 1832."

Mr. M'Millan's contribution consists of about 150 pages. In it are contained an account of Dr. Stevens's theory of cholera, of his treatment of the disease, and an examination of the official documents connected with the outbreak of cholera in Coldbath-fields Prison in 1832, and its treatment there by Dr. Stevens. As to the first two points, our readers must consult the work itself; our space permits us only to consider the last.

It seems that cholera broke out in Coldbath-fields Prison on the 5th of April, 1832, at which time it contained 1127 prisoners, and that no case of cholera occurred in the prison after December 31st of the same year. During the whole of this time the prison was greatly crowded.

On the 25th of April, 1852, Mr. Wakefield, of Lansdown-place, Brunswick-square, the Surgeon to the prison, addressed a letter to the Editor of the *Medical Gazette*, in which he stated, that, during the preceding three weeks, nearly 100 of the inmates of the prison had laboured under the influence of the cholera poison, and that in 25 of these the disease had assumed a malignant character; that the first four cases were treated in the common way, and all died; that all the others had been treated by Dr. Stevens's salines, with a result of three deaths only, "two of which were cases of relapse." From the official journal of the prison for 1832, two cases are given by Mr. M'Millan as illustrations of the practice.

The first of these two cases was admitted into the infirmary, April 11, suffering from pain in the abdomen, constipation of four days' standing, and a full and hard pulse. A saline aperient was administered. On the 13th, the man being free from pain, and his bowels sufficiently open, he was sent to the convalescent ward. In the evening, he was again sent to the infirmary ill with cramps, with rice-water evacuations, &c. Salines were administered every hour. On the next day, the patient was in a perfect state of collapse. Hot brandy and water was then given, in addition to the salines. On the following day, he was better, his skin warm, and he had passed some urine.

The second case given in illustration of the power of salines in the treatment of cholera, is that of a youth 17 years of age. The patient was admitted into the Infirmary on April 14, with pain in the abdomen, and constipation of several days' standing. He was treated for four days with saline aperients and saline injections. On the fifth day, the patient continuing to lose ground, hot brandy and water was given in addition to the salines. On the following day, he was in a state of collapse. On the ninth day of disease, re-action commenced. On the 13th of May, the man was "seized with fits, which caused his death on the 14th."

A note appended to this case says :—

"In this case, it may be well to remark, that every symptom of cholera had been subdued long previous to the attack of fits; but that the natural weakness of the patient's constitution accelerated his death."

Now, we must say, that these two cases seem to us to tell strongly against the value of salines in the treatment of cholera. Two young men are admitted into an infirmary, suffering from constipation of the bowels of some duration; they are purged freely by saline aperients, administered by Dr. Stevens, and while under the influence of these saline aperients they sink into a state of collapse; to arouse them from which, hot brandy and water is given in one case with markedly good effect—in fact, appears to have saved the patient's life—and it was given, not by an enemy, but by Dr. Stevens himself.

The cases treated in July tell much more favourably for the saline treatment. In that of J. Watmore, for instance, (p. 300,) no internal stimulants were used; and, in the successful cases at the Greville-street Hospital, and at Bridewell, (p. 386,) it does not appear that stimuli or any important auxiliaries were had recourse to.

The Prison official records show, that 165 cases of cholera were admitted from April 5 to May 11, inclusive: of these, 39 were "collapse cases," and of the whole, 9 died; but of these 9 fatal cases, 4 were treated on the Board of Health plan,—that is, with opium; and of the other 5, 2 are said to have died because they were removed too soon from the Infirmary; 1, the case above given, of fits; and 1 from the effects of typhoid fever on a worn-out constitution. The prison returns, with the names of the patients, are given to substantiate these statements.

On the 3rd of June a second outbreak of cholera occurred at the prison. Mr. Wakefield treated the cases from June 3rd to June 21st inclusive, on some plan of his own. Between these dates, 18 collapse cases occurred in the prison, 10 of which were fatal; between June 22nd and June 30th, 51 collapse cases were received into the infirmary, and treated by Dr. Stevens; the deaths during the same period were 13,—*i.e.*, of Mr. Wakefield's 18 cases, rather more than one-half died; of Dr. Stevens's first 46 cases, one-fourth died. Our limits will not permit us to enter further into the statistical details given by Mr. M'Millan and Dr. Stevens; but we must protest against the method adopted by these gentlemen of explaining away the deaths that occurred under the saline treatment by "came in too late," "went out too soon," "broken-down constitution," etc. No doubt, all these matters had their influence; but then, whatever the treatment adopted, the same sorts of accident occur; and it is not right to subtract all such cases from one's own statistical returns, and to insist on those advocating another line of treatment leaving them in their returns, and then to compare the results of the two modes of treatment, as represented by the figures thus obtained.

In conclusion, we would remark, that, taken as a whole, the work before us offers enough evidence in favour of Dr. Stevens's saline treatment to justify its having another and complete trial, in case cholera should again visit this country; and that, while we must express regret that Dr. Stevens has attributed the meanest motives to men of hitherto unblemished fame, and has mixed with his work many things which we must regard as the eccentricities of a man of great genius, enthusiastically devoted to one pursuit, yet we believe him to be a thoroughly honest man, animated in all he says and does by the most benevolent and praiseworthy motives.

2. The Report we now proceed to notice is drawn up by Dr. Gavin Milroy, who was sent out to Jamaica in the early part of the year 1851, in order to examine the condition of that island, more especially with regard to the visitation of cholera, which was then raging with great violence. Dr. Milroy investigated the sanitary condition of every parish in Jamaica, and has given an elaborate history of the rise and progress of the late epidemic, together with a number of suggestions as to the cause of the disease, and the prevention of its recurrence.

The first part of the Report contains a history of the origin of the cholera in the New World in 1832-6, and in 1848-50, and then it proceeds to describe the course of the disease in the island of Jamaica. The terrific violence of the epidemic may be judged by the circumstance, that, in the last visitation, "*the entire mortality* from the cholera throughout the island may be estimated at *between* 40,000 *and* 50,000, at least, out of a population which has generally been *considered to be about* 400,000. The country was therefore more than decimated of its inhabitants; and if we suppose that every second person attacked died, it will thus be seen that a full fifth of them were struck with the severe form of the disease, independently of the prodigious amount of diarrhœa, etc., among the remaining four-fifths."—P. 34.

Dr. Milroy then proceeds to describe specially the principal towns in the island, with particular reference to their sanitary condition and the nature of the visitation in each. Our limits will not allow us to quote from this part of the Report; but, after reading it, we cannot be much astonished at learning, that in the months of October and November, 1850, the deaths from cholera at Port Royal, exclusive of the mortality among the troops and the sailors, amounted to the frightful number of 259 in a population of between 900 and 1000!

In Kingston, one of the chief towns of Jamaica, the condition of the people is deplorable, and the mortality during the recent epidemic was appalling. "In Kingston, no part or district escaped the ravages of the pestilence, wherever the people were living in filth and huddled together. It was particularly severe in Harbour-street and other low-lying parts of the town. From a single house at the east end of

this street, nineteen corpses were carried out in the course of six-and-thirty hours. The inmates were chiefly women of bad character, and amounted in number to about forty when the disease broke out. All the survivors were more or less affected; some severely. Independently of filth, want of ventilation, and other predisponent causes, personal and domestic, of disease within, there was a laystall at one side of the house, with a foot deep of excrementitious mud, and stagnant green slime on the surface, where cattle were penned before being taken to a slaughter-house in the rear of the building. It is an instructive fact, that, in the police station-house, almost immediately adjoining, not a single fatal case occurred. The situation is not favourable, but the rooms were kept clean and well-aired." It was a remarkable fact, observed throughout the epidemic, that while the poor, the wretched, the dirty, and the dissolute, perished in vast numbers, the middle and upper ranks of life remained comparatively free from disease. "While death was thus raging in every direction among the great mass of the people, the well-conditioned classes all but escaped; not above two or three in a thousand perished; and it is worthy of notice, that seldom more than one member of a family so situated was attacked with the developed disease, although the other inmates of the house had been in constant attendance upon the patient."

The entire mortality of Kingston during the period of five or six weeks was believed to have reached nearly 5000 out of a population of rather less than 40,000! In Spanish Town, the seat of Government and capital of the island, things are still worse; and, in the other large towns, there are traceable the same filthy and abominable habits of the people, and the same proportionate mortality from cholera.

The general conclusions drawn by Dr. Milroy, from his investigations are, that the season of 1850 was distinguished by the existence of meteorological phenomena of an unusual character even in a warm climate, such as long continued heat, a very moist condition of the atmosphere, and frequent and very violent thunder-storms: that the outbreak of cholera in Jamaica was not traceable to importation from the shipping, but broke out in the island independently of personal communication, and that all attempts to restrain its diffusion by cordons were fruitless; that the development and the malignancy of the complaint were due to the influence of locality and personal habits, the low lying and ill-ventilated districts being the foci of the disease, and the dirty and the dissolute its principal victims; while the white residents, most of whom live in clean and airy dwellings, were almost free from its attacks; and that, therefore, the most energetic steps ought to be taken by the local Government and the British Legislature to remedy the condition of the island, by introducing such sanitary improvements in every quarter as science and experience have demonstrated to be expedient and efficacious.

It is stated, that there is a lamentable deficiency of medical assistance in the island of Jamaica; and not only is there an extreme want of medical practitioners at ordinary times, but at a period of epidemic disease the sick are often necessarily entirely in want of medical aid. This state of neglect is owing to the absence of remuneration from the indisposition of the lower classes to pay for medical advice, so that many members of the Profession who were formerly practising in Jamaica have relinquished their calling, and have devoted themselves to other pursuits, and their place has not been supplied. Dr. Milroy suggests the imposition of a tax upon the island for the purpose of providing medical assistance in case of illness, and urges this proposition with considerable force; and he argues, with great truth, that while the Government votes considerable sums for various services, such as the army, the police, the religious teachers, and others, it is equally imperative upon it to provide for the medical necessities of the population; and that, by an enlightened system of hygiene, not only would much disease be averted from the people, but also a great saving in mere money would be secured to the State.

That the cholera is to be regarded as a visitation from the Almighty, no one can doubt; but it has been proved, beyond all question, that the malignity and the fatality of the disease is enormously increased by a neglect of those sanitary precautions, both political and personal, which medical science has repeatedly laid down for the guidance of the public; and there can be little question, that if another similar epidemic should unhappily break out, it will spare, in a great measure, those localities which are prepared for its approach; while it will continue to depopulate those regions where men have refused to listen to the warning voice, and where, from their apathy, their indolence, their ignorance, or their vice, they seem almost to invite the visit of the destroyer.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ELECTRICITY AS AN AGENT OF SURGICAL THERAPEUTICS.

Dr. Amussat, jun., addressed a note to the Academy of Sciences, containing a summary of the results which he had obtained by the employment of electricity in the treatment of disease. A platinum wire was heated to a very high degree, by means of an electrical battery, composed of the great piles of Buntzen.

1. A ranula, the size of an almond, was cured by the cauterisation of its lining membrane.

2. A large irregular cavity, occupying the posterior surface of the right mammary gland of a female, aged 24, was healed by a similar treatment.

3. Two cancerous tumours were thus removed; one on the palm of the hand; the other, in the mammary region.

4. Both the exterior and the interior of the neck of the uterus were cauterised by this plan.

For the removal or tumours, the following course was pursued. The tumours being raised by the left hand, the base is traversed by a steel needle, armed with a platinum thread, in loop; the needle is then cut off, and two threads are left to be connected at their extremities with the powerful battery. By dragging the two threads in opposite directions, the base of the tumour is cut through, and a cauterised surface is left to be treated in the usual way. The wire should be heated to a bright heat; and the traction should be gentle and gradual, for at so high a temperature the threads break easily in burning their way through the base of the tumour. Also a sufficient amount of cauterisation of the subjacent tissues is thus obtained.—*L'Union Médicale.*

PERITONITIS, AS A COMPLICATION IN CERTAIN ACUTE DISEASES,

ESPECIALLY IN TYPHOID FEVER, AND SIMULATING PERFORATION OF THE INTESTINE.

By Dr. THIRIAL.

M. Louis observed, (1826,) that "if, during an attack of acute disease, and in unexpected circumstances, there comes on suddenly violent pain in the belly, first local, and then general; if this pain is aggravated by pressure, and causes sinking of the features, nausea, and vomiting, one should diagnose the existence of an intestinal perforation. Dr. Thirial relates some cases to show the exceptions to this generally correct statement; some of these we will relate.

A young girl, aged 20, was admitted into La Charité, under M. Rayer, May, 1853, with a cutaneous eruption, which was just cured, when, during the night, severe abdominal pain came on, and in two days she died, labouring under symptoms of acute peritonitis.

Upon the examination of the body, a stream of water was sent through the intestinal canal, with the idea of there being some point of perforation; none, however, was found; the alimentary canal was healthy; there was no constriction; a lumbricus, four inches in length, was found in the stomach. The peritoneum was injected; there was a quantity of serum and flakes of fibrin in the abdominal cavity.

In October, 1835, a young girl, aged 21, during convalescence from a mild attack of typhoid fever, became sud-

denly attacked with severe pain in the abdomen, bilious vomiting, depression of the pulse, and general prostration. Leeches were applied; then opium was given in large doses, as recommended by Dr. Stokes, of Dublin; the patient died. Upon examination, the abdominal cavity was found full of sero-purulent fluid; there were flakes of lymph upon the mesentery and adhesion of the intestines, but the interior of the intestinal canal was sound, except near the valve of the ileum, where Peyer's patches of glands appeared a little more elevated than usual.

Ten years after the occurrence of the last case, there were two other similar cases in the same hospital, and under the same physician. In the one, numerous abscesses had formed over the body during convalescence from fever; of a sudden, some days after an attack of diarrhœa, severe abdominal pains came on, and the patient died with all the symptoms of acute peritonitis. In the other, the same symptoms manifested themselves after typhoid fever, in a young man who had formerly suffered from rheumatism and endocarditis. There was no intestinal perforation in either case.

SUGAR IN PHTHISIS.

Avicenna recommends sugar as the best palliative in consumption. At the present time sugar-candy is a popular remedy against catarrh; doubtless it moistens the throat, and facilitates expectoration; but, besides this, there is a regular plan of treatment of phthisis by sugar. An American physician sends his patients to pass several hours a day in a sugar-manufactory. It appears, that the vapour emanating from the sugar exerts a beneficial influence upon the lungs. —*L'Union Médicale de Paris.*

REMARKS AND OBSERVATIONS UPON A NEW SOURCE OF INDICATIONS FOR THE TREPAN, IN CASES OF SYPHILITIC OSTEITIS OF THE CRANIUM.

By Dr. L. GOSSELIN.

Authors, who have spoken of indications for the use of the trepan, have taken care to distinguish those furnished by wounds of the head, and their consequences, from those furnished by disease of the cranial bones. In caries of the cranium, the indication for the trepan results from the necessity of giving issue to purulent fluid collected between the bone and the dura mater. In the case published by M. Gosselin, there was deep-seated change of structure in the bone, especially upon its inner surface, abundant and fetid suppuration, and hectic fever. It was thought that there was collection and decomposition of the pus under the bones, with resorption of the putrid matter, and that trephining would remedy the evil, by giving exit to the liquid. Nevertheless, after the removal of the bone by trephining, no purulent collection was found; the inner surface of the bone was lined with a fetid, viscid, and yellow layer of fluid, resembling, in some respects, that seen in inflammatory disease upon the inner surface of the arachnoid. Twice did M. Gosselin repeat the operation, and, upon each occasion, he remarked melioration; but the patient ultimately died.

The chief points, observes M. Gosselin, were the existence of a fetid, soft, but not fluid matter upon the inner surface of the diseased bone; and the amelioration obtained by three operations, by which a considerable quantity of this matter was removed. He remarks, and perhaps with justice, that the use of the trepan is not, in itself, serious, when the cranial bones are diseased; especially when, in consequence of necrosis, the dura mater is separated from the skull cap.

M. Gosselin inquires, what is this putrid matter? It is not formed by the external surface of the dura mater, for after death this membrane is found unaffected. It must be either pus, whence the more liquid parts have been absorbed, or a plastic substance similar to that effused upon other bones in various syphilitic affections. But, after the first operation, the pus is no longer pent up within the skull, consequently the first hypothesis is not tenable; the second opinion is more acceptable. Constitutional syphilis manifested itself in a patient of M. Gosselin, by simultaneous attacks of osteitis, and by the deposit of a substance as tenacious as gum: this substance became putrid upon exposure to air, and under the influence of the general deterioration of the economy. — *Archives Générales de Médicine.*

GENERAL CORRESPONDENCE.

MEDICAL REMUNERATION UNDER THE NEW LUNATIC ASYLUMS BILL.

To the Editor of the Medical Times and Gazette.

Sir,—My attention was directed this morning, on the third reading of the Lunatic Asylums Bill, to Clause 67, which provides—

"Every pauper lunatic not in asylum, or a hospital registered, or a house licensed for the reception of lunatics, shall be visited once in every quarter of a year by the medical officer of, or for the parish or union, or district of a union, in which such lunatic is resident; and such medical officer shall be paid the sum of two shillings and sixpence for each such quarterly visit." That "within seven days after the end of every such quarter, such medical officer shall prepare and sign a list according to the form in Schedule E, etc. etc. And every such medical officer failing to comply with this enactment, shall, for every such offence, forfeit any sum not exceeding twenty pounds, nor under two pounds."

The glaring injustice of requiring any gentleman to do such an amount of work, involving, perhaps, a journey of five, six, or more miles, under a penal enactment of twenty pounds forfeit, was admitted instantly by every honourable Member to whom I spoke on the subject; and on applying to Mr. Bouverie, I was recommended to call the attention of the House to this Clause, and to move any Amendment I might wish, when the Speaker put the question, "That this Bill do now pass."

Complaining, then, of so insulting an estimate of the value of professional labour, and moving that the sum of two shillings and sixpence be augmented to that of ten shillings and sixpence (and which I believe would have been instantly agreed to), I was told by the Speaker, that being a Bill from the Upper House, and this, moreover, being a money-question, it was too late now to introduce any such Amendment. I propose, therefore, if my professional brethren consider this a question of sufficient interest to them, to introduce a short Bill, as speedily as possible, to increase the paltry sum of two shillings and sixpence now enacted to be paid for the performance of such duties, to a more reasonable, but still scarcely remunerative fee of ten shillings and sixpence.

I am, &c. John Brady.

1, Warwick-terrace, Warwick-square, Aug. 9, 1853.

[We are quite sure that the Profession will feel deeply indebted to Mr. Brady for his judicious interference in this matter; and we hope that his intended effort will be successful.—Ed.]

THE REPORT OF A CASE OF SUSPENDED ANIMATION UNDER CHLOROFORM.—ARTIFICIAL RESPIRATION.—RECOVERY.

[To the Editor of the Medical Times and Gazette.]

Sir,—I believe it scarcely necessary to preface the following case by an apology for its publication. Surely it will bear with it such an amount of interest as will make it acceptable to the whole Profession. For when we consider, that not a day, or even an hour, passes by, during the which there are not some of our fraternity engaged in administering chloroform, and that each now and then a patient suddenly collapses, struggles a brief moment, and then dies, leaving behind him an awful testimony to the power of the agent we have in our hands, and a startling warning as to how great care we should ever use when calling that power to our aid,—when, I say, all this is borne in mind, I feel sure my report will be well received. To those, especially, who have been witnesses of such a catastrophe as a fatal case of chloroform, I feel confident I need offer no reasons for my relating a case where active measures, promptly and perseveringly applied, averted the fatal result just impending, and saved a life when scarcely a shadow of hope hovered over it.

It is but fair to Dr. Scott and myself, to state, that we are in the habit of daily administering chloroform, for operations of all kinds, often for those of the most severe character, and involving the loss of large quantities of blood; and yet, until now, we have met with hardly a single untoward symptom in our patients. Of course, too, during my House-Surgeonship, my experience amounted to many hundreds of cases, likewise without any disagreeable results. But as to be forewarned should lead to being forearmed, the fatal experience of others caused us to pre-arrange how we could best act, and act concertedly, should such a case as the following occur. The advantage of this will be apparent to all who read the following case: for it will be evident, that

any hesitation or delay would have lost us all chance of successs and our patient would have been one more added to the fatal case, of chloroform.

He was a young man, aged 22, on whom I was operating for partial excision of the left elbow-joint. He was a fine, well-built, dark individual, who had never suffered from any serious illness, save the scrofulous affection of the joint under operation; was a sober person, and had led a leisurely life; he was, in short, to all appearances, a fit and proper subject for chloroform.

Dr. Scott, who has so frequently administered the chloroform, did so on the present occasion. The man was rather restive, but nevertheless took it moderately well, and, having been rendered insensible, I had proceeded with the operation almost to its completion, when the patient became suddenly deadly pale and cold, his pulse intermitting alarmingly, and his breathing becoming convulsive. His face was quickly bathed with cold water, and fresh air admitted freely to him; he, however, grew still worse, his respirations became more feeble, and his pulse could no longer be felt at the wrist. He was instantly laid on the floor, and the feeble action of the chest gently aided by the hands; in spite of this, in about a minute or so, from his first seizure, he gave two or three short respirations, and, with a convulsive struggle, ceased to breathe, and his jaw dropped. As he did so, quick as thought, we bent over him, and Dr. Scott, closing the mouth, inflated the lungs by the nose, first covered with a cambric-handkerchief, while I, with a hand on each side of the chest, gently emptied them; thus we continued for full four minutes without producing any sensible result; at last a gentleman who held the wrist exclaimed, "There is a beat!" and after the lapse of a few seconds, "There is another!" Then a third. Now it began to beat violently, and the chest to heave deeply, but with a short period between each action. Presently the pulse beat more slowly, quietly, and regularly, but more feebly, and the chest acted spontaneously. After the lapse of a few more minutes, the man opened his eyes and smiled; being asked, he said he could swallow,—so, ceasing all aids to his respiration, he was given a little brandy; but not a drop was given until he had declared he could swallow. He was now sensible, his respiration restored, and his pulse acting naturally, though feebly; yet he still remained of a deathly coldness, and it required no little tronble to make him warm; his own expression well explained his condition: "He was as cold as if he were dead;" and, indeed, he was so. Brandy inside, blankets and hot water bottles outside, did, after a time, manage to restore him to something like a natural state of heat, and shortly afterwards he was able to sit up, and, in a little while, to be sent in a carriage home.

He has, since this, continued to go on quite well, never having felt any uncomfortableness, excepting a slight occasional tightness at the chest (which is often experienced after chloroform), and even now he is quite ignorant of his narrow escape.

I am folly persuaded that this case is a convincing testimony in favour of a steady perseverance in artificial respiration, as a remedy for the fatal effects of chloroform. To M. Ricord we owe its first recommendation and adoption. There can, I believe, be no doubt of its superiority over any other plan; but to make it effective it must be done well, and steadily persevered in. The present case tells well in favour of perseverance. Four minutes is a long time, under such circumstances, to continue steadily one plan without obtaining any benefit, and yet it triumphed in the end, and, to complete our victory, he had to continue the artificial respiration for full eight minutes without cessation. Our reward was success; and I cannot but believe the same reward awaits every one, who, under similar circumstances, will steadily pursue the same treatment.

I am, &c.

Edward William Lowe, M.R.C.S.E.,
Late House-Surgeon to St. Bartholomew's Hospital.

Congleton.

CHARING-CROSS HOSPITAL AND DR. EDWARD SMITH.

[To the Editor of the Medical Times and Gazette.]

Sir,—Dr. Edward Smith having, in his recent Pamphlet, endeavoured, by making violent attacks upon others, to divert attention from the circumstances which induced the Medical Committee of the Charing-Cross Hospital to annul his appointment as Teacher of Anatomy and Demonstrator, I feel it a duty, which I owe to myself, as well as to my colleagues, to give a plain statement of those circumstances.

During the latter part of last session, complaints were continually reaching me of the manner in which Dr. Smith conducted the anatomical department of the School.

That Dr. Smith, for the first three or four months of the session, devoted the greater part of his time to comparative anatomy, instead of confining himself to descriptive and surgical anatomy.

That he was usually late at lecture.

That he rarely attended above half an hour in the dissecting-room.

That, in describing parts at lectures, he was in the habit of doing so from notes.

That he did not provide subjects for lectures, but lectured from the parts for which the students had paid.

That, when he demonstrated in the dissecting-room, he did not give a lecture in the theatre, and *vice versâ*.

Two of the students, Mr. Clarke and Mr. Evans, complained to me, that they had been made to take parts which had been rendered imperfect by *post-mortem* examination, they having paid for perfect parts. I was also informed, that, while the dissatisfaction was general among the students, some were so displeased that they openly expressed their determination to write to the public journals upon the subject, which determination, if I am correctly informed, more than one carried into effect.

These complaints did not reach me from one source merely, not from the students alone, but from some of my colleagues, and likewise from gentlemen unconnected with the School, and having no communication with each other; some, indeed, residing in the country.

Dr. Hassall, of Richmond; Mr. Woolcott, of Maidstone; Mr. Canton, Mr. Echlin, Mr. Hird, and Mr. Hogg, have all spoken to me of the complaints which have been made to them upon the subject, besides several gentlemen who have expressed their unwillingness to have their names published.

Finding the complaints of so serious a character, so general, and so widely disseminated, I felt, that if Dr. Smith continued to retain his appointment of Teacher of Anatomy, the character of the School would be seriously prejudiced; but, at the same time, from friendship towards him, and feeling that his previous pursuits, while incapacitating him for the rougher details of simple anatomy, might most probably have rendered him more competent to teach physiology, I was very anxious, if I could possibly do so, to effect a change in position between Dr. Smith and Mr. Canton, that is, for Dr. Smith to take the Chair of Physiology, Mr. Canton resuming that of Anatomy, which he had so efficiently filled for some years. I therefore spoke (in my private capacity) to Mr. Canton upon the point, and, as he received the matter in a very liberal and generous spirit, I subsequently proposed it to my colleagues, Dr. Shearman, Dr. Golding, and Dr. Chowne. They concurred in my views, and I was in great hopes that I should have succeeded in the arrangement.

However, while the matter was under consideration, the Committee received a communication charging Dr. Smith (among other things,) with making mistakes at lecture, and lecturing from notes.

For obvious reasons I cannot give the letter itself here; *but, if Dr. Smith will give me permission in writing to do so, I hereby undertake to obtain a copy thereof, and to furnish the same to the public Journals.*

The Committee considered it but fair, that they should make Dr. Smith acquainted with the substance of this communication, and invite him to any explanation with which he might be desirous of favouring them; and they accordingly addressed a letter to Dr. Smith, embodying the substance of this communication, but which, as Dr. Smith has already published it *verbatim* in No. I of his Correspondence, it will be unnecessary for me to insert here. The Committee, likewise, received a copy of a resolution, passed, it is stated unanimously, at a meeting of the students, requesting Dr. Smith to use his influence with the Medical Committee, to obtain the appointment of a qualified Demonstrator.

Now, as Dr. Smith, by the terms upon which he held his appointment, was bound, if he did not attend in the dissecting-room himself, to appoint a qualified Demonstrator as his deputy; and, as Dr. Smith stands published in the Prospectus of the school as follows:—"Descriptive and Surgical Anatomy—Dr. E. Smith." "Demonstrations and Dissections—Dr. E. Smith." It must be very evident, that, had Dr. Smith done his duty, there would have been no necessity for such a meeting of students; and the Committee could not but regard the resolution as a confirmation of one of the complaints which had previously reached me, and which was also contained in the letter to which I have already alluded.

I would add, that Dr. Smith held his appointment upon precisely the same terms as those which governed his predecessors—Mr. Hird, Mr. Canton, and myself, for fifteen years. The Committee have never made charges against Dr. Smith; they have made him acquainted with the allegations brought against him in the letter in question, but they studiously avoided any comment either one way or the other. Whatever publicity has hitherto

been given to the transaction, has been due entirely to Dr. Smith. It is true, that the Committee told Dr. Smith, in their letter of the 11th of April, "that they did not wish to entertain the subject of the lecturer's anatomical errors, and his being obliged to lecture copiously from notes." This cannot, with any justice, be construed into a withdrawal of charges, but simply as it was intended and expressed, "that the Committee did not wish to entertain certain allegations made *to* not *by* them, but leaving those allegations unprejudiced." And so they remain to the present moment, since Dr. Smith throughout the whole of his correspondence has studiously avoided anything approaching to an explanation.

From the temper displayed by Dr. Smith, and the reckless charges made by him, in his correspondence with the Committee, they felt that his colleagues could no longer work harmoniously with him, and they consequently acted upon the agreement entered into, and signed by every teacher, upon his joining the school; which is equally binding upon the managers of the school as upon the teachers, and upon which, both teachers and managers have acted, to my own knowledge, for the last fifteen years. And I would add, that the hesitation of the Committee to supply Dr. Smith with a copy of the Rules which he had signed, arose from his having, by implication, threatened the Committee with law proceedings; the Committee, therefore, deemed it more proper to refer Dr. Smith to their solicitors, Messrs. Fladgate and Co., whom, on the 20th July, they instructed to furnish Dr. Smith's solicitor with the information required, more than a fortnight before his Pamphlet (in which he asserts he cannot obtain a copy of these Rules) appeared.

In conclusion, I would here allude to certain assertions contained in Dr. Smith's pamphlet connected with the Surgical department, which, if unnoticed, are calculated to mislead, and create misapprehension as to the efficiency of the institution.

1st. That "there is not an amputating knife in the place; so that, if it were necessary to perform an amputation in the night, the instrument-maker must be roused from his bed."

I make a rule of never using the same knife for operation more than once, without its being set to rights; and, to insure my instruments being always ready for use, and in proper order, I keep them at Mr. Simpson's, the surgical instrument-maker, in the Strand, immediately opposite the end of the hospital, not quite the length of the building from it. I have more than once had to amputate in the middle of the night, and, in all instances, the instruments were ready before the patient could be prepared; and I have scarcely ever performed what is termed a capital operation, without Mr. Simpson himself kindly attending, and furnishing me with a supply of every instrument which might with any probability be required.

2ndly. That "the House-Surgeon was directed to make splints out of pieces of board, for the treatment of fractures,—even of fractured thighs."

There is a large room especially appropriated for splints, etc.; it contains, at the present time, (and there have been no additions made to it for some weeks past,) between 90 and 100 splints of various kinds for use, comprising iron and wooden arm and leg splints,—Desault's, Liston's, double incline plane, and T splints, etc. In addition, thick leather, and boards about a quarter of an inch thick, purposely prepared, are kept, that the House-Pupil should be able, at any time, to fit proper-sized splints to the broken arms of out-patients; and for which purpose, also, if the House-Pupil does his duty, the necessary pads and bandages are in constant readiness. I have always approved of this procedure, as affording invaluable practice to the students, especially to those about to be located in the country, far away from instrument-makers. Cases are continually occurring, wherein the ordinary splints, even with all their valuable appliances, do not answer, and the surgeon is obliged to rely upon his own ingenuity.

There are other assertions contained in the Pamphlet, of an equally groundless character, and which are unworthy thetrouble of refuting.

I will now refer to the following letters, and remain, &c.

59, Harley-street. HENRY HANCOCK.

Kent County Ophthalmic Hospital, Maidstone,
July 30, 1853.

Dear Mr. Hancock,—It was Mr. Barnes, the late House-Surgeon to this hospital, and who, I believe, was Demonstrator of Anatomy under Dr. Smith before he came here, who informed me, that the students of the Charing-cross Hospital, with scarcely an exception, were dissatisfied with Dr. Smith as their teacher of anatomy, and that, if he continued lecturer on anatomy another session, the school would be greatly injured.

Believe me, yours very truly,

Henry Hancock, Esq. JOHN WOOLCOTT.

Richmond-green, July 29, 1853.

My dear Mr. Hancock,—My impressions have been derived from Mr. Thomas, (my present assistant,) and Mr. Price, my former pupil, both students of Charing-cross Hospital. They have frequently spoken of the inefficient manner anatomy is taught in the Charing-cross School by Dr. Smith, and that he seldom came in before half-past ten o'clock, and concluded his lecture at eleven; that his duty was to proceed from the theatre to the dissecting-room for two hours; but his usual practice was, to remain there about twenty minutes, when he wished the students, "Good morning," and left the hospital; that he took no pains to afford practical instruction; and that it was a subject of general complaint by the students, Mr. Clarke particularly remarking, that "he knew his anatomy as well as Dr. Smith."

I am, yours very truly,

Henry Hancock, Esq. RICHARD HASSALL.

Cleveland-row, St. James's, August 2, 1853.

My dear Mr. Hancock,—In reply to your note of this morning, wishing me to state to you in writing the complaints which had reached me during the past session in reference to the management of the anatomical department of the school, I can only repeat what I personally told you some time ago, viz., that three or four of the students had complained to me of the want of attendance in the dissecting-room, and of the irregular manner in which the lectures and demonstrations on anatomy were given. With respect to the latter complaint, I was given to understand that, when Dr. Smith lectured, he did not demonstrate; and, when he demonstrated, there was no anatomical lecture; and that, in place of giving a systematic course of instruction in the order usually pursued in the schools, there was a want of arrangement throughout the whole course.

In consequence of what had taken place in the school, and from certain statements contained in Dr. Smith's pamphlet, which I thought the class might consider as applicable to the anatomical department while under my superintendence, I felt it my duty, in my last lecture, to address a few words to the students on this painful subject, confining my observations strictly to the details of my own arrangements for illustrating the more difficult parts of anatomy during the fourteen years I held the anatomical chair.

I also informed the class, that I was neither a partisan of the Medical Committee on the one hand, nor of Dr. Smith on the other; and in giving you this simple statement of reports made to me by members of my own class, in my own house, voluntarily, and in the absence of any knowledge on my part of the correspondence that either had or was about to take place between the Medical Committee and Dr. Smith, I consider that I am only doing an act of justice to all parties.

Believe me, my dear Mr. Hancock, yours very faithfully,

Henry Hancock, Esq. FRANCIS HIRD.

31A, Savile-row, Aug. 2, 1853.

My dear Mr. Hancock,—During the past Session, I had frequently mentioned to you complaints which were rife in the school respecting the mode in which the anatomical department was conducted. I was not infrequently appealed to respecting the correctness of anatomical descriptions which had been given in the dissecting room or theatre. I have personally been acquainted with the lateness of the teacher to his ten o'clock lecture, in consequence of having visited the hospital not infrequently with my brother, whose duty carried him there at that time. I have been told repeatedly of the continued absence of the demonstrator from the dissecting-room, and been asked often the reason why so much comparative anatomy was given in the descriptive course of anatomy.

My long connexion with the anatomical department of our school has doubtless caused these matters to have been brought so prominently before me. Yours very truly,

E. CANTON.

[Mr. Hancock has also forwarded us two long letters from Mr. Hogg, of Gower-street, and Mr. Echlin, of Frith-street, Soho; but, as they merely repeat and confirm the statements of Mr. Canton, Mr. Hird, Dr. Hassall, and Mr. Woolcott, it appears unnecessary to occupy our space with them.—ED.]

[COPY OF A LETTER SENT TO THE MEDICAL COMMITTEE OF CHARING-CROSS HOSPITAL ON THE 5TH ULT.]

DEAR SIRS,—We very much regret the occasion which demands this assurance to you, upon our part, of our unqualified dissent from the expression used in a pamphlet

recently published, bearing reference to the manner in which we, the lecturers in the school, are treated by the Committee. On the contrary, we beg to assure you, that we are fully sensible of the honourable conduct and urbanity we have ever experienced from the Director and the other members of the Committee, and that we entertain for them the highest esteem, both in their official and private capacities.

John Steggall, M.D.,
Fifteen Years a Lecturer in the School.
Richard Rowland, M.D.,
Ten Years a Lecturer in the School.
Edwin Canton, F.R.C.S.E.,
Thirteen Years a Lecturer and Demonstrator in the School.
George Birkett, M.D.,
Three Years a Lecturer in the School.
W. Hughes Willshire, M.D.,
Fourteen Years a Lecturer in the School.
Francis Hird, F.R.C.S.,
Fifteen Years a Lecturer in the School.
Harman H. Lewis, A.M. Cantab.,
Five Years a Lecturer in the School.

To the Medical Committee of the Charing-cross Hospital. August 5, 1853.

Note.—Mr. Headland is on the Continent; and therefore his signature was not affixed.

MR. GAY'S OPERATION FOR ULCER.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have read with much interest the reports, published in your pages, of the success which has attended Mr. Gay's ingenious operation for the cure of chronic ulcer on the leg, in cases where, on the one hand, much of the integument had been destroyed, or, on the other, the new skin had become firmly adherent to the shin, or ankle bones, after cicatrization had reached a certain point.

Mr. Stanley has also, I understand, lately made an attempt, at St. Bartholomew's Hospital, to supply the lost integument in a case of stubborn ulcer, so circumstanced, by partially detaching a flap of skin from the neighbouring surface, and laying it down upon the sore. Adhesion did not, however, take place, and the flap sloughed, leaving the sore *in statu quo*. Another instance is on record, in your Number of last Saturday, (July 30,) in which the same eminent surgeon found it necessary to amputate a leg, disabled for years by an incurable ulcer of this kind. The extreme obstinacy of these varieties of the complaint, setting at defiance all the ordinary modes of treatment, and the great amount of suffering they inflict, completely justify a recourse to extreme measures; and I quite agree with your reporter, that the last patient was to be congratulated on the loss of so unserviceable a limb.

But, while thoroughly impressed with the inadequacy of our previous resources to meet the peculiar difficulty under consideration, and fully recognising the merits of Mr. Gay's suggestion,—more especially its adaptation to the class of cases first named, those in which much integument has been lost,—there yet appears to me to be no little danger, that, in endeavouring, by such means, to relieve the patient of a single burden, we may sometimes actually double it. We can scarcely, in fact, expect that a deep incision, through structure more or less diseased, will always be disposed to heal kindly. I have now under my care an old hospital patient, with an obstinate callous ulcer below the outer ankle, which originated in an incision made, two and a-half years ago, for the relief of phlegmonous erysipelas. Rest, strapping, and other means of cure, were tried in vain for many weeks in hospital, and, subsequently, as an out-patient. The sore is at present granulating slowly, but healthily, under the joint influence of blistering and support.

I make no apology, therefore, for requesting your insertion of the following brief sketch of a somewhat similar operation, which I have long contemplated, and which seems to me even better calculated than that of Mr. Gay to get rid of the other source of intractability,—adhesion, namely, of the newly-formed skin to the bones or fascia,—although no opportunity of carrying it into effect has yet occurred to myself. At the same time, all risk whatever is avoided of fresh ulcers forming, as a consequence of the one or two incisions parallel to the sore, practised by that gentleman, and which at any rate must require some time to cicatrize.

The plan referred to consists in simply raising the adherent skin from its connexion with the parts beneath, by gliding a double-edged bistoury under the tense margins of the sore, so as to set them free to a sufficient extent to admit of their edges being brought nearly, if not quite, into contact across the suppurating surface, my intention being afterwards to maintain them in that position by short straps of adhesive plaster, until union had taken place. A further division of the raised margins, at right angles to the sore, may sometimes be requisite for their better adjustment.

Its feasibility not having, then, been tested, I did not think it worth while to allude to what was no more than a project in the second edition of my Essay on Ulcers, published in the early part of the present year; but spoke of it to a number of friends attached to hospitals, in the hope that some of them might be induced to give it a trial. This has been done recently, under the influence of chloroform, by Mr. Ure, at St. Mary's Hospital, although my views were not entirely carried out,—the after-treatment consisting merely of water dressing and rest, no effort having been made to draw together the liberated margins with adhesive plaster. The latter stage of the cure was accordingly completed by granulation, and occupied more time, I imagine, (about a month,) than if the straps had been employed. Its success, nevertheless, has been sufficiently marked to encourage its repetition in other cases, a notice of which will, in all probability, ere-long appear.

One word of caution in conclusion. A tendency will always, perhaps, prevail to adopt and practise these and similar novelties without due discrimination. I have already been asked my opinion as to the propriety of an operation in two instances where no shadow of a necessity existed for any measure of the kind. The margins of neither ulcer were more than ordinarily adherent to the parts beneath, nor could I discover the least tension of the surrounding skin. Both sores, in fact, afterwards healed under long-established methods of treatment.

The cases are extremely few in which an operation is indispensable; and still fewer, I suspect, are the private patients who will submit to the treatment of an ulcer on the leg by the scalpel, even when all other attempts have failed. The first to whom I proposed the plan described above, nearly eight months ago, was so alarmed by the bare proposal, that she discontinued her attendance altogether. Her leg, I believe, with those of several other patients who could not be persuaded to try it, still remains unhealed; two recusants, however, have got perfectly well without any operation.

I am, &c. Henry T. Chapman.

Lower Seymour-street, Portman-square.

MR. WIBLIN AND MR. FINLAY.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having seen in your "Answers to Correspondents" in to-day's publication, notice taken for the second time of the correspondence between Mr. Wiblin and myself, I beg to explain the statements there used. In the first place, I stated to Mr. Wiblin in answer to his questions, that there were convalescents on board who had suffered from yellow-fever, and also that there was no other form of fever on board. The man, John Binstead, mentioned in your remarks, did not suffer from fever on the voyage home; he was sent on board at St. Thomas's drunk, and in irons, from one of the intercolonial ships, which, I believe, was the Eagle, if I recollect aright. He had a partial epileptic fit on the voyage, for which he came under my notice, but no fever that I could detect, as I remember very well examining him very minutely at the time, as fever then existed among the ship's company. In the second place, as to his dying yellow all over, allow me to remark, that yellowness of the skin does not constitute yellow-fever. If I mistake not, a man may die from jaundice, and be equally tinged as in yellow-fever. I am, &c.

Dublin. David L. Finlay, L.R.C.S.I.

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.—1853.

PASS EXAMINATION.

MONDAY, August 1.—*Morning*, 10 *to* 1.

ANATOMY AND PHYSIOLOGY.

Examiners—Mr. Kiernan and Prof. Sharpey.

1. Give an account of the cuboid and external cuneiform bones, and of their articulations with each other, and with adjacent bones, mentioning their relations with other parts. What examples of the classes of joints are presented by those of the lower extremity?

2. Commencing at the integuments, give the dissection required to expose the outer surface of the pterygoideus internus muscle.

3. Describe the subcutaneous bloodvessels, lymphatics, and

nerves of the lower limb, with the saphenous aperture of the fascia lata.

4. The abdomen being opened, and the greater omentum detached from the stomach, and turned downwards, give an account of the position and relations (omitting the structure) of the parts which lie between the lower surface of the diaphragm above, and the transverse arch of the colon and its mesocolon below, describing them, with their vessels and nerves, in the order in which they are met in dissection. The boundaries of the region are not to be described.

5. Give an account of the structure, physical properties, and chemical constitution of the elastic tissue.

MONDAY, August 1.—*Afternoon*, 3 *to* 6.

ANATOMY AND PHYSIOLOGY.

Examiners—Mr. KIERNAN and Prof. SHARPEY.

1. Give a description of the os innominatum, mentioning the several muscles attached to it, with their place of attachment. Describe also its mode of connexion with adjacent bones of the trunk.

2. Give the dissection required to expose the nerves of the brachial plexus in front, from the lower edge of the subclavius muscle to the insertion of the coraco-brachialis. Describe the arrangement of these nerves and the distribution of their branches within the assigned limits, except the continuation of the suprascapular and circumflex; mentioning the other parts met with in the dissection in the order of their appearance, and specially indicating their relations to the nerves.

3. Describe the parts which would be successively brought into view in exposing, by dissection, the three extensor muscles of the thumb, from their origins to their insertions.

4. The cerebellum, tuber annulare, and medulla oblongata being removed, describe the under surface of the cerebrum, including the vessels and nerves, and the parts necessarily seen in exposing the under surface of the corpus callosum in its whole length.

5. Describe the external configuration and the internal surface of the auricles of the heart.

TUESDAY, August 2.—*Morning*, 10 *to* 1.

CHEMISTRY.

Examiner, Professor BRANDE.

1. Describe the manufacture and properties of phosphorus, the uses to which it is applied, and the composition and characters of its compounds with oxygen.

2. Give the details of the analysis of the atmosphere, stating the best means of determining the quantity of oxygen, carbonic acid, aqueous vapour, and other substances occasionally present in it.

3. Give the formulæ of composition of the following salts, including, when present, water of crystallization:—

Acetate of potassa, acetate of soda, acetate of lead, oxalate of ammonia, oxalate of lime, Rochelle salt, ferrocyanide of potassium, carbonate of potassa, carbonate of soda, bicarbonate of potassa, emetic tartar, borax.

4. Explain the various modes of determining temperature, and their respective applications and merits.

5. A calculus contains uric acid, phosphate of lime, and ammoniomagnesian phosphate; how would you detect their presence, and determine their respective proportions?

TUESDAY, August 2.—*Afternoon*, 3 *to* 6.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

Examiner—Dr OWEN REES.

1. Describe the physical characters, chemical constitution, and more especial therapeutical action of the following drugs: calumba, gentian, the cinchonas, sulphate of iron, sulphate of zinc.

2. Describe the methods of testing for the presence of morphia and of meconic acid. State the sources of fallacy connected with the determination of the latter substance, and the means of establishing its presence.

3. What distinction do you draw between a narcotic and a sedative, and between a tonic and a stimulant? Give types of each of these classes of remedy.

4. Describe the physical and chemical characters of chloroform, and the mode of preparing it recommended by the London College.

5. Translate the following passages into English, and give the reasons for applying the tests therein recommended to be used:—

"Nec lacmi nec curcumæ colorem mutat. Immisso acido hydrosulphurico non coloratur; nec quicquam demittit adjecto barii chlorido. Quod ab argenti nitrate demittitur in aquâ, præcipue autem in acido nitrico liquatur. Adjecta potassâ ammoniam, adjecto acido sulphurico vapores aceticos emittit. Liquore consumpto quod restat in igne perit." [Note. Liquor ammoniæ acetatis.—*Ph. Lond.*]

. . . . . "Instillato acido hydrochlorico nullas emittit bullulas; neque aquâ, in quâ prius contritum digestum fuerit calore gradus 170mi, potassii iodido et acido nitrico diluto simul adjectis, cæruleo colore tingitur. Hujus e granis 100 grana 78, in æthere liquare debent." [Note. Scammonium.—*Ph. Lond.*]

(N.B. Detailed answers are required to the above questions.)

WEDNESDAY, August 3.—*Morning*, 10 *to* 12.

BOTANY.

Examiner—Rev. Prof. HENSLOW.

1. Define the following terms:—Utriculus, Axilla, Spongiola, Placenta, Cremocarpium, Monochlamydeus.

2. Describe the specimens numbered 1, 2, etc. (so far as they admit), confining yourself *strictly* to the following particulars:—

(*a*) STEM. General Character.
(*b*) LEAVES. Arrangement.
(*c*) ——— Stipulation.
(*d*) ——— Composition.
(*e*) ——— Form.
(*f*) ——— Margin and Incision.
(*g*) ——— Venation.
(*h*) INFLORESCENCE. General Character.
(*i*) ——— Bracteal appendages.
(*j*) FLOWER. Peculiarities of Calyx.
(*k*) ——— ——— Corolla.
(*l*) ——— ——— Stamens.
(noticing insertion.)
(*m*) ——— Disk.
(*n*) ——— Pistil (as to Ovary, Style, Stigma, Placentation.)
(*o*) ——— A brief sketch of the chief characteristics of the Order to which the Plant belongs.

UNIVERSITY OF EDINBURGH.

THE annual ceremony of "capping" the Medical Graduates, and conferring upon them the diploma of M.D. on the termination of their studies in the University, took place in the Chemistry Class-room on Monday week at ten o'clock. The unusual number of eighty-four students of medicine graduated upon the occasion. Principal Lee presided, and among the Professors present were Drs. Alison, Syme, Simpson, Traill, Sir George Ballingall, Gregory, Bennett, Miller, Balfour, and Liston. The Graduates came forward in alphabetical order, and signed the *sponsio*, and, advancing to the Principal, were capped by him, and received their diplomas. The following is a list of the Graduates:—

***Those who have obtained Prizes for their Dissertations.
**Those selected for Competition for the Dissertation Prizes.
*Those commended for their Dissertations.

FROM SCOTLAND.

**Adam, Andrew Mercer.
**Anderson, Thomas.
Ashenheim, Charles.
*Brown, James Lundin.
Bruce, Robert.
***Chaumont François de, F. Stephen Bennett.
**Cowan, James M'Haffie.
**Currie, James Allan, M.A.
***Dalzell, Allen.
Fair, George.
Fraser, Duncan Alexander Campbell.
Gray, John.
**Greig, David.
Guthrie, Alexander.
Hood, David.
Jardine, James.
Johnstone, John.
Kay, Wm. Forbes Oudenay.
Loch, James Henry.
Macarthur, Alexander John.
Macdonald, Francis Robertson.
Mackay, Jas. Wm. Norris.
**Millar, Wm. Somerville.
Millar, Thomas.
**Milroy, David.
**Moir, Robert.
*Pirie, George Clark.
*Ramsay, David.
Scott, William Henry.
*Steuart, James Frederick.
**Stirling, David Halket.
Watson, Patrick Heron.
Young, James.

FROM ENGLAND.

Aldridge, John Henry.
**Beddoe, John, B.A.
Burrows, Merrick Lloyd.
*Cock, Frederick.
*Collinge, James.
*Dickson, John.
Hewitt, Tom Smith.
Inglis, Cornelius.
King, Edwyn John.
Law, Joseph.
Longton, Edward John.
Matthews, John.
Nicholson, Emilius Rowley.
***Priestley, William Overend.
Robertson, William Tindal.
**Sherwood, Eleazar.
Speak, Tom.
Titterton, Henry.
***Turle, John.
Twyford, Henry Penrose.
Veale, Henry Richard.
*Vernon, Henry Haunote.
Wailes, Robert.
Williams, Thomas Robert.

Young, Christopher.
FROM BERWICK.
Sinclair, James.
FROM WALES.
Roberts, David Watkin.
FROM IRELAND.
***Bryce, William.
Clugston, William Alexander.
Dycer, Charles.
Hamilton, William.
Taylor, William.
FROM THE EAST INDIES.
Breton, Henry.
Dupuy, Arthur.
**Hutchinson, Robert Faure.
O'Donel, Francis Hugh.
FROM JAMAICA.
*Bizzett, William Weddell.
Finlayson, David.
FROM TRINIDAD.
Boissière, Jean Valleton de.
FROM CANADA.
*Burton, Robert Graves.
Christie, Robert.
**Lane, Edw. Wickstead, M.A.
Russell, Francis M'Manus.
FROM NEW BRUNSWICK.
Berryman, Peter James.
Parker, Neville Gray du Vernet.
Street, James Petrie.
FROM MALTA.
*Jones, Arthur Trefusis.
*Pisani, Salvator Aloysius, M.D., University of Malta.
FROM PORTUGAL.
Ozorio, Joseph Fructuoso Ayrez de Gouvea, M.D., University of Coimbra.
FROM TURKEY.
Sarell, Richard.
FROM SMYRNA.
**Chasseaud, Guilliame.
FROM BRAZIL.
Hall, Thomas Wright.

MEDICAL NEWS.

THE ROYAL COLLEGE OF PHYSICIANS.—The new Charter of the Royal College of Physicians, which has already been in draft before the Medical Profession, is not expected to receive the sanction of the Legislature during the present Session of Parliament, Lord Palmerston having, it is understood, expressed himself as favourable to further deliberation on this matter.

KNIGHTHOOD.—At a Court held on Tuesday, Dr. John Forbes, Physician to Her Majesty's Household, had an audience, when the Queen was pleased to confer on him the honour of knighthood. Dr. James L. Bardsley, of Manchester, also had an audience of Her Majesty, and received the honour of knighthood.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Aug. 4, 1853:—

ADYE, HENRY, Bradford, Wilts.
BUTLER, JOHN MATTHEW, Woolwich, Kent.
CRIDGE, EPHRAIM MATTHEW, Stoke, Devonport.
DAVEY, RICHARD STAINES, Walmer.
HALLIWELL, RICHARD NOWELL, Demsbury.
HANSLIP, THOMAS, Hatton-garden.
JACOBSON, THOMAS EDMUNDS, Sleaford, Lincoln.
ROE, JOHN WITHINGTON, Malpas, Cheshire.
SALT, WILLIAM, Betley, Staffordshire.
STEDMAN, FREDERIC SAVIGNAC, India.
SYKES, RICHARD, Drightington, Yorkshire.
TUDOR, JOHN, Bronhanloy, Denbighshire.

COMPLIMENT TO THE MEDICAL PROFESSION.—The Lord Chancellor, on the recommendation of the Lord-Lieutenant the Earl of Warwick, has nominated William Sands Cox, Esq., a Deputy-Lieutenant to the Commission of the Peace for the County of Warwick.

APPOINTMENTS.

MILITARY.—12th Regiment of Light Dragoons: Assistant-Surgeon Dudley Clifton Wodsworth, from the Staff, to be Assistant-Surgeon—13th Foot: Assistant-Surgeon William Hanbury, from the 24th Foot, to be Assistant-Surgeon, vice Clarke, appointed to the 24th Foot. 24th Foot: Assistant-Surgeon Frederick Clarke, from the 13th Foot, to be Assistant-Surgeon, vice Hanbury, appointed to the 13th Foot. 43rd Foot: Assistant-Surgeon John Matthew Biddle, from the 94th Foot, to be Assistant-Surgeon. 74th Foot: Assistant-Surgeon Arthur Bell, from the Staff, to be Assistant-Surgeon. 91st Foot: Assistant-Surgeon Constantine Caridi Read, from the Staff, to be Assistant-Surgeon, vice Peile, deceased. Hospital Staff: Peter Davidson, M.D., to be Assistant-Surgeon to the Forces, vice Constantine Caridi Read, appointed to the 91st Foot; James Sinclair, gent., to be Assistant-Surgeon to the Forces, vice Dudley Clifton Wodsworth, appointed to the 12th Light Dragoons.

QUEEN'S COLLEGE, BIRMINGHAM.—Dr. Heslop, Physician to the Queen's Hospital, has been appointed joint Professor of Materia Medica, and Mr. Oliver Pemberton, Surgeon to the General Hospital, and Demonstrator of Anatomy in the College.

BOMBAY.

APPOINTMENTS.—Surgeon M. T. Kays, M.D., to officiate as Superintending Surgeon during the absence of Superintending Surgeon Edward, on leave to Egypt and Syria. Surgeon J. J. Atkinson, of the 24th Regiment Native Infantry, to act as Garrison Surgeon at Surat, during the absence of Surgeon Pitcairn, on sick leave to the Cape of Good Hope. Surgeon A. Wright is appointed to the Medical Charge of the 2nd Battalion Artillery. Assistant-Surgeon N. P. Foley is appointed to the Medical Charge of the 27th Regiment Native Infantry.

ADMITTED TO THE SERVICE.—Mr. John Milford Barnett, M.D., as an Assistant-Surgeon; date of arrival at Bombay, May 22, 1853.

BENGAL.

APPOINTMENTS.—Surgeon D. Butter, M.D. of the 29th Regiment of Native Infantry, is appointed Garrison-Surgeon at Allahabad, vice Surgeon H. Guthrie, M.D., appointed Superintending Surgeon. Surgeon H. A. Bruce, M.D., officiating on staff employ, is removed from the 1st European Bengal Fusiliers to the 49th Regiment Native Infantry. Surgeon E. Hare, new promotion, is posted to the 1st European Bengal Fusiliers. Assistant-Surgeon S. R. Tucker, at present in medical charge of the corps, is posted permanently to the 7th Irregular Cavalry.

ADMITTED TO THE SERVICE.—Medical Department: Thomas James Duthoit, M.D.; date of arrival at Fort William, May 30, 1853.

RANK ASSIGNED.—Medical Department: Assistant-Surgeon William Boyne Butt, March 20, 1853.

CIVIL SERVICE.—BOMBAY.

APPOINTMENTS.—Assistant-Surgeon Ballingall, to be Curator of the Museum of the Grant Medical College. Dr. A Gibson, to be Conservator of Forests, and Superintendent of Botanical Gardens. Dr. J. E. Stocks, to be temporarily employed on special duty in the Deccan.

MADRAS.

APPOINTMENT.—TEMPORARY.—Assistant-Surgeon Eaglesfield John Barker, to act as Residency Surgeon at Travancore, during Assistant-Surgeon Waring's employment on other duty.

BENGAL.

APPOINTMENTS.—TEMPORARY.—Assistant-Surgeon Thos. Boycott, of the Bombay Medical Service, to be Deputy Assay Master of the Calcutta Mint, during the absence of Dr. O'Shaughnessy, on special duty. Dr. C. Merchison, to officiate as Professor of Chemistry in the Medical College.

DEATHS.

CALDWELL.—The American newspapers mention the death of Professor Caldwell, of Kentucky, on the 9th of July last, in his 81st year. One of them, the *New York Daily Tribune*, devotes nearly three columns to a memoir and eulogium on the deceased, from which it appears, that he was an ardent phrenologist, in addition to the high rank he had attained in the Profession in America. Dr. Caldwell was a physician and a teacher of high repute in the United States, and his loss will not be easily replaced. For some years prior to his decease, he was occupied in preparing autobiographical memoirs.

JOHNSTON.—At Umballa, Assistant-Surgeon Johnston, Her Majesty's 75th.

OWEN.—May 24, at Midnapore, Bengal, of cholera, aged 27, William Charles Owen, Esq., M.D.

RUSSELL.—June 10, in Mexico, Mr. Robert Russell, surgeon. He was attacked by robbers, fourteen in number, and cruelly murdered. He fought bravely for his life, killing the captain of the gang, and one of his followers, when he fell, speared through and through. The wretches mangled his remains in the most barbarous manner, inflicting no fewer than fifty wounds.

STOKES.—Aug. 5, in Essex-court, Temple, John Stokes, Esq., of Herne Bay, Kent, aged 60; L.R.C.S. Ireland, 1820; Matric. T.C.D., 1820; Lic. Midw. Dub., 1821; late Surgeon to the Welsley Hospital; formerly Surgeon to St. Peter's Dispensary, and to the Female Shelter for Prisoners, Dublin; Hon. Member Med. Chir. Soc. of Dublin.

THOMSON.—Aug 4, at his residence, Belvedere, Tonbridge-wells, Thomas Thomson, Esq., M.D., Inspector-General of Hospitals, in the 78th year of his age.

LEEDS SCHOOL OF MEDICINE.—The distribution of prizes of this school, for the summer session, took place on Saturday, July 30, when the following awards were made:—Botany, silver medal, Mr. W. W. Morriss. Midwifery, silver medal, Mr. Wm. de Fabeck; certificate of honour, Mr. Wm. Barker. Materia Medica, silver medal, Mr. F. Hall; certificate of honour, Mr. W. W. Morriss.—Medical Jurisprudence, silver medal, Mr. Wm. de Fabeck; certificate of honour, Mr. J. E. Fawcett.

QUEEN'S COLLEGE, BIRMINGHAM.—Mr. William Webb, a Warneford Scholar and a Warneford Gold Medalist, and Resident Surgeon at the Stafford Infirmary, and Mr. James Henry Franks, Warneford Scholar and a Warneford Gold Medalist, and Resident Surgeon at the Leamington Hospital, have been unanimously

admitted to the "Fellowship" under the powers granted by the Crown.

THE MEDICAL PRACTITIONERS OF ROTHERHAM AND THE SEWERAGE OF THE TOWN.—A letter, signed by all the Medical Practitioners of the town, was read at a late Board meeting, deeply regretting the slow advance made with the sewerage of the town. They respectfully called the attention of the Board to the present extremely deficient state of the sewerage generally, whereby the cellars in these localities are now almost invariably flooded, exhaling noxious gases, depressing the vital powers of the inhabitants, and rendering them extremely liable to dangerous disease. Under these circumstances, they looked forward to the approaching season of autumn with considerable apprehension, more particularly when they observed the rapid extension of cholera on the Continent.

DEVON AND EXETER HOSPITAL.—A Special General Court of Governors was held at this Institution on Thursday, to receive the Report of a Committee appointed for the purpose of considering the propriety of building a museum and lecture-room, in connexion with the hospital. Mr. Sillifant, in moving the adoption of the Report, stated, that not only were the Committee enabled to present this great and valuable appendage to the hospital without drawing further upon their funds; but, by the liberality of voluntary contributions, were able to leave untouched the 400*l.* which the hospital had generously granted. There was also a surplus of 250*l.*, which the Governors could, if they pleased, take, and treat the museum as their own, or it might be retained as a nucleus for sums to be collected in future generations, to cherish and increase the museum. The Report was unanimously adopted, and the necessasy statutes were agreed to.

THE CHOLERA.—The Dutch Government have received the official notification from the Dutch Minister Plenipotentiary at Stockholm, that the Swedish Government have declared that the cholera prevails in Abo, Elsinore, St. Petersburg, Cronstadt, Narrva, Reval, Riga, and Copenhagen, and that the following places and territories are "suspected to be infected:"—All the Finnian harbours from Christianstadt inclusive to the Russian frontiers; all the Russian ports of the Gulf of Finland and the Baltic, and the ports of Zealand.—COPENHAGEN, July 31.—The cholera seems to have diminished here somewhat in intensity, as there are only 237 new cases, and 115 deaths. Up to the present time the 45th part of the population has been carried off by the malady. Our accounts from Copenhagen, up to the 4th instant, show the cholera to be somewhat on the decrease, the new cases seldom exceeding 150 per day. The whole number at present announced amounts to 5996, with 3219 deaths. It is to be observed, however, that now that the disease has attacked the middle-classes, who, for the most part, were treated at their own houses, the number of cases published would always be considerably under the truth.

THE CHOLERA.—The last news from Persia announces, that the cholera is making great ravages in Astraband, Mazraderam, and the desert of the Turcomans. In one of these provinces, the number of deaths amounted to 150 a-day. The Shah and his Court had retired to Imama. To complete the distress, the towns of Shiraz and Surham had been nearly destroyed by earthquakes. the River Zaindowod was dried up, so that, from its muddy bed, innumerable bands of grasshoppers proceeded, destroying everything in their progress.

YELLOW FEVER.—The *New Orleans Bulletin* of the 18th ult., publishes a statement from official records, showing, that the yellow fever prevails in that city to a very considerable extent. Of 104 deaths in the Charity Hospital, during the week ending the 15th ult., 86 were cases of yellow fever. On the 17th ult., there were in the hospital 145 cases of yellow fever. "For the past two days," says the *Bulletin*, "there have been 51 deaths by yellow fever." In May, there were 2 deaths by this disease; in June, 24; and from the 1st to the 16th July, inclusive, 181.

MEASLES.—The ship Constitution, which arrived at New York July 26, with 819 passengers, had more than 90 cases of measles at one time during the voyage.—*New York Daily Tribune.*

THE DISEASE which has been so fatal to the vines in Madeira is making great ravages near Lisbon. There are also symptoms of it in the port-wine district. A similar malady has destroyed a great many orange groves. The grape blight is now visible all over Sicily. The olive tree is also slightly touched.

CHARGES OF FELONIOUS ASSAULT IN DUBLIN. — The *Dublin Freeman's Journal* contains the account of three trials which the Government brought on in cases of alleged criminal intercourse with children, the fact being, that these children were discovered by their friends to be labouring under infantile leucorrhœa, and then the usual consequences, detailed by Cooper and others, followed. The children were questioned as to connexion; threatened severely if they did not confess; names were suggested to them; accusations made; parties taken up; police doctors swear that the appearances "may be the result of violence;" two men are sent to prison; and the cases come on before the Commission. The result was that, in one instance, the Crown abandoned the case; and in the other the jury at once acquitted the prisoner. But for the pains taken to elicit the truth on this occasion, one or both men would have been transported for life, the Crown being very determined, and the judges dead against the doctors.

FLOGGING IN THE NAVY.—In the year 1848 the total number of punishments inflicted in the navy was 1363; the total number of lashes was 40,545; the highest number at a single punishment 48, and the lowest number 1. The next year shows a material decrease in these figures, the whole number of punishments in 1849 being 1087, and the lashes 32,446, while the highest and lowest numbers stand at 48 and 2 respectively. In 1850 the improvement still continues. The total number of punishments in that year was only 967; the total number of lashes 27,291; 50 being the highest, and 2 the lowest number inflicted. In 1851 the total number of punishments sinks still further, to 842; and the total number of lashes to 26,587; the highest and lowest numbers being 50 and 6. Finally, the last return shows the greatest improvement of all, for the punishments dropped in 1852 to 578, and the lashes to 17,571; being considerably less than half of the total number reported four years previously for the year 1848. A certain number of vessels every year make a blank return, indicating that no corporal punishments whatever have been inflicted in the ship. The number of ships thus distingnished was, in 1848, 46; in 1849, 45; in 1850, 60; in 1851, only 43; but, in 1852, 78; the Victoria and Albert being always included in the honourable list.

THE POTATO DISEASE.—This disease has re-appeared this year in numerous instances, and is spreading with such rapidity as to threaten an amount of mischief equal to that of 1846. In all quarters complaints are heard of the late crops; some of the beautiful early potatoes exhibited last Tuesday to the Horticultural Society became diseased the next day. What especially produces alarm is the sudden appearance of spots on the leaves, attended by a general rustiness of the underground stems, and the disagreeable smell which more especially marked the years 1845 and 1846. Letters from Saxony say that the disease there is already discoverable by the nose alone. It is evident that these vegetable diseases are on the increase on the Continent.

MORTALITY NOTABILIA.—The number of deaths registered last week in the Metropolis was 991; in the previous week it was 1004. In corresponding weeks of the years 1843-52, exclusive of that in 1849, (when cholera raised the total mortality of the week to 1909,) the numbers ranged from 801 to 1135. With the exception of the infant part of the population, who suffer as usual at this season, the health of London appears to be comparatively good. In the returns of fatal diseases the chief feature is the progress of diarrhœa. The deaths referred to this complaint in the last six weeks are 28, 34, 54, 73, 81, and 110. Of the 110 persons to whom it was fatal, 64 were males, 46 were females; and of the whole number 78 were children under one year. Only 2 children died last week of small-pox; only 16 of measles (though in the previous week the number was 34); while 33 died of scarlatina, showing an increase of 10 on the previous week's return. Eleven pensioners died in the Royal Hospital, Greenwich, between the 28th July and 3rd of August, at ages varying from 63 to 91 years. The cause of death, in 6 of those cases, was chronic bronchitis; in four, diarrhœa was a primary or secondary disease.

Scarlatina.—At 2, Church-road, Homerton, on the 31st July, the son of a licensed victualler, deceased, aged 13 years, died of "scarlatina maligna (8 days)." The medical attendant adds, on his certificate:—"This case was most peculiar from the dreadful prostration which ensued from the first day in a boy previously enjoying the best health. From the fourth day he continued almost pulseless and cold, and was unable to take either medicine or nourishment, but still lingered on to the eighth day. All diseases have put on the typhoid character of late in this neighbourhood. In the above case, there were good air and drainage."

Cancer of the Face.—At 3, Thornhill-street, Islington, on the 4th of August, a barge-carter, aged 74 years, died of "cancer of the face (7 months)." "The disease" (says Mr. Watts) "is supposed to have originated, as far back as fourteen years ago, from constantly blowing, for twelve months, a brass horn, (to which a silver mouthpiece was afterwards attached,) used formerly as a signal at the tunnel, Regent's Canal, Islington, he having been engaged there for twenty years as tunnel-keeper. The deceased, seven months ago, underwent an operation at the Free Hospital, Gray's-inn-lane, having the cancer cut from his face, his teeth being removed, as well as part of the jaw, but he never recovered."

Births.—Last week, the births of 769 boys, and 779 girls, in all 1548 children, were registered in London. In the eight corresponding weeks of the years 1845-52, the average number was 1332.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·876 in. The mean temperature of the week was 61·6°, which is slightly below the average of the same week in 38 years. The highest temperature occurred on Monday, and was 77°; the lowest was 46·5°, and occurred on Friday. The greatest difference between the dew-point temperature and air temperature was 18° on Monday; the least 1·2° on Wednesday; the mean difference of the week was 10·2°. The wind was in the south-west on the first three days; on Wednesday it changed to south; it was afterwards in the north, and calm.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending August 6:—

	Males.	Females.	Total.
Workhouses	41	37	78
Military and Naval Asylums.. ...	11	...	11
General Hospitals	24	10	34
Hospitals for Special Diseases ...	3	2	5
Lying-in Hospitals	1	...	1
Lunatic Asylums	4	...	4
Military and Naval Hospitals ...	...	...	...
Hospitals for Foreigners, &c. ...	1	1	2
Prisons	...	...	...
	85	50	135

DEATHS *in the Metropolis for the week ending Saturday, August* 6, 1853.

CAUSES OF DEATH.	AUG. 6. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	511	289	181	991	10913
SPECIFIED CAUSES	510	289	180	981	10866
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	216	37	26	279	3973
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	17	17	40	435
3. Tubercular Diseases	72	110	9	192	1868
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	61	27	31	119	1147
5. Diseases of the Heart and Blood-vessels	5	13	9	27	293
6. Diseases of the Lungs and of the other Organs of Respiration ...	45	20	32	97	732
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	21	35	15	71	738
8. Diseases of the Kidneys, etc. ...	...	9	7	16	98
9. Childbirth, Diseases of the Uterus	1	5	...	6	74
10. Rheumatism, Diseases of the Bones, Joints, etc.	1	7	1	9	69
11. Diseases of the Skin, Cellular Tissue, etc.	...	...	1	1	19
12. Malformations	2	...	...	2	30
13. Premature Birth and Debility ...	32	...	...	32	268
14. Atrophy	33	3	5	41	303
15. Age	...	...	22	22	424
16. Sudden	2	...	2	4	61
17. Violence, Privation, Cold, and Intemperance	13	6	3	23	334
CAUSES NOT SPECIFIED	1	...	1	10	47

BOOKS RECEIVED.

Practical Observations on the Treatment of Club-foot. By John Lizars. Edinburgh, 1853.

A Medical and Topographical Sketch of the Thermal Springs of Teplitz. By T. L. Richter, M.D. Leipzig, 1853.

Wisconsin.

Ψυχή: A Discourse on the Birth and Pilgrimage of Thought. By W. C. Dendy. London: Longman. 1853.

Pharmaceutical Journal. August, 1853.

The Educational Expositor. August, 1853.

Report of the Trial Fennel *v.* Adams. London, 1853.

Cretins and Idiots. London, 1853.

El Porvenir Medico. Madrid. Julio, 1853.

Report of Bethlem Hospital.

Twenty-third Annual Report of the Belfast District Hospital for the Insane. Belfast, 1853.

On the Impregnation of the Ovum in the Amphibia (Second Series revised), and on the Direct Agency of the Spermatozoon. By George Newport, F.R.S., F.L.S., etc. London, 1853.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have been lately informed that a Medical Practitioner, who practised before 1815, and not a member of the College of Surgeons, can legally demand payment for surgical operations, attendance, and dressings; but that a person commencing practice since that time, possessing the L.A.C. qualification only, cannot. Will you be good enough to give me your opinion in this matter in your next publication, and you will much oblige your obedient servant, A CONSTANT READER.

[In both the cases mentioned, the charges for surgical attendance can be recovered at law.]

[To the Editor of the Medical Times and Gazette.]

SIR,—A Student, who is preparing for the College and Hall, is desirous of knowing whether there is any book with questions and answers that might assist him. If so, he will feel greatly obliged if in your next you will inform him.

Hull. I am, &c. F. S.

[There is no book which would answer the purpose. The student should diligently attend to his lectures and practical pursuits, and read such books as are recommended by his teachers.]

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel greatly obliged by your informing me, through the *Medical Times and Gazette*, if a person who has never had any indentures of apprenticeship drawn, but has been with a medical man, in extensive practice, for the last five years, can pass the Apothecaries' Hall and College of Surgeons. I am, &c. P. R.

[Yes. Apply to Mr. Blatch, at the Hall.]

Our Correspondent who requested information as to the Preliminary Examination at Apothecaries' Hall will find it answered in an Advertisement in the present Number.

The Reports of the Newcastle-on-Tyne Pathological Society shall shortly be proceeded with.

J.F.C.—We cannot undertake to return rejected communications; but when writers wish it, they may be always left at the Publishers.

Mr. Alfred Markwick's observations on Animal Heat are not peculiar to himself. We think it better, therefore, not to publish them.

Dr. Stewart, Belfast.—Many thanks.

Dr. Ransom's paper on Sarcina Ventriculi has been received.

Mr. Danford's case shall be inserted.

Dr. Inman's letter shall also be inserted.

Mr. Shinkwin's cases are received with thanks.

We regret very much that we have not space to insert Dr. Rigby's letter on Vaccination this week, but it shall appear in the next Number.

Mr. Low's request has been attended to.

C. D.—The expense of the degree varies with the University. The mere diploma at the College of Surgeons is £22; at the Apothecaries' Hall, £6 6s.

A paper by Mr. Spencer Wells, "On the Cure of Squinting by Prismatic Spectacles," has been in type for some weeks, and postponed only from the press of original communications. Another paper, "On a New Ophthalmoscope," has been delayed from the same cause.

COMMUNICATIONS have been received from—

C. J. GIBB, Esq.; C. BROWN, Esq., Newcastle-on-Tyne; H. P. GREGG, Esq.; Dr. RUPELL, Birmingham; J. F. CLOVER, Esq.; Mr. CHAPMAN; Dr. STEWART; H. HANCOCK, Esq.; Dr. BUDD; Dr. RANSOM, Nottingham; Dr. INMAN, Liverpool; T. C. SHINKWIN, Esq., Cork; Dr. STEGGALL; W. H. WINCHESTER, Esq.; Dr. RIGBY; Mr. WILDE; Dr. COTTON; T. G. TEBAY, Esq.

[ADVERTISEMENT.]

MEDICAL DIRECTORIES.

OFFICES, 128, STRAND.

TO THE MEDICAL PROFESSION IN ENGLAND, IRELAND, AND SCOTLAND.

GENTLEMEN,—

THE Proprietors of the *British Medical Directory* have announced a new attempt to rival the *London and Provincial Medical Directory*, hoping to win the applause of the Profession by declaring that they will hand over to the Committee of the Medical Benevolent College *half the profits* which may arise from the publication. We apprehend, that gentlemen desirous of assisting the Medical College will know how to do so without resorting to this indirect, and, to us, injurious course. Indeed, we should not thus bring the matter before you, were it not desirable that the opinion of the Profession should be *unanimous* in favour of *one Directory;* and were it not certain, also, that, to divide the Profession, even in a limited degree, in reference to a Work which represents them as a Body, is to inflict a corresponding injury on the whole Medical community.

Gentlemen who have not returned our "Annual Circular," which was forwarded a few days since, will, it is hoped, kindly do so without delay; or, in the event of that document being mislaid, another shall be forwarded on application.

We have the honour to be Gentlemen,

Your obedient Servants,

THE EDITORS OF THE THREE MEDICAL DIRECTORIES.

ORIGINAL LECTURES.

CLINICAL LECTURE
ON
THE PATHOLOGY AND TREATMENT OF THE DISEASES OF THE SCALP.

POPULARLY KNOWN BY THE NAME OF RINGWORM.

DELIVERED AT

University College Hospital.

By WILLIAM JENNER, M.D., F.R.C.P.

Professor of Pathological Anatomy University College; Physician to the Hospital for Sick Children, etc.

Frequency of Scalp Diseases.—Signification of the word "Ringworm."—Definition of the Genus Tinea.—General Description of its Four Species, Tinea Favosa, Tinea Tonsurans, Tinea Decalvans, Tinea Sycosa.—Characters of, and Situations Occupied by, the Parasitic Plants found connected with the Hairs in these Species.—Synonyms.—Etiological Relation of the Parasite to the Disease.—General Principles of Treatment.—Parasiticides.—The Use of Sulphurous Acid illustrated by its Effects in Tinea Decalvans.—Aphthæ.—Case of Tinea Favosa.

Gentlemen,—Such of you as have attended in the out-patient's room, are aware, that diseases of the skin are among the most common of those we have there to treat; and of skin diseases, that those affecting the scalp, come, perhaps, the most frequently under our notice. I have observed, that students, and even young practitioners, are often extremely puzzled to diagnose these diseases of the scalp. This difficulty is partly due to the resemblance of some of them to each other, and partly to the fact, that, while some writers have given the same name to different things, others have given different names to the same thing.

Several of these scalp affections are popularly called "ringworm;" and you must have many times observed the anxiety with which the mother asks whether her child has the ringworm. The cause of her anxiety is, that she understands by the term she employs, a very obstinate and a very contagious disease.

To-day I propose to consider certain of those diseases of the scalp which bear a highly important pathological, etiological, and therapeutical relation to each other, although they differ very greatly in their readily recognisable physical characters. I shall show you several cases of these diseases, and read you the notes of one case which left the hospital a short time since, and shall speak of their treatment as illustrated by two of these cases.

You are aware, that on the mucous membrane of the mouth, in one form of the disease termed aphthæ, microscopical parasitic plants are developed in enormous quantity; and that, in the stomach, not uncommon vegetable growths are sarcinæ Goodsirii and torulæ cerevisiæ.

It has been shown, that parasitic plants are also sometimes developed on the skin and its appendages; and in several scalp affections to which the popular name of ringworm has been especially applied, (because they are obstinate and contagious diseases, having a tendency to spread in circles,) these parasitic vegetables are found in or around the hairs.

What is popularly meant by ringworm was by some of the older writers on skin diseases expressed by the word tinea; but the technical name being found, as our knowledge advanced, to have no definite signification, gradually fell into disuse.

It has been recently proposed to employ this word tinea again, and to give to it a precise signification. Under the generic name tinea it is proposed to include(a) all diseases of the hairs produced, kept up, or attended, by the development of parasitic plants.

In this genus are included the following species:—

Tinea favosa.
Tinea tonsurans.
Tinea decalvans.
Tinea sycosa.

It is to this genus tinea, and to these species of that genus, that I desire to-day especially to call your attention; and I am confident that if you remember the names of the species of tinea I have just repeated, if you learn what I am about to tell you of those species, and observe well the things I shall presently show you, the remaining and more common diseases of the scalp will be mastered in a very few hours spent in the out-patient's room.

I shall now, then, briefly enumerate the characters of each of these four species of the genus tinea.

Tinea Favosa.—The man Hyman Jacobs, who recently left Ward 4, was suffering on his admission from tinea favosa. Just call to mind the appearance of that man's scalp, trunk, and extremities, and you will the more readily follow my general description, because in all points the eruption in his case was a type of the disease. This wax model, from the College museum, and these plates of Mr. Wilson, will also assist you in following me.

Tinea favosa most commonly affects the hairy scalp, but now and then it is found on other parts of the surface. It is characterised by thick, dry, yellow crusts, which, if small, are circular in outline and depressed in the centre, cup-shaped. Passing through the centre of each of these crusts, is a hair. Crusts of this kind were present on the trunk and extremities of the man Jacobs; some of the crusts were extremely small; the largest had a diameter of one-third of an inch. The larger of the circular crusts often appear as though made up of concentric rings, alternately yellow and brown in colour. They were so in the case just referred to. If the crusts are very large, as they were on Jacob's scalp, they have an irregular shape; but still they indicate their origin from distinct centres by the semicular outline of the masses which project from their margin. These larger, irregularly-shaped crusts, are pitted on the surface, and, from their fancied resemblance to the cut surface of a piece of honeycomb, the disease has received the name of favus.

The margin of the large crusts rises considerably above the level of the cutis; internally, they seem as though half-buried in the substance of the cutis. Carefully detach the crusts from the cutis, and a distinct layer of epithelium is found below them; examine the surface of the smaller crusts, and you find a layer of epithelium cover them.

The hair, at an early period of the disease, can be pulled out from the centre of each little crust with great facility; subsequently it falls off from the diseased parts, and permanent baldness results. We have an example of this in the girl Lewis, whom you must have repeatedly seen in the out-patient's room.

The crusts, then, of tinea favosa are remarkable for their thickness, dryness, brittleness, and depressed centre. Tinea favosa it not a pustular disease, but it is said, by those who have seen much of it, (it is a rare disease in London,) to be often consecutive to eczema, impetigo, chronic lichen, and herpes circinatus; pustules are sometimes formed subsequently to the tinea favosa, in consequence of the inflammation excited by the crusts, and the injury inflicted on the scalp by scratching.

That tinea favosa is contagious, was placed beyond doubt by Remak. He bound a crust removed from a patient suffering from this disease on to his own arm; after a few days, the crust and bandage came off, and there was no appearance of any effect having been produced. But, fourteen days after, he felt the part itch, and, in a short time, a crust of tinea favosa formed on the spot.

Tinea favosa is said to occur chiefly in the scrofulous, those mentally weak, and those in bad health. Jacobs was certainly neither scrofulous nor mentally weak, and his health was excellent.

Tinea Tonsurans is often mistaken for herpes circinatus of the scalp, with which it is now and then conjoined. It is characterised by pallor, decolorization, and brittleness of the hairs, and the presence of thin white powdery scales around the base of the hairs, and on the skin between them. The diseased hairs have been likened to "tow." "They are," Mr. Wilson says, "remarkable for their bent and twisted shape, and resemblance to the fibres of hemp in colour and apparent texture." Their brittleness is sometimes such, that every hair on the affected spot is broken off just above the surface of the skin. This appearance is well seen in the girl who is now going round the room for you to inspect; while the decolorization of the hair is equally well seen in the boy. Observe, that the diseased patches are circular in both children. It is only when torn by the nails of the patient, so as to be made to bleed, or when, from neglect, or the application of topical irritants, they inflame, that crusts are formed on the patches of tinea tonsurans.

(a) "Bazin Recherches de la Nature et le Traitement des Teignes."

In *Tinea Decalvans* the hair falls out rapidly from one or more circular spots, leaving a smooth, bald surface. There is no eruption of any kind,—no crusts,—no scales.

This little girl affords a good illustration of the disease. Observe, here is a small, circular, smooth, bald spot, here a larger one, while here is a very large, irregularly-shaped, bald surface; but note the outline of the latter, and you will see, from its scalloped edges, the tendency of the disease, to spread in circles, manifested. The rapidity with which the hair comes off the head in this disease is often singularly great. The first bald patch on this girl's head was observed by her mother about six months since; but it is only lately that the disease has spread much, and now you see nearly half her scalp is uncovered by hair.

Tinea Sycosa is characterised by inflammation of the hair follicles. Sometimes the inflammation leads only to the effusion of serosity, and the exudation of lymph around and into the capsule of the hair. At other times, and more commonly, pus is formed, and then, when the pustule breaks, a brownish scab is formed on the surface. The usual seat of tinea sycosa is, the chin, upper lip, and sides of the cheek. I had a case lately under my care in which the pustules occupied the inner surface of the nares,—that part from which the hairs spring that protect the orifice of the nose. Tinea sycosa rarely occurs on the scalp, and it does not spread circularly; so far as I know, the name of ringworm has never been applied to it. I mention it to you to-day, although I have no example of it among my patients, to show you, because of its relation to the species of tinea of which we have examples before us.

You will have remarked, then, from the characters of the species of tinea I have mentioned, that—

Tinea favosa is especially characterised by its crusts.

Tinea tonsurans is especially characterised by decolorization and brittleness of the hair.

Tinea decalvans is especially characterised by baldness, not preceded or accompanied by an eruption.

Tinea sycosa is especially characterised by inflammation, tenderness, hardness, and suppuration of the hair follicles.

I told you that these diseases are arranged together in one genus, because in all a parasitic plant is developed in connexion with the hairs. Now, the plant present is different for each species of tinea; and the situation occupied by the parasite is also different in each species of that genus.

In tinea favosa, the parasite is the *achorion Schönleinii*. This plant has mycelium, sporule-bearing branches, and sporules. The sporules are round or oval, and their diameter varies, according to Gruby, from 0·003 mm. to 0·01 mm.

The vegetable growth is first perceptible between the layers of the epithelium, just at the orifice of the hair follicle; from this point it may spread downwards between the hair and its capsule, and upwards around and in the substance even of the hair.

Such of you as visited Ward 4 during the time Jacobs was in the hospital, had frequent opportunities of seeing the mycelium, the sporule-bearing branches, and the sporules of the *achorion Schönleinii*. You will recognise it in these very excellent drawings of Robins.

In tinea tonsurans, the parasite is the *trichophyton tonsurans*. This plant is composed of spores only; the spores, however, are occasionally somewhat elongated, and arranged in a linear series. They are round or oval, and their diameter varies from 0·003 mm. to 0·01 mm.

The primary seat of the trichophyton tonsurans is the root of the hair; subsequently, it extends up into the substance of the hair, and even outwards, according to Bazin, on to the skin between the hairs. I have under the microscope some hairs removed from the head of one of these children. You will see in one specimen the spores in the hair follicle; and, in another, the hair split up with the spores among the fibres, as figured in this plate by Bazin, and in this more highly magnified drawing by Robin.

In tinea decalvans, the parasitic vegetable is the *microsporon Audouini*. This plant is formed of branched filaments, on which the spores are developed. The spores are very small — from 0·001 mm. to 0·005 mm. The seat of the growth is the outside of the hair; it forms a sort of sheath around the hair, from the surface of the skin upwards, from 1 mm. to 3 mm. Gruby first described this plant, and its relation to tinea decalvans; and Robin says, he can confirm the accuracy of Gruby's description.

In tinea sycosa, the parasite is the *microsporon mentagrophytes*. It is also composed of filaments and spores; but the spores are larger, and the filaments broader, than those of microsporon Audouini.

The seat of the growth is the hair follicle between the hair and the capsule.

I have told you the names I would have you employ to signify the diseases I have described and demonstrated to you; but you ought also to know the names employed by the writers on skin diseases most popular in this country, to signify the same things.

Tinea favosa, then, is called porrigo favosa by Willan and Bateman; favus by Dr. A. T. Thomson, Simon, and many other writers.

Tinea tonsurans is called porrigo scutulata by Willan, Bateman, and Dr. A. T. Thomson; herpes tonsurans by Cazenave; and trichinosis furfuracea by Mr. Wilson.

Tinea decalvans is called porrigo decalvans by Willan and Bateman; vitiligo of the hairy scalp by Cazenave.

Tinea sycosa is called mentagra by Willan and Bateman; sycosis by Mr. Wilson.

As to the etiological relation of the parasite to the disease, it appears, that the spores of the vegetable growth require for their development a peculiar nidus. I say so, because all persons who mix with children suffering from tinea do not have the disease. But if a soil highly favourable to their growth exists, then a spore having found its way on to that soil developes and forms other spores, and so the parasite spreads over the surface of the individual more or less rapidly, according to the more or less favourable nature of the soil.

You will observe, however, that the abnormity of the secretion necessary for the development of these spores is not appreciable by our senses, nor by the sensations of the patient, for Remak did not know, when he applied the favus crust to his own arm, that his skin was not in all respects healthy; nor was he aware, when he removed the crust, that the secretions of his hair-follicles differed from those of the most healthy individual; and it was not till a fortnight after, that he was conscious that his arm was diseased. This experiment of Remak, then, proves, that a secretion in which these parasites can grow may be formed by the hair-follicles, and the patient believe himself to be in perfect health, not only generally, but even so far as concerns his skin; and that it is only when the parasite has developed in the secretion, that what we call the disease begins; then it is that the growth of the hair is impeded, that it is altered in colour and in intimate structure, that ultimately the hair falls out, and the hair-forming apparatus is so far damaged by the foreign body, that it fails to construct even imperfect hairs, and baldness results.

It would appear, from the fact of a large number of children, whose scalps are supposed to be healthy, suffering from tinea tonsurans, when placed in situations where the spores of microphyton tonsurans are floating in the atmosphere, that many persons, whose scalps are considered healthy, have in their hair-follicles a secretion suited to be the nidus of this plant.

The patient suffering from tinea comes under our care for the perceptible disease, and will be well contented if we can cure him of that; but it would be better if we could also destroy the susceptibility to the disease,—if we could bring the hair-follicles into a state in which they no longer secrete a nidus in which the plant can grow.

Strumous and weakly children, especially if dirty in their persons, are more frequently than others the subjects of tinea; therefore it has been inferred, that struma, debility, and dirt favour the formation of the secretion in question. In the treatment of tinea, then, we strive to enforce personal cleanliness, to strengthen the patient and improve his general health, and *to destroy the parasite*. As to the first and second objects, they are to be effected by attention to hygienic rules, ablution, air, exercise, and diet; tonic medicine, and cod-liver oil especially, are in some cases useful. But you may kill the parasite in all cases, and in many cases cure the disease by topical applications alone. Agents, the effect of which is to destroy directly the parasite, are called "parasiticides." Several agents having such an action have been brought before the Profession. Some physicians use a solution of corrosive sublimate. Acetate of copper has been also employed; but these agents are not sufficiently powerful parasiticides for the small quantity of them that finds its way into the hair follicles to kill the growths occupying that situation. Therefore Bazin, who is one of the great advocates of their employment, with the especial

object in view of killing the parasite, and not modifying the secretion, says, that it is essential for their efficient action that epilation be performed; that is, that the hairs be forceably removed from the affected parts. He says, that only two or three hairs should be taken hold of by the pincers at the same moment; and that, if this rule be observed, and diseased hairs alone be operated on, the patient suffers no pain from what seems on paper a very terrible operation.

From the details of two cases I am about to give, you will observe, that it is highly probable that, if sulphurous acid be employed as a parasiticide, epilation will be found to be altogether unnecessary to its complete action. This agent was first introduced to the notice of the medical officers of the hospital, by Professor Graham, as a possible remedy for cholera, at the time that disease was said to have its origin in the presence of an entophyte in the intestinal canal. It was first employed by myself to check fermentation, and to destroy the torulæ cereviseiæ and sarcinæ Goodsirii.(a) When lecturing on this subject, some time since,(b) I expressed myself thus:—"Considerable benefit may be anticipated from the employment of sulphurous acid in all diseases attended with the development of parasitic plants. I would especially mention porrigo."

The case I am about to read to you, of Hyman Jacobs, proves, that, in regard of tinea (porrigo) favosa, these anticipations have been fully realised; while the case of the girl now in the room, and who is still under treatment, renders it highly probable that the beneficial effects of this parasiticide will be as manifest in tinea decalvans as they are tinea favosa.(c)

In some forms of thrush, too, I may mention that it acts most rapidly, one application of a solution of sulphite of soda (a dram to an ounce of water) sufficing to remove the disease from the mucous membrane of the mouth in twenty-four hours. The secretions of the mouth being acid, the salt is decomposed, and sulphurous acid is set free; in this, as in all other cases, the sulphurous acid is the active agent in the destruction of the parasite.

Hyman Jacobs, aged 27 years, a Jew pedlar, a native of Amsterdam, and resident in London fifteen months, was admitted into the hospital on March 21, 1853.

He was, as most of you must remember, a man of cheerful disposition, dark complexion, rather short, muscular, moderately stout; in fact, he looked generally in robust health. His habits were those of his class; he slept in the low common lodging-house, fared badly, rarely eating meat, and, judging from his appearance, was not very cleanly in his person.

He affirmed, and I believed him, that he was temperate in regard of the use of alcoholic liquor. His general health, he said, had always been good.

The scalp affection was of nine years' duration at the time he came into the hospital. He had been in many hospitals, but had never derived any marked benefit from treatment. When Jacobs came under observation, his condition was as follows:—

Cerebral, circulatory, respiratory, and digestive functions healthy in all particulars.

The whole of the scalp, excepting the margin, was covered with the crusts of tinea favosa. The largest crusts were of a greyish yellow colour, of the consistence of dried putty or mortar, and brittle. Their thickness generally was considerable. Where thickest, the surface of the crust was below the level of the cutis; so that it looked, at the first glance, as if the latter had been partially destroyed by ulceration. The surface of these crusts was very irregular; it had a pitted, worm-eaten, or eroded appearance. At the edge of the large, irregularly-shaped crusts, were many small circular crusts, depressed in the centre. A hair passed through the centre of each of these small crusts. When the crusts were forcibly detached from the scalp by mechanical means, the exposed surface of the cutis was very red and raw.

The head itched much; and, though scratching gave considerable pain, it was evident, from the traces of blood on the surface, that he had been applying his nails to the part.

The odour of the head was very offensive, something like that emitted by mice, only, as one of you remarked at the time, sweeter and more nauseous. Scattered over the trunk and extremities were a very large number of circular favus crusts. There were as many as forty on the back alone. The smallest of these appeared, when seen through a lens, to be constituted thus: in the centre was a hair, around and touching that a brownish-yellow crust, and around that again a dusky-red halo; the diameter of the whole not exceeding two-thirds of a line. On the back no crust was more than one-fourth of an inch in diameter; on the leg there was one one-third of an inch in diameter. These crusts were circular, raised about a line above the level of the cutis, hard, dry, and appeared as though made up of concentric rings of pale, greyish-yellow, and brown colours alternating. The surface of these crusts was readily detached, and then a cup-shaped cavity was exposed, filled with a brimstone-yellow powder. The base of the crust being removed, the surface of the cutis, from which it had been detached, was raw.

We saw, you may remember, the mycelium, sporule bearing branches, and sporules of the achorion Schönleinii, when portions of the crusts, or of the yellow powder, were placed under the microscope.

No treatment was adopted for some time after the man's admission. On April 13th his state was exactly the same as when he entered the hospital. Rags, wet with a solution of sulphurous acid, were now ordered to be kept constantly on the scalp; the head to be covered with an oil-silk cap.

On April 18th, large quantities of the crust had separated from the scalp, and *those that remained attached had entirely lost their yellow hue; they were now of a dirty-brown colour.* All itching of the scalp ceased shortly after the application of the sulphurous acid. No sulphurous acid had been applied to the crusts on the trunk and extremities, and they had still the characters they presented on the man's admission into the hospital.

A piece of lint, wet with sulphurous acid lotion, was applied to one of the largest crusts on the leg.

On the 22nd April a mere trace of the favus crust remained on the scalp; but the surface of the cutis was red, and there was an inflamed papula near the vertex. Thinking this condition might be partly due to the acid, which was a very strong solution, I ordered its use to be discontinued for twenty-four hours. The crust on the leg to which the sulphurous acid was applied on the 19th, had separated; the exposed surface was red, but not raw. *Two favus crusts which were seated in the vicinity of that to which the acid was applied on the 19th, were observed to be turning brown; subsequently they dropped off spontaneously.* The effect of the sulphurous acid gas on these two patches is of great interest, as illustrating the mode of action of the solution. The crust on the scalp turned brown shortly after the acid was applied to them, and before they separated from the cutis.

On the 29th April the lotion was discontinued, and zinc ointment applied to the scalp.

On May 2nd the head was free from crusts, but the scalp was still red, and several inflamed papula were seated on it.

On May 9th the skin of the scalp was here and there more natural in hue, and one or two papulæ had suppurated; the pus was healthy in appearance, and there was no trace of the parasitic plant to be detected by the microscope.

On the 18th, the head continued free from favus; the scalp was much less red; the hair was growing. As the crusts on the trunk and extremities were still in the same state as on the patient's admission into the hospital, he was immersed, about nine in the evening, for half an hour, in a full-sized tepid bath, containing sixteen ounces of saturated solution of sulphurous acid; no friction was employed. During the night all the crusts save three fell from the surface.

On the 20th he was again immersed in the acid bath, and the next day no trace of a crust was to be found on the trunk or extremities. My notes say:—"No fresh crusts on head; a small pustule occasionally appears, and dries up in two or three days, and then disappears entirely; the skin of the head generally is much paler and more healthy in aspect."

31st.—The scalp was still paler than at the previous report. There were only two small pustules on the scalp. By the microscope, no trace of the parasite could be detected. The

(a) Several medical men have lately administered the hyposulphite of soda, instead of the sulphite; but the latter is the preferable salt, and for this reason, that when the hyposulphite is decomposed by the hydrochloric acid of the gastric juice, not only is sulphurous acid generated, but sulphur is precipitated,—a substance it is very undesirable to have in the stomach in some of these cases.

(b) *Medical Times and Gazette*, August, 1851.

(c) This case of tinea decalvans has continued to progress most favourably. No hair has fallen out since the first application of the acid, and hair well-formed and of good colour is replacing the little down that scantily covered some of the patches; while on other patches which were absolutely smooth hairs are springing up.

skin generally appeared healthy; and, on June 2, Jacobs left the hospital, at his own desire, to return to Holland.

I cannot conclude without expressing my confident belief, that a very great advance was made in pathology when the vegetable nature of the diseases I have to-day referred to, as well as of some others, was demonstrated; and my equally confident belief, that the foundation for a very great advance in therapeutics was laid when Professor Graham introduced to notice the power of sulphurous acid to destroy vegetable life, and explained how it could be given internally without injury to the patient.

Note.—The solution of sulphurous acid I have used is made by passing a stream of the gas through water till the latter is saturated. Of this saturated solution, two ounces may be added to six ounces of water, to make the lotion.

The saturated solution of sulphurous acid I have employed has been either prepared in the Birkbeck Laboratory of University College; or procured from Button's, Holborn; Hopkins and Williams, New Cavendish-street; or Burcham's, Albany-street.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

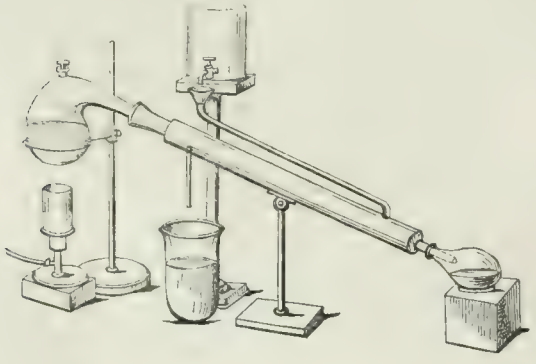
Lecture XII.

ALCOHOL AND ALDEHYDE.

Gentlemen,—In the preceding Lecture you became acquainted with the peculiar processes which effect the transformation of sugar into alcohol,—that is, with fermentation. To-day, I have to bring under your notice the properties of alcohol, and the changes which it suffers under the influence of chemical agents, especially of oxygen.

The crude product of fermentation is a dilute solution of alcohol in water. A large quantity of this water may be separated by a simple process of distillation. Alcohol being much more volatile than water, ebullition of the liquid obtained by fermentation in a retort furnishes a distillate, which is much richer in alcohol than the original mixture, the residuary liquid which is left in the retort consisting of water with either no, or very little, alcohol, and a small portion of an oily substance, called fusel-oil, with which you will become better acquainted by and by.

In the laboratory, and upon a small scale, this distillation is performed by means of a retort, which is connected with a so-called Liebig's condenser.



For the operation upon a large scale, a variety of ingenious apparatus has been devised, among which Coffey's still deserves to be specially mentioned. Time will not permit me to describe to you this remarkable arrangement, by means of which many thousands of gallons may be distilled per hour with a very moderate sized still. Coffey's still is now frequently employed in the large spirit-manufactories of this country; and I strongly recommend you to become acquainted with this apparatus, by a visit to one of these establishments. Distillation alone, however, even when repeated several times, never furnishes a perfectly pure alcohol. By one distillation by means of the improved apparatus, which is in use at present, a liquid is produced containing from 45 to 54 per cent. of absolute alcohol. It is this liquid which is called brandy, gin, or whiskey, according to its flavour. A second distillation yields what is called "rectified spirits of wine," containing from 66 to 74 per cent. of real or absolute alcohol; and, lastly, a third distillation, "highly rectified spirits of wine," which contains 90 per cent. of absolute alcohol. The 10 per cent. of water which is still present in highly rectified spirit cannot be removed by further distillation. In order to obtain anhydrous alcohol, it becomes necessary to fix the water by some chemical agent which has a great attraction for it, such as highly dried carbonate of potassa, chloride of calcium, or anhydrous lime. Highly rectified alcohol is digested for some days with one of these substances, and then submitted to distillation in a water-bath.

The pure alcohol thus obtained is a colourless, transparent liquid, of a peculiar odour, which to some appears agreeable, and of a burning taste. Its anhydrous condition may be readily tested by agitating it with some anhydrous sulphate of copper. This salt, the magnificent blue colour of which in the hydrated condition is familiar to you, is perfectly white, when deprived by a well-managed heat, of its water of crystallization. It assumes its blue colour when in contact with alcohol containing water, but remains white in anhydrous alcohol.

Absolute alcohol is very inflammable, and burns with a bluish flame, possessing very little luminosity; the products of combustion being carbonic acid and water, if atmospheric air has free access. The boiling-point of absolute alcohol is 78·4° C. (173° F.), under a barometric pressure of 29·922 in. The specific gravity of pure alcohol is 0·7938, a number which refers to the ordinary temperature (15·5° C.=60° F.), this value being, of course, very much affected by the expansion or contraction of the alcohol under the influence of heat. At the freezing-point of water, the specific gravity of absolute alcohol is as high as 0·8151.

The specific gravity of mixtures of alcohol and water is likewise much higher than that of absolute alcohol; the specific gravity of Excise-proof spirit being, for instance, 0·9198 at 15·5° C. (60° F.) The determination of the specific gravity of mixtures of alcohol and water affords, therefore, a most valuable means of ascertaining the exact quantity of alcohol which they contain. This may be done either by the specific-gravity bottle, or more expeditiously, although with less accuracy, by an ordinary hydrometer (areometer.) The specific gravity being determined, we refer to one of the many tables which have been constructed for the purpose, and which give the percentage of absolute alcohol for every specific gravity observed.(a) In the construction of these tables, considerable difficulties presented themselves, since the mixing of water and alcohol is attended by contraction, the amount of which is variable, so that many experiments were required. The greatest contraction takes place when 53·7 volumes of absolute alcohol are mixed with 49·8 volumes of water. In this case, 100 instead of 103·5 volumes of dilute alcohol are obtained. This contraction may be made visible by means of a very simple apparatus. A glass tube, one foot long and of a quarter of an inch bore is sealed at one extremity, and blown out at the other extremity into two bulbs of at least an inch in diameter, the upper one being somewhat more capacious than the lower one, and communicating with each other by an opening of about the diameter of the tube. The tube and the lower bulb are now filled with water, and the upper one with alcohol, which may be done without the liquids becoming mixed. The aperture of the upper bulb is then closed with a stopper when the apparatus is perfectly filled with liquid. On turning the tube upside down, the water and alcohol become mixed, the contraction takes place, and a vacuum is rendered visible at the sealed extremity of the tube.

The specific gravity of mixtures of alcohol and water ceases to be a measure of their strength whenever other substances are present which likewise affect the density of the mixtures, such as sugar in wine, and sugar and dextrin in beer. In such cases, the spirituous liquid has to be distilled until the whole of the alcohol has passed over, and the determination of the specific gravity of the distillate, together

(a) An excellent table of this kind is found in "Fownes's Manual of Chemistry," Ed. 4, p. 659.

with the comparison of its weight or volume with those of the original liquid, will furnish all the data which are necessary for ascertaining the amount of alcohol. The distillation process requiring much time and experimental dexterity, several other methods have been lately proposed for determining the amount of alcohol in wine or beer. One of these, which has been suggested by Conaty and Broisard-Vidal, and lately elaborately described by Professor Pohl, of Vienna, consists in accurately determining the boiling point of the alcoholic mixture under examination. The boiling points of such mixtures vary from 78·4° C. (173° F.) to 100° C. (212° F.), and are not modified by the presence of non-volatile organic substances, such as sugar or dextrin, if their amount does not exceed 15 per cent. The determination of alcohol by means of the "ebullioscope,"—this is the name given to the arrangement,—is very expeditious, but it is rendered uncertain by the difficulty attending the correct observation of the boiling point, which rises very rapidly in consequence of the evaporation of some of the alcohol during the experiment. Another process has been quite recently proposed by Messrs. Plücker and Geissler, of Bonn, and consists in the determination of the vapour-tension of alcoholic mixtures, in other words, in measuring the height of a mercurial column which the vapour of a mixture of alcohol and water is capable of balancing at a given temperature, for instance, at the temperature of boiling water. The observation, by means of this most elegant apparatus, is very easy; since it is possible to maintain the column perfectly stationary for any length of time; the experiment may be rapidly performed; and, if it be proved, by an extensive series of observations, that the tension of the vapours of mixtures of alcohol and water is not materially influenced by the presence, in the liquid which furnishes the vapour, of non-volatile substances, this method is very likely to supersede all the others. I need scarcely mention, that this, like all similar methods, necessitates the construction of a table, the values of which have to be obtained by a series of accurate experiments.

Alcohol, either in the pure state, or mixed with variable quantities of water, is applied to a great many purposes. Its use in the preservation of organic substances, for instance, of anatomical preparations, depends partly upon the coagulation of the albumen by alcohol, partly upon the attraction alcohol possesses for water, in consequence of which the organic substances are, as it were, dehydrated. This attraction for water is so great, that absolute alcohol becomes rapidly diluted when exposed to the atmosphere. In the laboratory alcohol is constantly employed as a solvent. It dissolves almost all the gases which are soluble in water, and frequently in larger quantity than the latter. 1 volume of alcohol dissolves, for instance, 6 volumes of sulphuretted, and 115 volumes of sulphurous acid, while 1 volume of water is capable only of absorbing respectively 2, 5, and 50 volumes. The caustic alkalies, for instance, as well as a great many inorganic salts, many chlorides and nitrates, are likewise soluble in alcohol. Many salts, on the other hand, are insoluble in alcohol; and thus separations may be frequently effected by means of alcohol. A mixture of chloride of barium and chloride of strontium or calcium, when digested with strong alcohol, furnishes a solution of the two latter chlorides, while the barium-salt remains undissolved. The aqueous and alcoholic solutions of salts frequently exhibit remarkable discrepancies in their deportment with chemical re-agents. A solution of acetate of soda in water is not affected by carbonic acid gas; in fact, you know, that aqueous solutions of carbonates are readily decomposed by acetic acid with evolution of carbonic acid. An alcoholic solution of acetate of soda, on the other hand, is decomposed by a current of carbonic acid; an abundant precipitate of the bicarbonate of soda takes place, which, being insoluble in the spirit, escapes the decomposing action of the dilute acetic acid that is liberated. The most important application, however, is made of alcohol in organic chemistry; a very large number of organic bodies, which are not dissolved by water, being readily soluble in alcohol, from which they frequently crystallize with remarkable facility. Substances crystallizing from alcohol sometimes take up a certain quantity of this body, and give rise to the formation of very ephemeral compounds, in which the alcohol appears to be present in a condition somewhat similar to that of the water of hydration in many salts. These compounds have accordingly been called alcoholates. The existence of alcoholates, which was first pointed out by Professor Graham, was doubted at a certain time by chemists; recent experiments of Chodnew, however, have confirmed Graham's observations. Thus, chloride of calcium forms a compound having the composition $Ca\,Cl + 2\,C_4\,H_6\,O_2$; nitrate of magnesia a compound $Mg\,O,\,NO_5 + 3\,C_4\,H_6\,O_2$.

I have mentioned, that the oxidation of alcohol in atmospheric air, and at high temperatures, furnishes carbonic acid and water; the ultimate product of the complete combustion of all organic substances. On the other hand, if this oxydation be effected by oxygen compounds, or at a low temperature, a series of intermediate products are formed. These substances are aldehyde and acetic acid.

The facility with which alcohol is oxidysed is readily seen by mixing it with either a solution of permanganate of potassa, or of chromate of potassa, to which some hydrochloric acid has been added. The intense purple of the former is immediately decolorized, a brown precipitate of hydrated binoxide of manganese being formed, while the red colour of the latter is replaced by a magnificent emerald green, which is due to the reduction of chromic acid to the state of sesquioxide of chromium. At the same time, the smell of acetic acid becomes perceptible, but mixed with the suffocating odour of aldehyde. Both re-actions take place at the common temperature, but of course more rapidly upon application of heat. The oxygen of the atmosphere does not act upon pure alcohol at the common temperature; but if it be mixed with certain substances, for instance, with finely-divided platinum, and gently heated, a similar metamorphosis ensues. I have had repeated opportunities of calling your attention to the remarkable manner in which platinum promotes chemical combination. A platinum wire gauze, gently warmed, and then introduced into a current of ordinary coal-gas, becomes rapidly red-hot, and soon kindles the gas. A somewhat similar result takes place, although less readily, in the vapour of alcohol, if a gauze of extremely thin wire, and of very fine meshes, be employed. A platinum wire gauze of this kind may be conveniently replaced by asbestos, which has been dipped into a concentrated solution of bichloride of platinum, and subsequently ignited. Every fibre of asbestos has thus become covered with an exceedingly thin film of metallic platinum. Asbestos platinized in this manner, when spread upon some platinum wires, placed over a capsule containing warm alcohol, becomes rapidly incandescent in the vapour of the alcohol, if atmospheric air be freely supplied. The experiment succeeds best by placing the capsule upon a glass plate, and covering it with a glass bell, which has an opening at the top. By inserting some small wedges between the support and the bell, and by lifting at the same time, more or less, the stopper, a current of air is readily established, sufficient to maintain the oxydation of the vapour which is continually supplied by the alcohol in the capsule, evaporating by the heat of its own combustion. In this manner the platinized asbestos may be kept ignited for hours. The products of this process are aldehyde and acetic acid, but, owing to the rather high temperature, a very considerable quantity of carbonic acid and water is invariably generated. If it be of interest to obtain chiefly the intermediate products, it is better to replace the platinized asbestos by platinum-black, which is readily obtained by heating a solution of bichloride of platinum, to which an excess of carbonate of soda has been added, with sugar or tartaric acid in a waterbath. This substance acts at a lower temperature, and permits us to collect the acetic acid, which volatilizes and condenses upon the cold surface of the bell in the glass plate, while the aldehyde escapes through the open aperture, and may be readily recognised by its peculiar odour.

But let us, before we proceed any farther, examine the composition of aldehyde and acetic acid, in order to obtain a more exact idea of these processes of oxydation. The analysis of aldehyde and acetic acid has led to the following formulæ:—

Aldehyde	C_4	H_4	O_2
Acetic acid	C_4	H_4	O_4,

which explain at once the transformation of alcohol under the influence of oxydising agents.

$$\underbrace{C_4\,H_6\,O_2}_{\text{Alcohol.}} + 2\,O = \underbrace{C_4\,H_4\,O_2}_{\text{Aldehyde.}} + 2\,HO$$

It is evident that aldehyde is derived from alcohol simply by the oxydation of two equivalents of hydrogen in the latter,

whence the name of the new substance, *al*cohol *dehydro*genatus. Acetic acid is the result of a further oxydation of aldehyde, the latter absorbing two additional equivalents of oxygen,—*i.e.*, it is derived from alcohol, by the latter absorbing four equivalents of oxygen and eliminating two equivalents of water.

$$\underbrace{C_4\,H_6\,O_2}_{\text{Alcohol.}} + 4\,O = \underbrace{C_4\,H_4\,O_4}_{\text{Acetic acid.}} + 2\,HO$$

There exists, as you perceive, an exceedingly simple relation between alcohol and acetic acid, which will become even more obvious if we write the formulæ of these substances in the following manner:—

$$\text{Alcohol}\quad C_4 \left\{ \begin{matrix} H_4 \\ H_2 \end{matrix} \right\} O_2$$

$$\text{Acetic acid}\quad C_4 \left\{ \begin{matrix} H_4 \\ O_2 \end{matrix} \right\} O_2$$

Acetic acid thus becomes alcohol, two equivalents of hydrogen of which are replaced by two equivalents of oxygen. This relation is of considerable interest. You will learn, by and by, that both alcohol and acetic acid are the types of groups of numerous substances which stand to each other in the same position as alcohol and acetic acid.

Now that you have become acquainted with the composition and the formation of aldehyde and acetic acid, I may briefly add a few remarks regarding the preparation and properties of these substances.

Aldehyde, as I have stated, is always formed, whenever alcohol is oxidised at low temperatures; but experience has shown, that the largest quantity of this body is produced, if the oxidation of alcohol be effected by a mixture of binoxide of manganese and sulphuric acid; three parts of sulphuric acid, diluted with one part of water, are mixed with three parts of finely-powdered binoxide of manganese, and one part of alcohol of 95 per cent. The mixture is distilled in a very capacious retort which is connected with a Liebig's condenser, the distillate collected in a receiver, carefully cooled with ice, and twice or three times distilled over its own weight of fused chloride of calcium. The very volatile liquid thus obtained is a mixture of aldehyde, which is the predominant constituent, with alcohol and several other liquids which do not interest us at the present moment. To purify the aldehyde the mixture is agitated with a saturated ethereal solution of ammonia, when a compound of aldehyde and ammonia separates in white crystals, which contain $C_4\,H_4\,O_2, NH_3$. These crystals are washed with ether, pressed between folds of bibulous paper, dissolved in the smallest quantity of water, and distilled, at a gentle temperature, from a tabulated retort, into which, by means of a safety-funnel, a small quantity of sulphuric acid is introduced, after the neck of the retort has been connected with a condenser. The liquid thus obtained once more rectified over chloride of calcium constitutes perfectly pure aldehyde. This substance is a transparent, colourless liquid, of extreme volatility; it boils far below blood-heat, the exact boiling point being 22°C. (71·6°F.) It possesses a very suffocating odour, by which it is readily recognised. Aldehyde mixes in all proportions with alcohol and with water; the solution has no re-action upon vegetable colours, although it has the properties of a weak acid, since it combines, as we have just seen, with ammonia. The leading character of aldehyde is, the facility with which it combines with oxygen. In contact with atmospheric air, it is rapidly converted into acetic acid; the same transformation is, of course, even more readily effected by all oxidising agents. A very characteristic re-action, which was first observed by Liebig, to whom we are chiefly indebted for the investigation of aldehyde, ensues when this substance comes in contact with an ammoniacal solution of silver. The liquid becomes turbid, and deposits, after a few minutes, more readily upon heating in a water-bath, a splendid metallic mirror of metallic silver, upon the inner surface of the vessel. The solution now contains an organic silver-salt, the acid of which has, as Liebig is inclined to believe, a composition intermediate between aldehyde and acetic acid, and which is designated by the term, aldehydic or acetylous acid.

$$\underbrace{C_4\,H_4\,O_2}_{\text{Aldehyde.}} + 2\,AgO = Ag + \underbrace{AgO, C_4\,H_3\,O_2}_{\text{Aldehydate of silver.}} + HO$$

This acid may be separated from the silver-salt by means of sulphuretted hydrogen. It shares to a certain extent the properties of aldehyde and acetic acid. It is very probable that the same acid is found among the products of the oxidation of alcohol effected by means of finely divided platinum.

The reduction of silver by means of aldehyde is interesting, as the starting-point of a new industry, which is likely to become of very considerable extension. At the time Liebig observed for the first time the brilliant silver mirror produced by aldehyde, he thought that this re-action was characteristic of that substance. It was, however, soon found, that this action is by no means confined to aldehyde. Chemists became gradually acquainted with a series of substances, of which aldehyde is the type, which all possessed the same property; and, within the last few years, it was found that a great many organic substances, in no way connected with aldehyde, exhibit with ammoniacal solution of nitrate of silver exactly the same deportment. A solution of oil of cloves and oil of cinnamon in spirits of wine produces a mirror by no means inferior to that of aldehyde. Glucose, and several other substances, produce the same effect. The process hitherto confined to the laboratory, soon passed over to the workshop; and the dazzling reflectors of the Glass-Silvering Company, which are so conspicuously exhibited in some shop-windows in Regent-street, bear witness to the perfection to which this useful art has even now attained—an art which has emanated from a series of experiments instituted for the elaboration of a purely scientific question.

Aldehyde undergoes another very curious change, when treated with the alkalies or alkaline earths, in the presence of water. This mixture evolves an intensely pungent vapour, exciting most powerful lachrymation. The residue contains a brown, viscid mass, soluble in alcohol and in potassa, from which solutions it is again obtained upon evaporation, or upon addition of an acid. The composition of this substance, which has been named aldehyde-resin, is unknown; its formation, and the silver-mirror produced by ammoniacal silver-solution, furnish the safest methods of ascertaining the presence of aldehyde in mixtures.

On account of the great attraction of aldehyde for oxygen, this liquid is generally preserved in sealed tubes, which should be almost entirely filled. But, even in this manner, it is impossible to preserve aldehyde for any length of time. Under circumstances which are not yet sufficiently studied, aldehyde is converted into another liquid, which boils at 94° C. (201·2° F.), and solidifies at the freezing point of water to a white crystalline mass. This liquid, which differs also from aldehyde by being perfectly insoluble in water, by no longer combining with ammonia, and by not having the slightest action upon nitrate of silver, has, nevertheless, the same composition as aldehyde, but the triple vapour-density; the composition of aldehyde being represented by

$$C_4\,H_4\,O_2,$$

the molecule of the new substance acquires the formula

$$C_{12}\,H_{12}\,O_6,$$

whence it stands to aldehyde in the same position which the solid chloride of cyanogen holds to the gaseous, or cyanuric, to cyanic acid. This substance has received the name of elaldehyde. Elaldehyde is not the only product of the transposition of the elements of aldehyde. Sometimes this substance solidifies at the ordinary temperature into a crystalline mass, which volatilises at 120° C. (248° F.), without previously fusing. This substance, to which the name metaldehyde has been given, still retains the same percentage composition as aldehyde and elaldehyde. Its vapour-density has not yet been determined, so that its true formula remains doubtful. Perhaps it occupies a position intermediate between aldehyde and elaldehyde, and would then be analogous to fulminic acid, which, as you recollect, is the connecting link between cyanic and cyanuric acid.

The study of the deportment of aldehyde with various chemical agents, such as sulphide of ammonium, hydrocyanic acid, etc., has led within the last few years to a series of discoveries of intense interest. The former reaction has furnished to Wöhler and Liebig a new organic base, containing a large quantity of sulphur, which the discoverer has called thialdine; the latter reaction, in the hands of Dr. Strecker, has become a means of artificially producing lactic acid. But you are scarcely prepared at present to follow into the details of these remarkable changes, the consideration of which I propose to postpone to a later period of this course.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. IV.

EXTRACTS FROM A REPORT ON SCARLATINA IN HER MAJESTY'S SHIPS AGAMEMNON AND ODIN, IN 1853.

By Sir JOHN RICHARDSON, Kt., M.D., C.B.
Inspector of Naval Hospitals.

Epidemic scarlatina, towards the close of last winter, prevailed among the crews of Her Majesty's screw-steamers of war, Agamemnon and Odin. An account of the epidemic is due, because of the lasting injury it produced on the health of a large proportion of those who were attacked by it, of the rapidity by which the ships of war were disabled by its spreading among their crews, and of several peculiarities in which the epidemic varied from ordinary scarlatina, more especially by its tendency to relapse after an interval of between a month and six and seven weeks.

The Agamemnon was put into commission on the 6th of October, 1852, at Sheerness, and lay in the mouth of the Medway, while her crew were being gradually collected from various quarters. During the whole season, the prevailing weather was unusually cold and rainy, with occasional showers of snow and sleet, and the alluvial lands of Sheppey and the Isle of Grain were flooded by stagnant waters. In addition to these circumstances, which are mentioned as being peculiarly calculated to produce a condition of the atmosphere favourable to the diffusion of scarlatina, the composition of the crew of the Agamemnon may also be adverted to, as having some influence in that respect. Her proper complement of men and officers was 820; but I have been told, that she had not reached that number by about 100, and her crew was still further diminished by the men sent from time to time to Melville Hospital. On the other hand, a proportion of the seamen being permitted to have their wives with them when in port, added to the number of the souls on board. Of the proper crew, the marines amounted to 153; the marine artillerymen to 32; the stokers to 36; and the officers to 50. The remainder consisted of petty officers and able seamen, ordinary seamen, landsmen, and boys. I have not the means of correctly ascertaining the numbers of each of these classes actually on board; but, as an approximation, the petty officers and able seamen having the port of disciplined men-of-war's men may be stated at 230, the ordinary seamen and landsmen at 200, and the boys at 60.

The ordinary seamen were chiefly from the merchant service, and had entered at the rendezvous in London and Liverpool. The men so obtained are not the *élite* of the merchant navy; but, on the contrary, the mass of those that offer themselves at the rendezvous are men of irregular habits, who, having expended their credit and clothing, are unable to procure employment in the line in which they were brought up, or men who, from natural indolence or the debility induced by incipient phthisis, cardiac disease, or other maladies, shrink from the continuous labour of a merchant ship. They are subject to a medical inspection, yet they often contrive to conceal the existence of hæmoptysis, palpitation of the heart, and other indications of incipient phthisis; though, having once entered into the Royal Navy, they are not long before they seek shelter in the sick list, and then confess to previous maladies and hurts. When compared with the active, intelligent, and disciplined seamen trained up in a man-of-war, the ordinary seamen so procured contrast very disadvantageously, being deficient in personal cleanliness, of filthy habits generally, rude to an extreme in their manner of eating, impatient of control, careless of their own clothing, prone to destroy the hospital bedding and stores, ignorant of the comforts of orderly conduct, and defying the utmost efforts and assiduity of the nurses to keep tidy the wards in which they were placed after they became sick. This contrast, though strongly drawn, is merely a transcript of what has passed under my observation, and is not exaggerated, nor is it recorded with the invidious purpose of exalting one service by depreciating the other, but because I became fully convinced that the progress and results of the epidemic were influenced by the habits of the men who were subjected to its influence. The disease was unquestionably most prevalent among these newly-raised men, and they suffered more severely from the after consequences. . . . .

Having made these introductory observations, I proceed to mention the chief facts in the history of the epidemic, as ascertained from Dr. Elliott, the surgeon, and Mr. Martin and Dr. Barclay, assistant-surgeons of the ship, and subsequently from my own experience. The cold damp weather and the nature of the lands enclosing the anchorage began to tell on the health of the crew in January, and by the 12th of that month the accessions to the sick list had increased in a marked degree; but no case of scarlatina occurred until the 27th of the month, when a ward-room officer being sudden seized with fever, was sent on the third day to Melville Hospital; but it was not until he reached the latter place that he was known to be affected with scarlatina, the eruption not having appeared before, or being too faint to attract notice in the imperfect light of a cabin on the orlop deck. The next seizure was also a ward-room officer; then followed a seaman, succeeded by three members of the midshipman's mess. The marines (who by the way are located in the after part of the ship next to the gun-room, where the midshipmen mess,) were then affected, and for some days the progress of the epidemic was confined to them; but afterwards cases occurred in various parts, the boys who slept on the upper deck being as yet exempt. In the course of eleven days from the first case, or by the 8th of February, 25 patients infected with scarlatina had been sent to Melville Hospital, and there were, in addition, about 30 of the crew there for other complaints. When the ship sailed from the Medway on the 9th of the month, the individuals on board, including 12 women, amounted to 697, classed as follow:— officers 50, petty officers 58, able seamen 168, ordinary seamen 186, lansdmen 8, boys 53, stokers 32, marine artillery 31, royal marines 99, wives 12.

The Agamemnon anchored at Spithead on the 10th of February; on the 11th, 5 cases of scarlatina were sent to Haslar Hospital, and, on the 13th, 24 more, being all that were then ill on board. On the 14th, I was directed by the Commander-in-Chief to inquire into the nature of the epidemic, and suggest measures for staying its progress; and having subsequently inspected the crew, and reported to the Admiralty, the plans finally adopted were carried out under their authority, and in pursuance of the advice of the Director-General, Sir William Burnett, to whom daily returns were thereafter made.

As we find that contagious fevers are very slowly propagated in the wards of a well-ventilated hospital, wherein, as at Haslar, we can allow from 1,000 to 1,200 cubic feet of air to each patient, so on the contrary, in a ship where the crew hang in hammocks touching each other and near the deck above them, contagion spreads rapidly from man to man, and fevers acquire malignant features. The first consideration, therefore, after taking means for the removal of the sick from among the healthy as fast as they fell ill, was to thin out the sleeping berths, but there were difficulties in the way of doing this, either immediately or for a time, effectually. The crews could not, for various reasons, be dispersed to their homes, as is the practice with children when large schools are invaded by scarlatina. The habits of seamen, the distance of many of their homes, the want of money among that portion of the crew who were most susceptible of contagion, were obvious objections to such a plan; but above all, there was the impropriety of turning adrift on the public a large body of men, not knowing how many of them would carry with them the seeds of contagion. Neither did Portsmouth, where the barrack room is scarcely adequate to the wants of the garrison, offer suitable lodging for secluding 400 or 500 men. As the best measure that could be resorted to under the circumstances, the Camperdown hulk, a roomy three-decker, was prepared for the crew, who were removed into her on the 26th of February, from the Agamemnon, which had been brought into the harbour some days previously, the numbers on board having been diminished by 138 scarlatina patients and 14 affected with other diseases sent to Haslar Hospital up to the end of the month, or to 555. At this period belladonna was administered for seventeen days, as a prophylactic, to all the crew remaining on board, and also to the washerwomen at the hospital; but the latter refused to take it above a week, from the sickness and depression it created, and it was discontinued on board also when the daily fresh cases were found to be undiminished. Six days after the removal into the Camperdown there was a temporary falling off in the number taken ill, but it did not

continue, and during March 126 cases were added to those previously in Haslar Hospital.

The hospital being fitted only for such patients as the Navy on the peace establishment was likely to supply, such an unusual influx rendered an additional quantity of iron bedsteads and other stores necessary. These were got as speedily as they could be sent from other parts, and, by the end of March, ample accommodation was provided for 900 patients and 150 nurses. This enabled us to appropriate wards detached from the others for the reception of 178 men, in apparent health, from the Camperdown, who were accordingly admitted, on the 2nd of April, under the denomination of "visiters." In selecting these for landing, the individuals of the classes that experience had shown to be most prone to receive the contagion were chosen, and the 240 left on board the Camperdown were chiefly officers and disciplined able seamen of considerable standing in the navy, and from among whom but very few cases were afterwards sent to the hospital.

In the meantime, the Agamemnon had been thoroughly fumigated with chlorine in every part accessible to the gas, introduced through gutta percha tubes,—her beams, bulkheads, inner sides, cabins, and timbers being washed with a solution of chloride of zinc, and afterwards whitewashed. The clothing of the men left in the Camperdown was also sprinkled with a solution of the chloride previous to being washed and dred; and it was ordered by the Admiralty, that when the time came for returning to their ship, the men were to be supplied with new bedding gratuitously, while that in use was to be sent to Haslar Hospital for purification.

Each patient coming to the hospital was well washed with soap and warm water, and the whole of his clothing and bedding was immersed for twelve hours in a solution of chloride of zinc, in the proportion of 1 part of the salt to 80 of water, and afterwards passed twice through boiling water. The hair mattresses were taken down, the hair picked afresh, and the ticking treated like the clothing. Finally, the various articles having been thoroughly dried in the open air, were placed in a store-room until the patient should be ready to return to his ship,—hospital clothing, including flannels and shirts, being supplied for his use until then. The "visiters" were allowed to take amusement in cricket-playing and other exercises in the extensive airing-grounds of the hospital, but restricted from communicating with the scarlatina wards, though a few evasions of this rule were detected, and the transgressors shut up. Out of the 178 "visiters," 31 were affected with scarlatina down to the 21st of April, when the last seizure occurred, nineteen days after the reception of this class of men into the hospital.

The Agamemnon, having been purified as above mentioned, was considered to be ready for the reception of convalescents. During the interval between the first days of March, when the fumigation was completed, and the 2nd of April, a considerable number of dockyard artisans were employed on board in altering the cooking apparatus and making other repairs, and in whitewashing the whole interior of the ship; and a guard of marines, lent from the Blenheim, slept constantly on board from the day that her proper crew were removed to the hulk. No case of scarlatina having occurred among either of these parties the ship was considered to be free from contagion.

On the afternoon of the 4th of April, permission having been obtained from the Admiralty after due representation, 102 convalescents, most of whom had been more than a month, and many of them six weeks, in the hospital, were sent on board. A great part of these men had been comparatively slightly affected at first; a number of them maintained, notwithstanding the evidence of the eruption on the skin and in the fauces, that they had never been sick at all, and they had generally urgently requested to be sent to duty, that they might obtain leave of absence to go on shore; in fact, they had every appearance of men in perfect health, except that some of them had still a faint erythematous blush remaining on the edge of the velum palati or on the posterior fauces. The full signification of this very slight departure from the normal state of the throat was not at that time fully recognised, and it was considered that the men in whom it remained could not communicate the disease after the lapse of five or six weeks from the primary attack. Each of the convalescents on laying aside the hospital dress was washed with soap and warm water, prior to putting on his own clothing and leaving the hospital.

On the 7th of April, being the fourth day after the return of the convalescents to their ship, one of them having fractured a rib by a fall, was sent back to the hospital, and on being admitted, was found to have a return of the red efflorescence on the body and also of the erythema of the fauces. On the following day, the convalescents from scarlatina and other diseases, sent from Melville Hospital, arrived, having been absent from their ship two months or more; and within an hour of their being received on board, one of them who had fallen overboard at Deal on the voyage round from the Medway was sent to the hospital for pneumonia. This man also showed a slight roseate efflorescence on the skin and in the fauces. On the 9th of the month, 11 of the Haslar convalescents were sent back from the ship, having had a relapse of scarlatina, together with four of those from Chatham. The latter had not been twenty-four hours on board before symptoms of the recurrence of the epidemic were exhibited by them, and two of the number had the scarlet eruption as vivid as it ever is in scarlatina. One of the four only had not had scarlatina previously, having been sent to Melville Hospital for another disease. The weather, at this time, was cold and raw, and the men had been inconvenienced by it on their voyage to Portsmouth. Relapses also took place at this time in an equal ratio among the patients remaining in the hospital, seldom occurring before the end of the fourth week from the first attack, but often in the sixth or seventh week. Ten or twelve of the men in the hospital had also attacks of ague, and sometimes it required attention to distinguish the two kinds of paroxysm, both being ushered in by shivering, more or less severe, and the scarlatina paroxysm going off not rarely by moisture of the skin and even sweating. The ague, however, recurred frequently, assuming the tertian type, and it was found that almost all in whom it appeared had been subject to it at some former period. One case of relapse was that of an officer who, after recovering in the hospital, went home to his family at Woolwich, on leave of absence, where the second attack occurred, more than a month after the first one, was of a more severe character, and was followed by more lasting debility. In all, 48 relapsed cases were sent back to the hospital out of the 102 convalescents sent on board, and there were in addition several first attacks, occurring in men recently entered on board, one of the latest being a marine of the guard borrowed from the Blenheim, and still employed in the Agamemnon. The last case sent to the hospital was on the 23rd of April.

At this time preparations were made for the ship going to Lisbon to try the effect of a warmer climate in restoring her crew to health, this plan having been found to answer well in the Odin, as will be hereafter mentioned. Accordingly, on the 27th, the "visiters" were sent on board from the hospital, and the men removed into her from the Camperdown. The ship sailed on the 8th of May, having a few days previously received on board all the patients in the hospital in whom symptoms of scarlatina had disappeared, except a small part of the number who still had slight erythema of the fauces, but who were expected to recover in a warmer climate.

[To be continued.]

MEDICINE IN LEWCHEW.

INTRODUCTION OF VACCINATION.

(Concluded from page 138.)

"*General Inoculation for Small-pox.*—It is customary, as I have stated, at Lewchew, to inoculate the whole population of the island, under thirteen years of age, every thirteenth year. The Cycle terminated in the year 1851, and during that year many inquiries were made as to the best mode of inoculating, and its treatment, and with apparent urgency. Lancets were also sought, first by allusion, and afterwards by request more openly expressed. Having a small supply of them, I was able to meet the demand. Several copies of the Chinese pamphlet, written by Sir G. Staunton, were also desired and granted. Questions as to the probability of our getting vaccine matter were often raised, and at last some impregnated ivory needles and a vaccine scab which I had remaining were half-officially asked for and gladly given, though with little hope of success. The lymph and the scab had been obtained through Dr. Barker, of Canton, by the Reynard, and, through the kindness of the Bishop of Victoria,

from another medical friend in Hong-Kong. My own child was vaccinated by Dr. Pottinger, of the Reynard, and myself, but without effect. The same result followed the vaccination of a native boy, performed in the presence of a native physician, who was sent to procure lymph, and to learn the method of vaccination. The inoculation having commenced, the disease generally followed in a mild form; but cases were subsequently reported of several, and even of all the children of a family, having died of small-pox. The operation frequently produced, as in vaccination, only a single pustule, and, if repeated, gave no further result, though the pustule was, in some individuals, of frightful dimensions. There can be little doubt, that high feeding, and the impure hot air of the closely shut up heated rooms, imparted to the virus a deleterious character, from which it was quite free on its first introduction. The Lewchewans are humoral pathologists, and look upon all exudations of pus and all eruptions as the results of expurgatory efforts, by which nature removes impurity from the general mass of humours. A mild variolous eruption is therefore deemed unsatisfactory, and the still greater mildness of cow-pox leads many to despise it, on the ground that it does little for the purification of the blood. The native doctors, therefore, recommend a generous diet as essential to the due maturation of the pocks, and "to push them up to the skin. The poor fared badly. Obliged by law to inoculate, yet unprovided with either doctor or medicine, they were quite unable to introduce the contagion while the disease still followed mildly, and they were left to procure a scab as they best could. They had the advantage, however, of being unable to overfeed or overheat their children, and of being more willing to listen to our advice.

"*The mode of inoculation* practised was very imperfect. The powdered scab was almost always introduced as snuff into the nose. When a knife was used, it was a big one, which greatly frightened the children. The incisions were often large, and on parts on which the body rests, so that the pustules were destroyed early, and rarely arrived at maturity, and the operation consequently failed. I insisted, first of all, on inoculation in the arm, and the use of a lancet, and Lewchew is entirely indebted to this mission for the practice of liquifying the scab, of impregnating with it a canulated or common lancet, and introducing it into the arm by easy punctures, and also of inoculating from arm to arm. Formerly, even the better classes waited for scabs one from the other; and the period of inoculation was thus protracted for many months. This year, all Lewchew went through the small-pox in between two and three months. I insisted, with equal firmness, on the adoption of a strict antiphlogistic diet until desiccation began, and *kugashi*, rice-jelly, of which the natives are very fond, constituted the chief article of food under our advice. We also entirely interdicted night-feeding, which the Lewchewans practise, in time of illness, to the extent of four meals a night, besides the day-feeding, considering it wilful murder to administer any less. On the other hand, we recommended, with all possible persuasion, cool air, ventilated rooms, and light, though warm covering. Whenever, from simple inspection of the pocks, we were enabled to tell the natives, with tolerable precision, the date of the inoculation and the probable course the disease had taken, we were gazed on with superstitious admiration, and secured thereby confidence and increased practice. This confidence induced a vast number of the natives to bring their children to have their arms inspected, or to inquire whether they were in a state of health suitable for the operation; and, had I been so disposed, I might have inoculated any number with my own hands; but having, in a despatch to the Government, repeatedly expressed my unmitigated disapproval of inoculation, and the necessity of introducing vaccination, I could not lend my own hand to what I condemned. I considered, also, that our enemies might make a malicious representation of our cases, if we had any, to shake the confidence we had inspired. As the Mandarins had undertaken the inoculation against my advice, I thought it sufficient, for my immediate duty, to prevent and mitigate actual suffering among the people, without either directly promoting, or appearing even in the least to oppose the Government measure. On the contrary, as soon as I knew certainly that the step was already taken, I universally advised *early* inoculation, partly to shorten, as much as possible, the duration of the plague, and partly through fear that the virus might, as it actually did, degenerate, through unskilful doctoring and feeding."

[Notwithstanding Dr. Bettleheim's caution, and the increasing good feeling of the natives, the envy and malice of the mandarins at last broke out, and a serious personal attack was made on Dr. Bettleheim and his family by an armed Japanese soldiery. For this attack the Lewchew Government were compelled to beg pardon under their great seal; but Dr. Bettleheim was for some time disabled. He thus proceeds:—]

"*Introduction of Vaccination.*—Nearly all the results of inoculation, whether favourable or the reverse, worked together advantageously to prepare the mind of the nation for the introduction of vaccination. Some had been persuaded by the numerous cases in which one or two pustules only appeared, and in which no further eruption could be forced, notwithstanding repeated inoculation, that the smallest number of pustules sufficed to show that the virus had penetrated the whole body. Others, again, the many heavy sufferers, sighed after some milder substitute for such a violent remedy. Others, again, on our representation, acknowledged that a method admitted into China, and long ago advantageously practised in Europe, deserved a trial in Lewchew.

"In February, 1852, the long wished-for vaccine virus arrived in H.M.S. Sphinx. The Bishop of Victoria also kindly made a second effort to supply us with lymph, and happily with complete success. In June, 1852, there arrived by the Lewchewan junk a box containing a precious supply of vaccine virus, and a Report of the London Vaccine Institution, with the card of Mrs. Graham, Bloomfield-lodge. Many thanks to the noble donor.

"Feb. 13.—Dr. Harvey, of H.M.S. Sphinx, vaccinated our child with lymph.

"17th.—The vaccine has taken; sent for an official person to inspect it.

"19th.—Sure that I could not succeed in introducing vaccination among the natives without the consent, or at least the connivance of Government, and thinking it also unsafe to attempt it clandestinely, I wrote to the Lewchewan authorities as follows:—

"'A respectful communication. A few days ago I received vaccine lymph and a scab. The former has been inoculated into the arm of my child, and I am rejoiced to inform you that it has taken. Everybody may now convince himself that the vaccine pock appears only when the lymph is introduced into the body. My child has not the slightest appearance of illness, walks about and plays, and takes the same food as usual. I therefore entreat the Regent to allow two or three Lewchewan children to be vaccinated, and thereby to put an end for ever to the calamities of the small-pox. Accept this inch of letter and my respectful New-year's compliments.—I have the honour, &c.

"'Han-Fung, 1. 12 last day (Feb. 19, 1852.)'

"This letter was accompanied by a suitable present.

"21st.—Took lymph from my child's arm, and impregnated several ivory needles; vaccinated therewith my elder girl, but without success. A te-fu (official messenger) arrived during the operation, with a blank refusal to the above request, based on the apparently justifiable excuse, that, having just suffered so much from the small-pox, they were afraid of a new trial. A more hollow reason was, that, as faithful vassals of China, and conscientious Confucianists, they durst not accept even a decided benefit that came not to them through the Emperor. The te-fu, however, wished to see my child's arm, and expressed great wonder at her walking about and playing, exposed to the air, without alteration in her diet, etc.

"23rd.—Ichirazichi, head of the Spy-force, Chief State Interpreter, Postmaster-General, Physician, and Surgeon, all in one person, in full official dress, arrived, apparently merely to bring the New-year's congratulations; but, after a good deal of ruminating, he finished by taking my box, containing needles charged with lymph from Hong-Kong, and others with lymph taken from my child. He expressed much predilection for the latter, as being a Lewchewan production. Alas for consistency! The mandarins of Lewchew, with all their vulgarity and gross ignorance, know how to play the Confucian; and while, with an ill-covered pride, and a still more ridiculous conscientiousness, they disdain to accept officially any favour from the foreigner, in order that they may be able, when it suits them, to ignore or deny it, they little scruple to connive at, or even to ask for privately, what they deliberately refused acceptance of.

"April 28.—Was requested by the Shuy Todzies (my guards and spies) to let them have the scab received from

Hong-Kong, which I gave them, and also another fallen from a desiccating pustule of my child.

"March 3.—Ichirazichi came and told me, the vaccine had taken. He at the same time requested me, if I wished vaccination to make progress in Lewchew, and to avert trouble from him, the first propagator of it, never to speak of it in my despatches to the mandarins.

"I am satisfied from this message, and hereby declare to our friends as a certain fact, that vaccination has been introduced into Lewchew with the knowledge of the local authorities, and that care will be taken to preserve and propagate it; and I have little doubt that the first junk sailing hence to Japan will carry it there. All praise be to God.

"March 15.—The Todzies, full of gratitude, informed me that the vaccine had generally(a) taken; and, at my request, promised that no effort should be spared to introduce it in all the out-islands belonging to Lewchew."

The remainder of Dr. Bettleheim's paper contains a description of a low typhoid fever which made its appearance in Lewchew during the hot season, almost contemporaneously with the inoculation, but prevailed long after the small-pox had ceased. To meet this new disease, Dr. Bettleheim exerted all his energies, attending the sick at their own houses six or seven hours daily, and employing much of the remainder of his time in preparing medicines for them at home. With the assistance only of Mrs. Bettleheim, (for he had no servant,) he carried about, on foot, ten to twenty pounds' weight of medicines, which he administered to the sick with his own hands. Not rain, nor filth, nor fetor, nor incessant toil, could arrest the perseverance of this Christian physician. His charity and devotedness, his marked success, and his seemingly miraculous escape from disease, when escape seemed impossible, at length softened the opposition of his enemies. The gratitude and confidence of the people seem at length to have so far extended to the authorities, that they allowed him to employ a *ragu* (native sedan) and bearers, and to prosecute his labours without further molestation, almost with their open encouragement.

Dr. Bettleheim is most anxious to confirm and improve this more kindly feeling, and, while he is introducing the benefits of European medical practice, to avail himself of the confidence of a grateful people to turn their hearts to Christianity; and the recent news from China makes it probable that the present time is singularly favourable to such an attempt. His efforts as a teacher of Christianity have been at least as great as his medical labours, and he has recently completed a translation of the Gospels and Epistles into the Lewchew language. It is hoped that those who feel an interest in the progress of medicine, as well as in the extension of the blessings of Christianity, will give a helping hand when so much medical benefit has already been accomplished, and so much more *may* be done.—FREDERIC J. FARRE.

NOTE.—Subscriptions and contributions will be thankfully received for this object by the Society's bankers, Messrs. Puget and Co., 12, St. Paul's Churchyard; or by the Assistant-Secretary, at the Society's Office, 48, Salisbury-square, Fleet-street.

CASE OF PLACENTAL PRESENTATION.

BY FREDERICK DANFORD, ESQ.

IN passing through a neighbouring village, on the morning of the 9th October, 1851, I was unexpectedly called in to see a girl, named Fanny Andrews, aged about 25, a person of robust health. I found she had been in labour all the night, but that her pains had ceased two hours previous to my visit. I learned from the women around her, that she had been suffering from hæmorrhage the greater part of the night, which had not abated when I saw her. That the hæmorrhage had been considerable, was evident from the saturated state of bed linen and bedding, and from her blanched appearance and almost pulseless condition.

I found the os uteri well dilated, and the placenta presenting, and attached in the whole of its circumference. I immediately detached it, when the hæmorrhage entirely ceased.

The presentation was a vertex one. I ruptured the membranes, and, finding no uterine action followed, turned the child, and readily extracted it. The child was dead. The uterus contracted well after delivery, and the woman recovered without a single bad symptom.

Parsondrove, near Wisbeach.

(a) Dr. Bettleheim does not explain how vaccination succeeded *generally* immediately after the universal inoculation of the children under the age of 13. Perhaps, notwithstanding the general order, some had escaped inoculation; and vaccination may have been tried, and generally succeeded, *in these*.—F. F.

A CASE OF INTUSSUSCEPTION,

IN WHICH NINE INCHES OF THE INCLUDED BOWEL SLOUGHED AND CAME AWAY PER ANUM.—RECOVERY.

BY W. H. BLACKTON, ESQ.

Medical Officer of the Woodford and Drummin Dispensary Districts.

ROSE CONNALLY, aged about 55, was suddenly attacked, on the night of the 13th of June last, with violent pain in her abdomen, and, some time after, with vomiting, which continued for a couple of days; that ceasing somewhat, she took two doses of castor oil, without, however, producing any effect; and had injections, which came away almost immediately, just in the same state as given. Finding she got no benefit from her own treatment, she procured a visiting-ticket, on which I attended on Sunday, the 19th of June.

I found her lying on her back, in very great pain; legs drawn up; pulse somewhat quickened and weak; tongue furred; much thirst; abdomen greatly distended, the slightest pressure causing intolerable pain, which, however, was most severe in the left iliac region. From these symptoms, and previous history, it was quite evident this was a case of inflammation arising from obstruction; though what caused the obstruction was not so apparent; of this, however, I satisfied myself, that it could not arise from any hernia that could be detected, and, considering her age, state of pulse, etc., etc., I thought the time for general depletion had passed; but should have resorted to local had the means been at hand; as it was, I was obliged to be satisfied.

Calomel and opium were given every four hours, and turpentine was applied to the abdomen.

Tuesday, 21st.—Rather better; bowels acted slightly.

The pills were given every six hours, and a dose of castor-oil next morning.

Saturday, 25th.—Going on favourably.

Tuesday, 28th.—Much better.

On Tuesday, July 5, she sent to the dispensary, saying, she wished very much to see me, as she was much frightened at something she had passed from her bowels, and which inspection proved to be really nine inches of intestine that had sloughed and come away, clearly revealing the cause of all her suffering.

Tuesday, 12th.—Is up and sewing; bowels acting regularly; feels tolerably well, but thinks she is occasionally troubled with flatulence.

Tuesday, 19th.—Discharged, with directions to be particularly careful in attending to the state of her bowels and diet.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

EXCISION OF VERY LARGE TUBERCULOUS GLANDS FROM THE AXILLA.

[Under the care of Mr. LAWRENCE.]

THE cases are not very common in which it is found necessary to remove lymphatic glands, on account of tuberculous disease. Yet they do occasionally occur, since such a measure may become desirable either from the tumour being of very long standing, frequently subject to inflammation, or habitually painful. In all such, however, it is requisite, in order to warrant the operation, that that they shall have resisted other treatment, and be in a perfectly chronic state. From time to time we have seen several of these cases submitted to operation, and always with good result, *i.e.*, the patient recovered well, and was freed, at

once from an inconvenience, and a deformity which would have never been removed by other means, or, if so, only after years of treatment. The region affected has, with the exception of the following case, always been the neck, and, as far as we are aware, it is very unusual for the axillary glands to be the seats of tuberculous disease. The great size and hardness of the swelling much perplexed the diagnosis, and in several respects, the case is one of such interest as to be well worthy being put on record.

Susan Johnson, aged 27, a delicate looking young woman, of dark complexion, thin skin, long silky eyelashes, and blue sclerotics, was admitted on April 28, 1853. She was very anxious about the nature of a lump, the size of an orange, in her left axilla, which she had first noticed when quite small, about three years ago. It was circumscribed, nearly round, and very hard, had increased gradually, and occasioned much pricking and shooting pain, to such an extent indeed, as often materially to interfere with sleep. There was no history of either scrofula or cancer having prevailed in the patient's family; her father had died of phthisis, and a brother was then ill of the same disease; she had herself long suffered from dyspepsia and a slight cough, but had never spit blood. About ten years ago, she had had erysipelas of the forearm with abscesses, but she did not recollect that the parts in the armpit were, at that time, at all swollen. Having tried the iodide of potassium in full doses for about a month, without any improvement, and as much treatment had been unsuccessfully adopted before her admission, Mr. Lawrence determined at once to remove the tumour by the knife, a measure which the patient was very desirous to submit to.

On Saturday, May 14, the operation was accordingly performed, and did not involve any unusual difficulties. Behind the mass which had been most easily felt, were found two other glands similarly diseased, though not nearly so large. In each, the gland tissues were converted into a thick pale sarcomatous structure, in the middle of which was lodged a large mass of crude tubercle of a somewhat whiter, more leathery, and less putty-like appearance than that usually found in the lungs. The diagnosis was confirmed by the microscope. The patient recovered well.

GUY'S HOSPITAL.

LARGE SOLID GLANDULAR TUMOUR IN THE NECK.—EXCISION.—RECOVERY.

[Under the care of Mr. COCK.]

THE following case forms in several points a very interesting contrast to that which precedes it. The patient was younger, a more strumous subject, of a strumous family, and the tumour, undoubtedly glandular, occurred in a situation where the lymphatics are most commonly affected by strumous disease, yet, singularly enough, the parts displayed, after excision, far less evidence of having ever been the seat of tubercle than in the one just related. Alfred Barton, aged 17, a miller, residing in the country, tall, and rather thin, of florid complexion, but delicate-looking, applied on account of a tumour in the right neck, of very unsightly magnitude. He stated, that it had commenced three years ago as a nut-sized, very movable swelling under the ear, and painlessly increasing in size, had sunk lower down in the neck. It was now as big as a very large adult fist, and extended from the angle of the jaw to a little above the clavicle. It lay immediately in front of and over the sterno-mastoid muscle, and did not adhere either to the skin or to the deep parts. At its upper part it presented two or three broad nodules, but its surface was everywhere smooth and rounded; it was very firm and inelastic to the touch. It appeared that his family, none of whom were known to have been affected with phthisis, had been much subject to enlarged cervical glands, several of his brothers having chronic swellings of this kind "as large as eggs." None of them had ever suffered from abscesses, either glandular or otherwise. He had himself never had any enlargement on the opposite side of the neck, but in childhood he had suffered from feeble circulation, as evidenced by great liability to cold extremities and to chilblains. He had for some time been under the able professional care of Mr. Adams, of Sevenoaks, by whom he had been treated with a long course of ol. morrhuæ internally, and the local application of tincture of iodine. Under the former he had gained flesh and strength, but no diminution in the size of the tumour had resulted. The history thus told seemed to point pretty conclusively to the probability, that the swelling consisted of glands which had undergone some change connected with the scrofulous diathesis. As no tendency either to discuss or to suppurate had yet been shown, it appeared clear that there was but one method of treatment likely to be successful, and to this Mr. Cock determined to resort at once, as the lad was in a state of health and at an age very likely to recover well after an operation. After he had been kept under observation for a short time, excision of the whole mass was accordingly performed, and, excepting from the difficulties incident to the locality, and to the size of the tumour, the operation presented no features of interest. The wound made was unavoidably large, and the dissection occasioned considerable hæmorrhage. The patient made a steady convalescence, and was discharged quite well about a month after the operation.

On examination of the excised lump, it was found to be composed of three or four roundish masses, which had closely adhered to each other; they were enclosed in thin capsules of cellular tissue, to which, also, they were firmly connected. From the relations of these to each other, there could be little doubt but that they consisted of a cluster of enlarged glands; their section was almost exactly similar in every part, being smooth, firm, homogeneous, and almost white. They were very tough, but did not cut crisply; they exuded no juice, and did not exhibit any glistening bands of fibrous tissue, but here and there, especially at the edges, was an indistinct appearance of lobular arrangement. In no part was there anything resembling any form of tubercle, or its cretaceous remains.

PAINFUL GROWTH IN THE BALL OF THE GREAT TOE.—EXCISION.—GREAT PAIN IN THE CICATRIX.—REMOVAL OF A PORTION OF NERVE.—RECOVERY AFTER A SECOND EXCISION.

[Under the care of Mr. COCK.]

Elizabeth Plumer, aged 30, a married woman, of dark complexion, and very nervous temperament, consulted Mr. Cock in the beginning of May last, on account of a small tumour over the inner side of the ball of the right great toe. She stated, that she had experienced pain in that part, more or less, for nearly five years, but that there had been nothing to be seen until about twelve months ago, when she noticed a slight swelling, which had since, but more especially during the past six months, increased in size. The pain in it had been of a darting and burning character, and had often kept her awake at night. Since the appearance of swelling, she had been quite unable to wear a boot or shoe on the affected foot. She was extremely anxious as to the nature of her disease, which had plainly caused her great trouble. Since its appearance, she said, that she had lost both flesh and strength. The tumour was now about the size of half a walnut, moderately firm to the touch, and attached both to the skin and to the deep parts. The skin over it was red and discoloured. The woman having been made an in-patient of the hospital, the operation was performed on

May 17.—Mr. Cock made a crucial incision through the skin over the growth, and, having dissected back the flaps, exposed the tumour, which he then separated from its adhesions to the short muscles of the great toe and the sesamoid bones. A portion of the tumour which appeared to dip beneath the muscles was also followed, and removed. In doing so, the trunk of a nerve was exposed, but not injured. The bone was not found to be diseased, and the substance of the tumour was composed of softish, greyish, white structure, freely supplied with vessels. It readily broke down between the fingers, but did not yield any true juice. It was examined microscopically by Mr. Birkett, who did not detect any evidence of malignancy. It appeared to consist of fibro-cellular tissue, in small quantity, and a large number of elongated or fusiform cells, more or less distinctly nucleated. Mr. Cock remarked, that, judging from the naked eye alone, without giving any opinion as to its essential character, he should yet expect it to be of a kind which would return again. The wound was dressed with water-dressing, and in a short time healed favourably; the pain, however, continued as severe as ever; and, as the cicatrization became complete, was even increased in intensity. This, Mr. Cock was inclined to attribute to the nerve-trunk, which had been exposed in the operation, having probably become involved in the scar. He accordingly decided to cut down on the part, and seek for this nerve, in order, if practicable, to remove it.

June 15.—The patient having been put under the influence of chloroform, Mr. Cock made an incision deeply into the scar, about over the part where it was judged the nerve lay. Its trunk was fortunately found with the greatest ease, and about an inch of its length dissected out. The filament, a digital branch of the internal plantar, was about the thickness of two pins, and at its distal extremity it was incorporated with the fascia, and swollen out into a somewhat bulbous form.

The division of the nerve proved effectual in arresting the neuralgic pain from which she had suffered; but, before the wound was healed, it became evident that the original disease was rapidly developing itself deeply in the sole of the foot, and that another operation would be required for its extirpation.

Accordingly, on July 5, she was again placed under the influence of chloroform, and an incision carried along the inner margin of the sole of the foot, where the tumour could be most distinctly felt. On laying it bare, it was found to extend completely beneath the short muscles of the great toe; the space between which and the interossei and metatarsal bones was completely occupied and distended by the morbid growth. It was necessary to completely divide and turn back the flexor brevis and abductor pollicis; and much careful dissection was required to follow out and extirpate the ramifications of the tumour, some portions of which extended towards the dorsum of the foot, between the three inner metatarsal bones, while others insinuated themselves into the interstices of the muscles.

A piece of sponge was introduced into the wound, to insure a free suppuration of the entire cavity, and the obliteration of those portions of the cyst which could not be removed. The deep-seated vessels and nerves necessarily suffered somewhat during the operation, and, for some days after, she experienced great and continued pain in the part. A healthy action, however, soon became established. She is now (July 25) free from suffering; the wound is rapidly closing, and her health has greatly improved.

Mr. Cock thinks it most probable that the tumour last excised existed in an incipient state at the time of the first operation, and that the growth which was then removed was merely an offshoot of the more deep-seated mass, which had found its way between the two portions of the flexor brevis, and developed itself between the muscles and the skin.

Left the hospital July 30; wound nearly healed.

THIRD EXCISION OF A LARGE TUMOUR OF DOUBTFUL NATURE FROM THE ARM.—RECOVERY.

[Under the care of Mr. COCK.]

The following case affords another example of the rapid and repeated reproduction on its original site of a morbid growth, at best very doubtfully malignant. We are indebted for the details concerning it to the notes taken by Mr. Turner, one of Mr. Cock's reporters.

Hannah Cross, aged 42, apparently in good health, was admitted on March 20, 1853, on account of a tumour as large as a full-sized cocoa-nut, on the back of the left arm, mid-way between the shoulder and the elbow. The mass felt firm and solid, was moderately moveable, and, for the most part, not adherent to the skin. Over its middle, however, ulceration had taken place, and a large sloughy sore was exposed, around the borders of which the skin and the morbid growth were united. The ulcer presented a very unhealthy appearance, and the discharge from it was thin and of a fetid odour. There were not, however, any features about it of a decidedly cancerous nature, and none that might not be explained by reference to the lowly organised structure of the tumour involved. The patient stated, the tumour had been growing almost painlessly for four months, and that it had consisted at first of two distinct masses, one situate over the external condyle of the humerus, the other higher up, and over the back of the arm, in process of growth. They had, however, become adherent, and intimately incorporated with each other. She had twice been under surgical care previously, and had large tumours excised from the same part; and the date which she assigned for the commencement of the present one was about three months after the last operation. The first appearance of the disease had been as a very small, moveable swelling, about two years ago, when it originated without known cause. For some time, it gave no pain whatever; but, as it attained a larger size, it began to be the seat of darting pains. In May, 1852, the surgeon under whose care she then was removed the whole mass, which weighed one pound. About a month after the wound had healed, it again began to grow, and increased more rapidly than before, so much so as to again require excision in September of the same year. It had then attained a little more than half its previous size.

On both occasions, the recovery after the operation had been rapid and satisfactory. She had not in any way lost flesh or strength during the last two years; and it was not known that any of her relatives had ever suffered from cancer.

On April 5, Mr. Cock performed a third operation. The patient being under the influence of chloroform, an elliptical portion of skin, including the ulcer, was surrounded by incisions about five inches in length. The tumour was found to be slightly adherent to the triceps, and a small circumscribed portion was developed in the structure of that muscle. With this exception, the mass was easily enucleated, not being attached to any of the surrounding parts.

On May 31, the patient was discharged, the wound being healed, with the exception of a very small portion. It had progressed favourably, and required no particular treatment. She has since been repeatedly seen. The wound healed soon after she left the hospital, and the cicatrix hitherto continues healthy.

The growth after removal did not present distinctive characteristics of malignancy, either ostensible or microscopic. Its section was of greyish white colour, very sparingly vascular, not crossed by fibrous bands, nearly homogeneous, and yielding scarcely any juice. It was partially divided into large lobes, and the whole was surrounded by a thin cellular envelope. When torn, it split up into laminæ, as if possessing somewhat of a fibrous structure. The microscope detected numerous elongated fusiform cells, containing single nuclei, and arranged in the meshes of fibro-cellular tissue.

NON-MALIGNANT TUMOUR FOUR TIMES REPRODUCED AFTER EXCISION.—FIFTH OPERATION.—RECOVERY.

[Under the care of Mr. COCK.]

It is important to be always borne in mind, that, among the rational indications of malignancy, the mere fact of a tumour having reproduced itself in or near the cicatrix left after its excision, is one of the least trustworthy. Common experience has shown,—and the case we are about to relate is an excellent illustration of it,—that this may occur, time after time, with growths which have no claim whatever to be considered cancers, which induce no cachexia, occasion no pain, do not affect the internal organs, and, excepting from their size, ulceration, sloughing, or other accident, have no tendency to shorten the life of the patient. Nor is there anything in this circumstance at all contrary to what ought to be expected; for, if we consider that, although undoubtedly most innocent tumours are purely local in their origin, and also confined to a particular organ or structure, yet it is probable that some others own also a constitutional cause, and find their most fitting nidus in widely-diffused tissues: it will be at once seen, that, as regards the latter class, the knife does little or nothing towards removing their efficient causes. Of what those causes may be, nothing definite is known, but it is easily credible that they may remain, after an operation, just as potent to reproduce as they were previously to originate. The question as to whether such tumours should be interfered with, is, we think, answered most conclusively in the affirmative by the following case, the subject of which has probably, by means only of repeated operations, been spared the inconvenience of an enormous growth, and its frequent attendants of ulceration, sloughing, etc.

Mary Griffiths, aged 54, a tall, hale woman, residing in Wales, was admitted, under the care of Mr. Cock, on April 20, 1853, in order to have a tumour removed from the right side of her face. The tumour in question was about as large as the palm of the hand, having its border raised to the extent of nearly an inch above the level of the surrounding skin, and its surface, excepting from the effects of depressions and puckerings here and there, almost flat. It felt firm in most parts, but in others evidently contained small cysts; it was movable slightly on the deep structures. It was situated beneath the right ear, extending downwards over the angle of the jaw, forwards on to the cheek, and backwards on to the neck. She stated, that Mr. Morgan (in Guy's Hospital) had removed a tumour from exactly the same place twenty-five years ago, which was as large as a man's fist, and had been three years growing. After the operation she returned home, and for two years remained well, when it again began to grow, and as she had determined, for the future, to take it in time, she came up to town, when it had attained the size of a hen's egg, and had it again cut out. Almost before the wound had healed, it again began to form, and, after an interval of five years, during which it had reached quite its original size, she submitted to another operation. A fourth, and last, excision was performed by Mr. Morgan, fourteen years ago. She has always recovered remarkably well from the operations, and has in the intervals enjoyed excellent health. The tumours have never been in any way painful, and have always re-appeared on the original seat. There is no family history of predisposition to tumours, malignant or otherwise.

May 3rd.—Chloroform having been administered, Mr. Cock commenced the operation by surrounding an elliptical piece of skin, which adhered to the tumour, by vertical incisions; he then dissected from each side the flap of skin covering its borders. The diseased mass being now held forward by means of toothed forceps, Mr. Cock proceeded to dissect it away from its posterior adhesions, beginning from above downwards. In so doing, it was found to have deep attachments, rather profuse hæmorrhage several times occurred, and the operation was delayed by the number of vessels which required ligature, before it could be proceeded with.

The tumour, a flattish, ill-defined mass, as large as a fist, consisted of a collection of cysts, varying in size from a wallnut to a bean, and each containing a beautifully clear and transparent jelly. The largest of these was lined by a smooth membrane, and

divided into many chambers, by bands which passed about its interior. The inter-spaces of these cysts were composed of thick layers, of what was apparently condensed fibro-cellular tissue. The jelly-like contents, when examined microscopically, showed a large number of small granular cells, much resembling those of lymph, only smaller; there was nothing at all resembling the constituents of cancer.

During the fortnight following the operation, the patient suffered from a smart attack of erysipelas, which lasted several days; she afterwards, however, made a good recovery, and left the hospital quite well, in the middle of June. At her age, the chances are probably that she will live out the remaining portion of her life without another recurrence of the disease, more especially as the rapidity of its production has appeared to decline progressively with increasing years.

RETURN OF A NON-MALIGNANT TUMOUR FIVE TIMES REMOVED BY OPERATION.—SIXTH EXCISION.—RECOVERY.

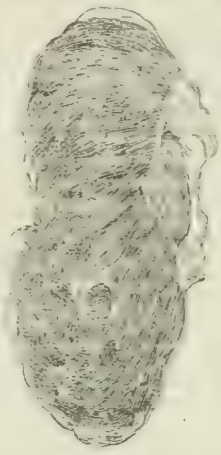
[Under the care of Mr. COCK.]

Clara Holland, aged 21, a healthy-looking woman, married, and the mother of one child, was admitted on July 6, on account of a tumour on the right thigh, for which she had previously submitted to no less than five operations by Mr. Cock. The history of her disease is as follows:—Eight years ago she received in play rather a severe bruise over the inner aspect of her right thigh, about six inches above the knee. No consequences ensued, until about a year afterwards, when there appeared in the part a small, well-defined, subcutaneous tumour. When this had attained about the size of a walnut, she applied as an out-patient to Guy's Hospital, and an incision was made into the growth; blood only escaped, and the wound not healing readily, she was, a week afterwards, admitted as an in-patient, and had the whole excised by Mr. Cock. She soon afterwards returned home, quite well, but in a short time the tumour again began to grow in the same place; and having, in about a year, attained to a little more than its previous size, it was again submitted to excision. Three subsequent operations of a similar character have since been performed, at intervals varying from one to two years, the last being in March, 1852. On several occasions the tumour has recommenced to form almost as soon as the wound healed, and it has never delayed its re-appearance for more than six months, excepting after the last operation, when it remained quiet for nearly a year. Mr. Cock states, that at each operation the tumour presented the same features, being a circumscribed, subcutaneous mass, attached to the fascia, and of pale grey, homogeneous appearance. The health of the patient never appeared to suffer in any way from it, and its growth was attended by but little pain. The one at present existing was, in March last, not larger than a marble, but it has since then increased rapidly, and is now as big as two fists, being pendulous, and attached by a thick peduncle. Five weeks ago, the superjacent skin ulcerated, and there has latterly been discharged from the sore a good deal of offensive pus. Since the ulceration, there has been much shooting pain in the lump, so severe as to often keep the patient awake at night, and apparently, as the result of this loss of rest, her appetite has failed, and she has considerably emaciated. Still, however, there is no kind of cachexia about her; she is florid and healthy-looking; pulse 86, and of good power. There is not, and has never been, any enlargement of the inguinal glands. We must not omit to note an important circumstance in her family history,—that her father died a few years ago of "cancer of the tongue." She describes his disease as having commenced about a year before death, from the irritation of a broken tooth, and states, that the greater part of the organ was destroyed by a foul and very painful ulcer (probably epithelial cancer.)

July 12.—The patient being under the influence of chloroform, Mr. Cock to-day performed for the sixth time excision of the morbid growth. An elliptical portion of skin, including its base, was removed with it, as also the deep fascia, from which it was found to grow, and a portion of adherent muscular fibre; the muscle below appeared quite healthy. No attempt was made to close the wound, which was covered with a piece of wet lint, and left to suppurate.

The healing process was subsequently completed favourably, and the patient was discharged after a short time.

A careful microscopic examination of the tumours, successively removed in the above case, was instituted by Mr. Birkett after most of the operations. Mr. Birkett informs us, that the drawings made on previous occasions agree exactly with the appearances presented by the growth last removed. In addition to the ordinary fibro-cellular or connective tissue, they exhibit great numbers of the elongated or fusiform single nucleated cells, described by Lebert as occurring in the "fibro-plastic" growths, being, however, quite destitute of the large, compound, many-nucleated cells, which, by other histologists, are considered yet more characteristic of them. To the naked eye the tumours have always displayed a pale grey section, discoloured in parts by effusions of blood. In the one last excised, which we here figure, the structure was much broken down by this interstitial extravasation, owing probably to several slight injuries which it had received, and to the existence of an unhealthy ulcerative process on its surface.



Comments.—The last three cases, although differing a little in some respects, are no doubt examples of the curious group which Mr. Paget has described in his pathological lectures under the well-chosen name of "Recurrent Fibroid Tumours," and which he believes to occupy a transitional position between innocent and malignant growths. From the latter they differ most markedly, in showing no tendency to affect the lymphatic glands, or to produce secondary deposits in the internal organs or any part of the body other than that originally attacked. As to treatment, one rule may be clearly and decidedly laid down, viz., that their growth must be perseveringly resisted. If the application of cold or of air-pressure be not found sufficient, the knife must be resorted to, and used over and over again as often as necessary, without waiting to let the tumour either slough or grow to an unwieldy size. If this be done, the patient may, perhaps, hope to outlive the morbid tendency in time; but, meanwhile, it is the surgeon's duty to impress upon his mind the absolute necessity for submitting to the repeated operations, since several cases are on record in which, from an increasing dislike to these measures, tumours of this description have been allowed to produce fatal consequences, death being in each instance caused by ulceration, sloughing, etc., of the overgrown mass.

The last case, that of Clara Holland, affords an interesting illustration of a remark made by the philosophic pathologist above mentioned, viz., "that the children of a cancerous parent, or those in whose family cancer is prone to occur, are apt to have tumours which may be like innocent tumours in their structure, but may resemble cancers in a peculiar rapidity of growth, and a proneness to ulceration and to recurrence after removal."(a) The patient, in whom an obstinately recurrent tumour had appeared at an early age, was the daughter of a man who had died of cancer. It would seem that the predisposition to malignant disease, hereditarily derived by the child, was of diminished force, and insufficient to produce cancer, but yet capable, in an expiring effort, of endowing an innocent tumour with certain peculiar characters. The next generation will probably be free from all degree of taint.

VERY LARGE SCIRRHOUS TUMOUR OF THE BREAST, WITH DISEASED AXILLARY LYMPHATICS. AMPUTATION OF THE BREAST.

[Under the care of Mr. BIRKETT.]

M. H., aged 37, born in Macclesfield, but resident in London, and the mother of four children, applied to Mr. Birkett in March, 1853, on account of a large tumour in the left breast. The last child was born four years and six months since, and was more than 3 years old when she weaned it. Her previous health had been very good; the catamenia normal. She had never suckled with the affected breast, and it had never been in any way the subject

(a) "Lectures on Surgical Pathology." Vol. II., page 260.

of disease until May, 1852, when she first accidentally noticed a hard lump in the clavicular half of the gland. She had been troubled with the milk "coreing" in the breast at the time after parturition, but it went no further. The left breast was transformed into a very large, pendulous, tuberculated mass of cancer. Its surface was shining, red, irregular, and here and there were small apertures in the skin, in the centre of which there was a yellow body somewhat resembling a slough. The tumour was very hard in all parts, and quite movable upon the pectoral muscle. The axilla was occupied by a large mass of indurated glands, as well as by a new growth of cancer, which was separate from the mammary tumour. The patient often experienced sharp, darting, shooting pains, but pressure and manipulation were quite endurable. The nipple was fixed rather than retracted, and it seemed as if it had been once well-developed. The general health of the patient was good, but her aspect was most cachectic, and indicative of disease. So greatly, indeed, did her appearance betoken general cancerous diathesis, that an operation seemed to offer but slight hope of benefit. She attended as an outpatient until the middle of April, when she was admitted; and, as she was very anxious to have the tumour removed, Mr. Birkett amputated it on April 19th. Profuse hæmorrhage occurred; but the entire mass was removed, with the exception of the axillary tumour, which extended so deeply, that it was deemed most prudent to leave it. A small independent growth was also removed from over the fifth intercostal space.

A section of the mass removed exhibited a very solid, fibrous growth, infiltrating but a very small portion of the gland-tissues, which, together with the ducts, were pushed to one side of it. Patches of opaque, yellow tissue were seen here and there, and there were some of them, especially those near the surface, in relation with the perforations in the skin. The general mass was yellowish-white, opaque, and of very close texture. The whole weighed rather more than two pounds. The lactiferous ducts were very distinct, and some of them were filled with a mucoid secretion. The detached tubercle was of the same nature as the large mass.

It was remarkable how quickly this woman recovered after so severe an operation. From the first the wound put on a healthy aspect, the surface granulated, and the skin contracted around it. By the end of May, the wound had nearly healed, and she left the hospital. Until the beginning of June, the axillary tumour did not enlarge; but, about this time, it became red, swollen, and painful. The cicatrix is quite healthy; but towards the sterno-clavicular articulation a tumour has been developed, which slowly increases.

It will be seen that, in the above case, contrary to the rule adopted by some surgeons, only a part of the disease was attempted to be removed. The operation has had the effect of much diminishing the patient's sufferings, and the growth of the secondary tumours seems, if anything, to have been retarded by it, certainly not expedited.

SCIRRHUS OF THE BREAST CO-EXISTENT WITH A SMALL PROLIFEROUS CYST.—EXTIRPATION OF THE TUMOUR.—RECOVERY.

[Under the care of Mr. BIRKETT.]

Mrs. W—, aged 42, a sterile woman, of regular habits, accustomed to active employment, and of a calm and resigned disposition, three years and a-half since, and before marriage, observed accidentally in the clavicular segment of the left mamma, a small hard lump. Mr. Birkett first saw her in March last. There was then a solid, hard, moveable tumour occupying the clavicular half of the gland, embedded in it, and giving more roundness and fulness to it than were observable in the right breast. Both mammæ were well developed, and she had never had any disease in either before this lump. The nipple was not affected; but a thin, clear, bright yellow fluid oozed from it, in drops at a time, and a drop could generally be expressed when desired. The axillary glands were not enlarged, but tender; the supra-clavicular quite healthy. She had always enjoyed good health, from which there was no marked deviation at the time Mr. Birkett saw her. She felt sharp, darting, shooting pains, sometimes for two or three hours continuously. The patient did not know that any of her ancestors had died of cancer, nor could she assign any cause as to the origin of the lump. As the tumour had increased rapidly the last few months, Mr. Birkett proposed its removal, to which she assented, and it was done on April 19, 1853.

The surface of the tumour was slightly irregular, but not attached to the skin. A vertical incision over its centre was made, and the entire new growth, with some portion of the upper half of the gland, were excised. Very free bleeding occurred. The tumour was firmly imbedded in the gland tissue. It extended entirely through the breast, being attached to its posterior fascia.

A section of the tumour exhibited a very dense fibrous stroma, forming cells or cavities, in which the cancerous growth was developed, and from which it was easily pressed forth. The reticulum was composed of fibre tissue, resembling the ordinary fibrous element of the gland. An excessively small proliferous cyst existed, the growth within which was very distinct, and, as it was developed among the ducts near the nipple, it may be supposed that the serous fluid which oozed from that organ proceeded from this little cyst. The cancer-cells were very well marked.

The wound healed slowly, on account of its depth, and the difficulty in keeping the parts in contact, as well as the continued collection of pus.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

LEEDS GENERAL INFIRMARY.

CASE OF FIBROUS TUMOUR OF THE WOMB REMOVED BY INCISION AND ENUCLEATION.

[Under the care of Mr. T. P. TEALE, F.L.S.]

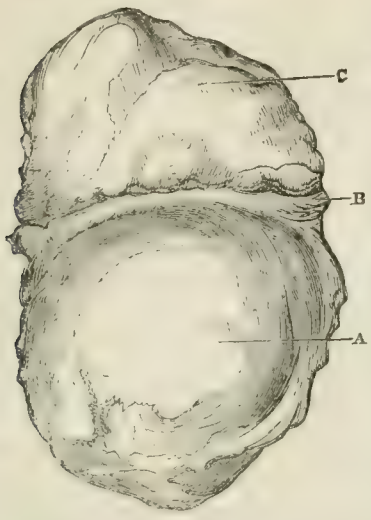
On the 15th of June, 1853, I visited, with Mr. Haymes, of Thirsk, Mrs. H., of that town, aged 56. She was extremely fat and anæmic; had borne several children, the last nine years ago; and has since been subject to profuse hæmorrhages from the womb. I found her greatly exhausted by loss of blood. The pelvis was filled with a smooth, rounded, elastic tumour, which descended as low as the perineum, resting upon this part, but not distending it. No trace of the os uteri could be felt; nor could I reach with the fingers beyond the chief convexity of the tumour, so as to determine whether it was pedunculated or was closely attached to the substance of the womb.

On the 19th of June, I again visited Mrs. H., having, in the meantime, considered what means that should be tried for the removal of the tumour.

The first step in the operation was to grasp the tumour by a pair of fenestrated forceps, as used in midwifery. By firm traction of the mass downwards, and movements of it from side to side, a great portion of it was gradually brought outside of the vulva; but, as soon as the forceps was removed, it receded within the pelvis. This was repeated two or three times, until at length I brought it so low down that Mr. Haymes could retain it by the grasp of both his hands, until I had applied around its upper part a strong whipcord, by the aid of Gooch's double canula. By this ligature, which was applied for the purpose of retention, and not for strangulation, the tumour was held downwards, and prevented from receding; and I was thus able to determine, without difficulty, the relations of the upper part of the tumour to the body of the womb. It was then found that the tumour was not pedunculated, but was imbedded at its upper part by a broad base, in the substance of the posterior wall of the womb, which was now partially inverted by the traction which had been employed. By means of long curved probe-pointed scissors, I made a transverse incision through the investing membrane of the tumour, a little above the ligature that had been applied, large enough to admit the tips of three fingers, by which I was enabled, slowly and cautiously, to enucleate the imbedded portion of the tumour from the uterine wall; so that it only remained attached by the undivided portion of the investing membrane, which was now divided by the scissors, and the entire mass was removed. The process of enucleation resembled much the turning out of a fatty tumour from its cellular bed. I now examined the vagina, and found it occupied by an elongated mass, as thick as the wrist, which was immediately recognised as the inverted womb. By compressing this mass with the fingers, and pushing it steadily upwards, the womb slowly receded, and at length suddenly resumed its natural position; after which the parts presented the ordinary characters which are observed in a person recently delivered of a child; but the womb felt of rather smaller size. The operation was completed at 8 P.M. In two hours afterwards the patient was perfectly easy, free from hæmorrhage, and her pulse 80.

On the following morning, she felt quite comfortable, having slept well, and her pulse was 80. So slight was the loss of blood, that during the night she had only soiled moderately one napkin.

The tumour weighed a pound and a-half. Its length was seven inches; circumference at the broadest part, eleven inches; and at the line of incision ten and a-quarter inches.



A. Portion of the tumour which occupied the vagina.

B. Line of incision of the investing membrane.

C. The enucleated portion of the tumour.

For the microscopical examination of its structures I am indebted to Mr. Scattergood, who states, that it consists of fibres identical with white fibrous tissue, having globules of fat interspersed; that the application of acetic acid did not exhibit any nuclei in its fibres; and that there was not any appearance of unstriped muscular tissue.

June 22.—She had proceeded very favourably, having only a slight puriform discharge.

July 3.—She sits up an hour or two. The discharge has nearly ceased.

27th.—Mr. Haymes reports, that since the operation she has not had one unfavourable symptom. She is now quite well, and has resumed her usual domestic avocations.

Remarks.—1. The practicability of enucleating some fibrous tumours of the womb, previously established, and further confirmed by this case, is a fact of great importance in the treatment of those fibrous masses which protrude from the interior of the womb, without having a peduncle or a well-defined neck. Although enucleation has been previously practised, I am not aware of the modification of the process by incision having been hitherto adopted. By the transverse incision of the investing membrane at its upper part, the trouble of enucleation is greatly diminished. I may also remark, that the process adopted in this case, as compared with the incomplete separation of the mass by ulceration consequent upon the application of a ligature, was a great saving of constitutional effort, as well as a much more complete removal of the disease.

2. In cases of large tumour of this kind, where it is impossible to determine by the fingers its mode of attachment, we may, by traction downwards, even beyond the external parts, accurately determine the nature of its connexion, and easily reach the site of operation. But, when inversion has been thus produced, it is important that the operator should, without delay, attempt the replacement of the womb; and he may do this, as in the present case, with the greatest hope of success, as the mouth of the womb, from long distension, is not disposed at the moment to contract with great force.

Medical Times & Gazette.

SATURDAY, AUGUST 20, 1853.

CHOLERA PROGRESS.

When we find that the cholera is raging at Copenhagen, and, as we announced last week, that the attacks up to the 4th inst. had amounted to 5996, and the deaths to 3219,—that the Swedish Government has declared officially, that it also prevails at Abo, Elsinore, St. Petersburgh, Cronstadt, Narrva, Riga, and other places,—and when letters from St. Petersburg are full of accounts of processions in the streets of weeping pilgrims and solemn priests, of the elevation of saints and relics and other religious ceremonies performed in the hope of checking the advance of the dread pestilence,—the questions are irresistibly suggested, What have we done since our last visitation to preserve ourselves from its operation?—Have we learned, from the experience of the past, any mode of impeding its progress?

The answer to the first question is anything but satisfactory. Our noble river, which ought to be the chief ornament of the Metropolis, still performs the ignominious duty of a common sewer. The water we drink is still nothing more than the filtered liquid portion of the filthy contents of this enormous cloaca. We have still 1100 miles of streets undrained, and but 900 drained. The glass-works and potteries have still unlimited power to pollute the air we breathe, and all other furnaces may do so for another year. Something has been done by the partial abolition of town grave-yards. Some obstructions to the current of air have been removed by straightening and widening streets; but it cannot be said, on the whole, that our sanitary condition has been so much improved since the last visitation of the cholera as to lead to any rational expectation that another epidemic would be much less extended or fatal than the last, should the disease make its appearance in Great Britain.

The second question, therefore, assumes increased importance,—Can we by any means check its progress and prevent its arrival in our island?

In 1832 and 1848, before the commencement of our two former cholera epidemics, the cholera was prevalent, as it is now, on the opposite shores of the German Ocean. In both cases the disease commenced in our north-eastern ports, and the simultaneous arrival of vessels from Hamburgh, where it was raging, if mere coincidences, were certainly remarkable ones. When the disease spreads overland it is in the great tracks of human progress. When it extends across the sea it invariably makes its first appearance in seaports, as Dr. Bryson showed in his admirable little tract on the subject, (a) and "in seaport towns which were at the time in direct communication with other distant towns or ports in which the disease existed." We never find it appearing in the centre of an island and extending to the circumference. In this country, it appeared at our north-eastern ports and in London; in America, at New York and New Orleans; in Canada, at Quebec and Montreal; in Nova Scotia, at Halifax; in Cuba, at the Havannah; in Jamaica, at Port Royal; in Malta, at Valletta, and in a part of Valletta close to some infected vessels. There is no reason why any poison existing in the atmosphere should be wafted in all parts of the world to the little spots used as harbours, rather than to any other part of the shores of any country; and the inference is very strongly supported, that, as in this and other islands, and in America, the disease has always followed the arrival of vessels from infected ports, this arrival and the commencement of the disease must bear some relation more important than mere coincidence.

We may refer also to the Pamphlet from which we have just quoted, for proof that cholera spreads on board ships by poisonous emanations from the bodies of the sick. The following conclusions upon the extension of the disease in the Apollo are quite borne out by the facts of the case:—

"Cholera made its appearance among the troops immediately after their removal from an infected locality into a healthy ship; the first case occurring the day after they went to sea; the second, a week later; and then dropping cases and cases of diarrhœa up to the 19th of July, thirty-two days after they had left the land, and about two thousand miles distant from the spot where it originated. Immediately after a free atmospheric communication had been opened up between the two decks, the disease began to attack the ship's company; those who were the most exposed being the first to suffer, although they had not had any direct communication with the original site of the disease at Cork, nor, for a period of at least six or seven weeks, with any other place besides the ship wherein it existed.

(a) "On the Infectious Origin and Propagation of Cholera." London. 1851.

"These latter cases occurring among the seamen thirty-two days after they had gone to sea, cannot, it is confidently assumed, be attributed to any local telluric cause; nor is it possible to suppose they could be the result of an epidemic cause floating in the atmosphere, and following the ship across the Atlantic; and, as it is equally improbable, considering the clean state of the hold, and the length of time the seamen had been living on board, that they originated from any cause (other than the emanations arising from the sick) within the ship, it is hardly possible to conceive that we shall ever obtain more conclusive evidence of the propagation of any disease by a specific infection arising from the human frame."

Taking all these facts into consideration—remembering that while, in 1832-3, under the measures of the Privy Council, the deaths amounted to 16,437, in 1849, under the rule of the Board of Health they amounted to 53,293,—having too good ground to fear that, under similar mismanagement in an increased population under very similar sanitary conditions, another epidemic would be still more fatal—the premonitory tokens of a visitation being as evident now as they were before either of the former epidemics, we are imperatively called upon to urge upon the consideration of Government the necessity of placing judicious restrictions upon vessels arriving in the ports of our island from infected places. These restrictions might be so arranged as to increase the comfort and safety of diseased persons and other passengers by such vessels, while any temporary inconvenience to merchants is not to be balanced against the hope of saving our country from the devastating progress of pestilence. This need not offer any false security, or any reason for neglecting other means. We should endeavour to meet the enemy if he arrive by pure air, pure water, wholesome food, clean dwellings, and sufficient clothing; but if we are ever to gain wisdom from the lessons of the past, let us also endeavour to prevent his arrival, when a simple means of doing so has been shown by incontrovertible facts to be possibly within our control.

THE SMOKE NUISANCE.

While the Board of Health have been dreaming over amateur systems of drainage, and its legal members have been inditing absurd theories on the origin and propagation of epidemic diseases, Lord Palmerston has succeeded in forcing a Bill through the House of Commons calculated to suppress a nuisance injurious in every way to the health and comfort of the inhabitants of the Metropolis. We allude to the Smoke Nuisance Abatement Bill,—an Act, admirable in purpose, and if partial and inadequate, or neutralized by unnecessary restrictions and delay, the fault is not that of Lord Palmerston, but of those who exerted their influence to oppose the general good for individual benefit.

The progress of this Bill through the House of Commons afforded a melancholy example of the manner in which the influence of the selfish few may be used to the injury of the suffering many. No one doubted the enormity of the evil. We are never free from the thick canopy of sooty smoke which hangs like a pall above us, moving backwards and forwards with the wind, but never wholly dissipated. The resident at Hampstead looks down, not on the buildings of a great city, but upon a dull, cloudy, leaden mass, through which a dome or steeple sometimes protrudes on a clear day. The traveller arriving in London by any of our railways is brought into an atmosphere sensibly different from that he has left but a few miles distant. His skin, his linen, his eyes, and his lungs, are alike fouled by the all-pervading nuisance. He sees trees, not green, but of a neutral tint,—leaves withered, and plants dying. Instead of the ruddy faces of the oxygenated rustics he has left in the country, he beholds the pale, sallow visages of the smoke-breathing Londoner. Let him arrive by the South-Western Railway, and between Vauxhall and Waterloo he will not only be smoked black by the united chimneys of potteries, glass-houses, pipe-drain factories, gas-works, and other delightful establishments, but his nose will be assailed by disgusting stenches from chemical works where bones are boiled to make gelatine, intestines are dried to make catgut, and other equally offensive abominations are openly carried on in broad daylight, while the breeze from the river adds the perfume from the contents of the sewers which open flow it. Yet, no sooner is an attempt made to diminish any part of this evil, than a number of gentlemen who live out of town, and are perfectly indifferent to the health and comfort of those who cannot afford to do the same, use their utmost efforts to prevent the success of the attempt.

Mr. Pellatt heads the van of these virtuous citizens, and moves an Amendment to exempt bottle and glass-works from the operation of the Act, on the plea, that it would ruin these manufactures in the Metropolis,—the more probable reason being, that, as he is a great bottle and glass-manufacturer, the Act would have obliged him to build furnaces on an improved construction. His effort was so far successful, that Lord Palmerston was obliged to provide, that nothing in the Act should "extend or apply to any glass-works or pottery-works established and existing within the Metropolis before the passing of this Act." This stopped Mr. Pellatt's opposition; but why glass houses in London should be exempted, when they are not in Newcastle, where more glass is made than in any other part of the kingdom, would be beyond comprehension were not Mr. Pellatt a Member of Parliament.

Then, Mr. Spooner said, it would be impossible for *distillers* to carry on their business. Mr. Bass said *brewers* could not possibly consume their smoke. Mr. Fox put in a plea for the *steamboats*, and Mr. Blackett urged that the coal trade in the north of England would be deranged by the increased consumption of Welch coal. It was all to no purpose for Lord Palmerston to state, that it was "clearly proved that smoke was unnecessary, and that its consumption would be economical and advantageous to the owners of furnaces;" or for Mr. Mackinnon, who had been twice Chairman of Committees to inquire into the possibility of affording relief from the smoke nuisance, to declare, that he was "perfectly satisfied that it was not only feasible, but easy to remedy the evil, and that the opposition proceeded from the disinclination of manufacturers to incur the expense of altering their furnaces." The "vested interests" clamoured as loudly as ever that, as the evil was one of long standing and we had borne it so long, we might bear it till next Session. Fortunately, this absurd argument has not been allowed to do more than to delay or diminish the utility of the Act; nor have the pecuniary interests and affected ignorance of some few persons connected with the furnaces of the Metropolis, been allowed to make some two or three millions of their fellow-citizens inhale the smoke needlessly created in the manufactories. As the Bill now stands, from the 1st of August, 1854, furnaces in the Metropolis are to consume their own smoke, and steam-vessels between London and Richmond bridges are to burn Welch coal. It is much to be regretted that they should be allowed to use any other coal nearer London than Gravesend, as it is not so much from the small iron steamers as from the large ones, that the dense cloud of smoke arises which poisons us all when the wind is easterly.

The only reasonable observation made by any of the opponents of the measure was by Lord Dudley Stuart, who said, "it was not the factories which produced the great cloud of smoke, but the innumerable chimneys of private dwellings in the Metropolis." However, if they do not produce *the* great cloud, they certainly produce *a* great cloud, as any one may convince himself by standing on Waterloo-bridge and looking towards Lambeth, and we may congratulate ourselves that this time next year this part of the cloud will be removed. Let us hope, also, that by an improved construction of fire-places in private houses, the present wasteful consumption of fuel and unnecessary production of smoke may be diminished, as competent engineers have proved that it might be by at least the half. We do not despair of seeing London freed even from this remaining half, its inhabitants breathing as pure and clear an air as those of Paris, Berlin, or Vienna; and its buildings, cleansed from their present funereal coating, standing forth in all the unsullied beauty of their architecture. In this case a new feature would be added to the architecture, and we should then see a number of beautiful structures, not unlike miniature representations of the gigantic aqueducts of the ancient Romans, replacing our present unsightly chimneys, and carrying all the smoke through closed conduits to central furnaces, where it would be in a great measure consumed, and its remaining portions discharged at a height too great to be injurious or unsightly. A small smoke-rate, giving us pure air, would surely be as cheerfully borne as a sewer-rate, which only purifies our houses by polluting our river.

THE VACCINATION EXTENSION BILL.—

DEPUTATION OF THE PROVINCIAL ASSOCIATION.

We observed in the *Association Medical Journal*, last week, a reply to some remarks we made upon the recent Deputation to Lord Palmerston from the Metropolitan Counties Branch of the Provincial Association on the Vaccination Bill. It appears, from a statement made by the gentlemen who composed the Deputation, and published by our contemporary, that it was not, as we had stated, upon the question of *professional remuneration* that the Deputation petitioned for delay, but upon other details of the measure. We regret very much that we mistook, not the object, but the language of the Deputation. The object was delay; and it was the delay of a useful measure upon which we commented. Had the question of remuneration, or any other of the details of the measure, been pointed out to the Home Secretary as objectionable, and requiring revision, we could only have thanked the Deputation for the trouble they had taken; but, when any such details, even though unjust to the Profession as we had proved them to be, are employed as reasons for delaying the passing of an Act imperatively demanded for the welfare of the public, we must do our duty, and express our opinion of the wisdom of any representatives of a small number of gentlemen endeavouring to influence the conduct of Government, and temporarily injuring the public, even for what they conceive may be a more permanent benefit. Mr. Brady adopts a better course, and uses his influence in Parliament to alter the Clauses of the Act which are unjust to his professional brethren. In his letter, a recapitulation will be found of the principal objections which we raised so recently to the details of the measure, that it is unnecessary to recur to them at present. His concluding remarks are worthy of our best attention. What a shout would be raised among the legal Members of the House of Commons, if a Bill were proposed to pay a lawyer for a consultation, attendance, and two certificates, by a fee of one shilling and sixpence! Whether Mr. Wilkinson may be a lawyer or not we cannot say, never having heard of him before. His speech, reported in our Parliamentary Intelligence to-day, appears to call for some comment from us; but a person who would make such a disgraceful attack upon a learned Profession is sufficiently punished by the simple report of his speech.

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Friday, Aug. 12, the House went into Committee on the Vaccination Extension Bill. An account of the discussion on this Bill will be found in Mr. Brady's letter, in another part of our Journal, but he does not allude to the remarks of

Mr. W. A. Wilkinson, who said that he was the grandson, nephew, and uncle of Medical men; but he must consider that this fighting about their fees *reduced them to the level of cabmen!* (Laughter.)

The remaining Clauses were agreed to, and the Bill was reported.

On Saturday, Petitions were presented by Mr. Brotherton, praying for reform in the Medical Profession, from members of the Medical Profession in Bangor, Mold, Welchpool, and the North Wales branch of the Provincial Medical and Surgical Association.

On Monday, a Petition was presented by Dr. Michell from the Medical students of St. George's Hospital, praying that the Medical service of the Royal Navy may be placed in the same position as that of the Army.

REVIEWS.

A Treatise on General Pathology. By Dr. J. Henle, Professor of Anatomy and Physiology in Heidelberg. Translated from the German, by Henry C. Preston, A.M., M.D. 8vo, pp. 391. Philadelphia: Lindsay and Blakiston. 1853.

It cannot be considered strange that the public are a ready prey to every plausible medical charlatan, when even the method of investigating the phenomena and their relation, which, together, constitute the science of medicine, is yet matter of serious difference of opinion among the most able and highly educated physicians.

Two systems of medicine prevail among us. This man administers mercury in a given case, because he has seen it do good when, on a former occasion, the same symptoms were present; that man strives to determine the nature of the disease under which his patient labours, and then administers the therapeutic agents which he holds to be able to remedy the primary deviation from health. The latter must comprehend the *modus operandi* of the remedies he employs; the former is guided only by the knowledge that certain symptoms disappear after the administration of certain drugs.

"The diagnosis," writes Henle, "of the empiric, like the diagnosis in the descriptive natural sciences, proves nothing more than that the individual case belongs, according to its external phenomena, to this or that series of known cases; the diagnosis of the theorist, is the condensed and independent history of the individual case. To the empirical physician, a definite group of symptoms, perceptible by the senses, indicates directly a definite, specific mode of cure; to the theoretical physician, a supposed internal derangement indicates immediately only the internal change to be obtained, and only indirectly the method by which it is supposed that the required change is to be effected."

Louis' works on phthisis, typhoid fever, and bloodletting in pneumonia, are the most perfect specimens we possess of the empirical researches of the 19th century; and Louis himself is, *par excellence, the* empirical physician of our age.

Henle's Manual of Rational Pathology is the earnest of what the rationalist is to accomplish.

The works of the one class are for all time; those of the other in their day are too often received as the expression of the highest science, although, when our science itself has advanced yet a few steps forward, they excite the smile even of the tyro.

In this country, the writings of a large proportion of our physicians are tinctured more or less deeply with rationalism; though pure empiricism has here found able advocates, and we may add, the pupils of the school of Louis—the Bacon of medicine—are rapidly increasing among us.

Although unable to assign to the "Handbuch der Rationellen Pathologie" the high place, as a scientific work, to which some maintain it has a claim, because we believe the method of investigation it advocates is faulty, we admit that it is far in advance, in point of the ability displayed by its author as an ingenious reasoner, of the majority of the works on General Pathology; and for this reason, as well as because the opinions it advocates are pretty widely spread in Germany, we should be glad to see it in an English dress.

The book before us is called, by its author, a translation of the first part of Henle's great work. As the second edition of this part appeared seven years since, and at that time was pretty fully analysed in the English Journals,(a) we shall merely say a few words as to the way in which Dr. Preston has performed the task he has undertaken. The great merit which Dr. Preston claims for his production is, that it is a literal transcript of Henle.

"It has been my study and aim," he writes in his Preface, "to give the author's ideas as literally as possible, and in some instances, perhaps, I have erred in this respect; but a slight want of perspicuity, or even an apparent solecism, I have deemed a more venial fault than a contortion of the sense, or the concealment of the ideas of the author, by a graceful English drapery." P. xi.

And again:—

"I think it will be considered as one merit, at least, in this translation, that there is not a sentence in the original which is omitted in the English version." P. xi.

We give these extracts, because we think that every book should be judged, to some extent at least, by the standard the author proposed to himself. We may, or we may not, think a literal translation of a German work better than a translation of the ideas of its author into elegant English; but, if he who renders a work into English affirms that he has accomplished his task according to either the one or the other method, we have a right to expect the translation, on comparison with the original, to verify his statement. Dr. Preston lays no claim to the merit of having produced an elegant translation of the original, and he most assuredly has no such claims to urge; but is it a literal translation that he has published? No; for we might almost say, that not a single sentence of the original has been translated literally by Dr. Preston; certainly we believe, that no single passage is correctly rendered.

Dr. Preston, it appears, from the Preface, desirous of instructing himself in German, occupied his evening hours in "the translation of this work." So far Dr. Preston may have been and probably was well employed; but he did not rest there, for having completed his to him laborious task, he was, he says, persuaded by his friends (?) to let the world profit by his labours, and so he published his exercise books. And, judging from the number of German words to which Dr. Preston assigns meanings of which they are perfectly innocent, and the utter ignorance of voices, moods, and tenses, he displays, we can assure him, that if he had been a boy at a good English school, he would, long ere he reached the end of his task, have been well flogged for the very careless manner in which he was performing it.

We subjoin a short extract from page 362 of the translation. This extract is not selected on account of its errors, but merely as a specimen. The mistakes are italicised, and the words bearing the literal signification of the original are enclosed within brackets:—

"If, now, an adherent of orthodox medicine, in order to *oppose* (refute) the bold *deniers* (denier) of the doctrine of crises *refers to the recoveries and their fetid* skin, (points to the convalescent and his gently perspiring skin,) or sedimentous urine, he makes use of a species of argumentation very similar to that by which *for ages*, (formerly) the *conjurors have maintained* (exorcists maintained) a belief in their art. That a devil *has* (had) been expelled, *would be* (was) proved by the evil odour left behind by him. The fetor was a matter of fact, that it could have been *prepared* (diffused) in no other way than by the devil that—*is* (was) a matter of course."

(a) See *British and Foreign Review*, 1847.

The Decline of Life in Health and Disease; Being an Attempt to Investigate the Causes of Longevity, and the Best Means of Attaining a Healthful Old Age. By Barnard Van Oven, M.D. London. 1853. 8vo. Pp. 300.

Dr. Van Oven is enthusiastic on his subject. He says:—"There is, probably, no fixed limit to our existence; and, even if there were, how few attain it! How few really die of old age! Parr's death at 152 was premature!" Enthusiastic men, however, generally produce books which are worth reading; and this work is no exception to the rule. The curious tables of persons who have attained great ages will prove generally interesting, as the author has collected notices of 1519 persons who have attained ages from 100 to 110 years; of 331 from 110 to 120 years; of 99 from 120 to 130; of 37 from 130 to 140; of 11 from 140 to 150; and of 17 persons who have exceeded 150 years of age. It appears from our Registrar-General's returns, that, of a million and a-quarter deaths in this country, 708 were upwards of 100 years of age. The tables and the instances of longevity collected from Russia and Sweden, certainly encourage the hope, not only that, under an enlightened sanitary system, the average duration of human life may be very considerably increased, but that all the physical and moral powers of man may be enjoyed to a much greater age than the "three-score and ten" traditionally allotted to him.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

LITHOLIBY.

Dr. Denamiel has read before the *Academie des Sciences* of Paris a memoir upon "Litholiby" (λίθος, stone; θλίβω, to crush); by which term he designates an operation consisting in the crushing of the stone, as it lies in the trigon vesicæ, behind the prostate, between an instrument introduced by the urethra into the bladder, and the fore and middle fingers of the left hand, introduced per anum. He affirms that some calculi are so friable as to break under the least pressure; that the trigon vesicæ, where free calculi generally lie, is accessible to the finger introduced into the rectum; and that a sound passed into the bladder may serve as the *point d'appui*. He also states that the action of alkaline fluids upon the mucus, which forms the common cement of the elements of calculi, leads to the disintegration of the mass, whatever may be the chemical composition of the layers which compose it.

The distance from the integument to the neck of the bladder is commonly 2¼ inches; it varies between 1 inch and 4 inches. The prostate gland and the trigon vesicæ are separated from the rectum by only a very thin layer of areolar tissue, in which fat is never deposited; consequently, any hard body may be easily felt and compressed.

The patient, having the bladder moderately distended, is put into the horizontal position, upon a properly constructed bed; the thighs separated and raised; the feet resting upon chairs. The left fore and middle fingers of the operator are then introduced into the rectum, and the stone is felt. A curved sound, grooved upon its convexity, as far as its vesical extremity, that it may the more readily hold the stone, is next passed into the bladder. Then pressure is made, until the calculus gives way. In many cases, a very slight amount will suffice. Should any difficulty arise, the pressure may be directed alternately towards the right or the left, that every part of the surface of the stone may be acted upon. In cases where the calculi are hard, several sittings are required; and the use of alkaline fluids becomes needed, to favour their disintegration. A quantity of warm water should be injected into the bladder after each operation, that the smaller fragments may be immediately washed away.

EXTERNAL APPLICATION OF ATROPIN IN NEURALGIA.

By LUIGI CROSIO.

In four cases of severe neuralgia,—trigeminal, supra-orbital, brachial, and ischiatic,—in which other remedies had failed, the external application of atropin effected a speedy cure. One gramme of atropin, dissolved in spirit and mixed with a drachm of fat, was rubbed into a surface of integument excoriated by a blister. There were sym-

ptoms of intoxication in one case only. Upon the second day, in each case the pupils were dilated, the skin hot and dry, the head oppressed. All objects appeared small and confused, and the patients feared to become blind. As these sensations subsided, the neuralgic pains disappeared. Care was taken that the brain became not too much affected.—*Gazz. Lomb.*, 1852.

ANEURISM OF THE GLUTEAL ARTERY.—LIGATURE OF THE COMMON ILIAC.

By Professor C. W. F. UHDE.

A smith, aged 26, for five years subject to rheumatism, complained of severe pain in the left thigh of fourteen days' duration. The author found a tense, painless, elastic, and pulsating swelling in the buttock above the trochanter. Having, upon examination, arrived at the conclusion that it was an aneurism, Professor Uhde proceeded to tie the common iliac artery (October 7) in the usual manner. The patient died October 11, four days afterwards.

Examination of the Body.—Wound healthy; the peritoneum in the neighbourhood covered with a thin layer of lymph. The areolar tissue around the iliac vessels infiltrated with pus. The gluteal artery within the pelvis exhibited a marked dilatation. The gluteus medius muscle appeared like a dark-coloured bladder full of blood, and it formed the outer wall of the sac, which contained four ounces of coagulum.

The author relates ten cases of gluteal aneurism; eight in men, two in women, the patients' ages varying from 17 to 60. The causes assigned were—a stab, disease following drunkenness, rheumatism, severe labour, straining, injury to the hip. In three cases no cause was given. In five cases an operation was successful; five patients died. The gluteal artery itself was tied three times, the internal iliac six times, and the common iliac once. The common iliac artery has been tied, according to the author, about eighteen times, for various accidents and diseases. In six cases the patients recovered; in the others, death ensued in periods varying from two hours to eight months.—*Deutsche Klin.*, 1853.

NASAL INJECTIONS CONSIDERED AS A MEANS OF NOURISHING NEW BORN INFANTS.

By M. HENRIETTE, Physician at the Hospital for Foundlings at Bengal.

The author adverts to the want of success which, in his hospital, has attended every effort hitherto made to nourish foundlings, who, upon their reception, refused to take the breast. Accident induced him to inject food by the nose. An infant was attacked by ozena. It suckled with the greatest difficulty, being obliged to let go the nipple every moment in order that it might breathe. Milk was injected through the nares, and, to the surprise of the author, it passed upon each occasion into the stomach. In May, 1851, an infant was brought to the hospice in a state of extreme weakness; it was scarce seven months old, and its appearance indicated precocious birth. It took no food; whatever was put into the mouth was spit out as it was given. Under these circumstances its life was despaired of; for it is a known fact, that, in hospitals for young infants, death is the rule for those who will not take the breast. Dr. Henriette commenced injecting daily through the nose milk taken from the mammary gland of the nurse destined for the child. The operation was repeated frequently, and, in the course of a few weeks, the patient became well-nourished and thriving. At the date of February 1, 1852, eleven infants, who had refused to suckle, had been thus supplied with food. Of these, seven were rescued from death; and, in the remaining four, who ultimately died, life was prolonged from periods varying between five and twenty-four days. The author remarks, that this proceeding is adapted to infants prematurely born, whose weakness depends upon imperfect organisation, and not to those suffering from internal disease; and he relates the differences of appearance between the two. In speaking of the advantages of these nasal injections, he remarks, that they require no effort of the will; and he alludes to their applicability to those infants who, brought to the hospital weak and apparently dying, lie in their cradles, occasionally uttering slight cries, but generally silent, refusing upon any inducement to take notice of their nurse. Of such, it appears, a great number are annually received. *Post-mortem* examination has failed to detect in them any important lesion.

The infant being placed upon the lap of the nurse, the surgeon introduces the tube of a syringe, previously warmed, supported by the thumb of the left hand, about a line into the nasal aperture. If introduced further, it excites a fit of sneezing, and might wound the mucous membrane in the event, which occasionally though rarely happens, of the child being unruly. The liquid must be propelled very slowly; it passes into the posterior part of the pharynx, and runs drop by drop down the œsophagus into the stomach. The presence of food in the alimentary canal effects those changes in the condition of the child which, in many cases, induce it in the course of a few days to take to the breast in the natural manner.—*Revue Med. Chir. de Paris.* 1853.

M. Henriette has since published an appendix to the foregoing, in which he recommends the administration of medicines in infants, and occasionally in adults, by the same passages.

NOTE UPON THE GOOD EFFECTS OF MILK IN CASES OF POISONING BY NUX VOMICA.

By M. Dr. GORRE.

A domestic, while drunk, swallowed fifteen pills of extract of nux vomica. Half an hour afterwards M. Gorré found him suffering frightful tortures, the face expressing suffering, and the eyes wild; he was unable to utter any articulate sound, but the rigidity of the jaw and of the limbs indicated the nature of the poison. M. Gorré introduced, with difficulty, a finger between the teeth, and excited vomiting, by which some fragments of pills were thrown up. Then finding a quantity of milk at hand, he made him drink large quantities at short intervals. The stomach distended beyond measure, relieved itself from time to time by regurgitation of the enormous quantities of liquid which it was made to receive; and, M. Gorré finding the serious symptoms disappear, insisted upon a continuance of the same treatment under which the patient recovered.

UPON A PECULIAR FORM OF ULCERATION OF THE GUMS.

By M. BAUCHET.

Persons are seen both in hospitals and in private practice who suffer for weeks and even for months in certain points of the gums. If the buccal cavity be explored, it will be remarked, that at the level of the neck of one or more teeth there is a spot of ulceration which produces separation of the gum. It is a sort of diphtherite, terminating in ulceration; the ulcer heals readily under the application of astringents or mild caustics.—*L'Union Médicale.*

GENERAL CORRESPONDENCE.

REMUNERATION OF MEDICAL MEN UNDER THE VACCINATION EXTENSION BILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—The contemptible system of not paying, or of merely nominally paying, Medical men for the performance of Professional duties, which are deemed of sufficient importance to the public to demand legislative enactments, with all the coercion of pains and penalties, was again exemplified on Friday night, the 12th inst., when "The House" went into Committee on the Vaccination Extension Bill. A brief *résumé* of this Act will, I doubt not, prove acceptable to the Profession at large, and will afford me the means of explaining my objections to several Clauses in the Bill, and which were very inadequately reported in the daily journals.

The Bill itself comprises thirteeen Clauses. The first places the Act under the direction of the Poor-law Board; in my opinion a very objectionable proceeding, and one very calculated, by giving the compulsory vaccination, afterwards provided for, an appearance of parish relief, (a thing, I need not say, most repugnant to the feelings of the people,) to interfere seriously with the working of the Act.

As an Amendment to this Clause, I moved, that the Act be under the superintendence of the Registrar-General of Births and Deaths; that the Medical officer should be appointed, rather than "contracted with," as the engagement to vaccinate is cautiously named!

Clause 2 provides, that children "shall be vaccinated, within four months after birth, by the Medical officer appointed by the parish authorities, "unless he shall have been previously vaccinated by some duly-qualified Medical Practitioner, and the

vaccination duly certified;" no provision for the payment of such certificate.

Clause 3 provides, that the child be inspected, on the eighth day after vaccination, by the Practitioner by whom the operation was performed.

Clause 4 enacts, "Upon, and immediately after, the successful vaccination of any child, the Medical officer or Practitioner, who shall have performed the operation, shall deliver to the father or mother, &c., of the said child, a certificate, under his hand, according to form, (Schedule A,) that the said child has been successfully vaccinated, and shall also transmit a duplicate of the same to the Registrar of Births and Deaths of the sub-district."

No remuneration is provided for the Practitioner's time and trouble in giving and sending these certificates.

Clause 5. "If any Medical officer or Practitioner shall be of opinion, that any child is not in a fit and proper state to be successfully vaccinated, he shall thereupon and immediately deliver, without fee or reward, to the parents, &c., a certificate, according to form, (Schedule B,) which shall remain in force two months," when, if necessary, it must be renewed for a second period of two months; and so on every two months a new certificate must be given, "without fee or reward," until the child be vaccinated ! ! !

The 6th Clause provides, that the sums contracted to be paid, for every person successfully vaccinated at the residence of the Medical officer, or within two miles therefrom, "shall be a sum not less than one shilling and sixpence; and for every person successfully vaccinated, at any distance beyond two miles from such residence, any sum not less than two shillings and sixpence.

To which I moved the substitution of the sums two shillings and sixpence and three shillings and sixpence respectively, which was negatived.

Clause 7 provides, "In the event of any Medical Practitioner being of opinion, that any child that he has vaccinated is unsusceptible of the vaccine disease, he shall deliver to the parents, &c., a certificate (form D). Again no remuneration provided.

The remaining Clauses refer to the Registrar, and to the inflicting a penalty of twenty shillings upon parents," &c., who shall neglect having the vaccination performed.

Whether or not, the Act, as a compulsory measure, be in accordance with the spirit of the British Constitution, I will not discuss; but the very able and excellent "Report on the state of small-pox and vaccination in England and Wales, and other countries, of the Vaccination Committee of the Epidemiological Society" clearly shows, that in those countries, such as Sweden and Denmark, where vaccination is compulsory, the per-centage of deaths from small-pox is much higher than in those countries, such as France and Belgium, where honorary distinctions and rewards are held out to Medical men as inducements to exertion in furthering the object of vaccination; and this important fact I strenuously brought before the House, and endeavoured to point out the inference, that it would be found impossible to fully carry out the provisions of this Act, however desirable general vaccination might be considered, unless the operatives were treated with some degree of courtesy, and were somewhat better remunerated than a cab-driver.

The redress, however, of all the grievances rests with the Profession itself. Until Medical men combine together to bring their really very powerful influence into action at the Hustings, and there obtain from candidates a pledge, that some amount of their attention shall be paid to questions bearing on their especial interests, it will be hopeless to look for a House to support the efforts of any one or two Members who may be anxious to uphold the dignity and claims of Medical men. I am, &c.

1, Warwick-terrace, Warwick-square. JNO. BRADY.

VACCINATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—No one can read your able article, of July 30, on the Vaccination Extension Bill, without a feeling of shame, as well as sorrow, that England, who can boast the honour of having given birth to this most brilliant discovery on the page of history, should now, through the apathy and indifference of her rulers, be actually behind other countries in availing herself of its inestimable blessings, Truly, it is a disgraceful fact, that "the proportion of deaths from small-pox in London is three times, and in Glasgow six times, what it is in Brussels, Berlin, or Copenhagen;" and you did well to commence the editorial article of the *Medical Times* with the observation just quoted, and place so melancholy a result in the most prominent position.

It is, therefore, high time that the Authorities of this country should bestir themselves, and adopt active and efficient measures to correct this great defect in our sanitary department. The very principle upon which this new Bill is framed, seems to me objectionable, because in its working it will be both inefficient and obnoxious. A measure compulsory by fine, in a matter of so domestic a character, is apt to be looked upon as a despotic inquisition; and though such enactments are occasionally unavoidable, as in the registration of births, deaths, and marriages, and also in taking the Census of the population, still, where it is possible, it should be avoided. Among the lower classes, it will be frequently evaded, and consequently the working of the law will be imperfect. Moreover, the arrangements, according to the proposed Act, viz., that the Registrar should send the parents or guardians of the child a notice that they are to have it vaccinated, and that he should, in due time, ascertain and enforce the same, appears to me most clumsy and inconvenient, and scarcely possible to be carried out effectually, even supposing that in future all Registrars should be also properly qualified vaccinators.

The law in Prussia, for insuring general vaccination, is upon a different principle. It is admirably efficient without being obnoxious, and its perfect success has been well proved by the test of time.

The country is divided into districts, to which properly qualified vaccinators, are appointed, all of whom are subordinate to the head Vaccine Establishment at Berlin. A large registration book is kept, giving the number of the registry, age and name of the child, names of its parents and their address, the date of the vaccination and number of punctures; and the following week the registration is filled up (if the arm has taken) by the number of vesicles, and any other remark that may be necessary. The parent or guardian then receives a printed certificate, or "*Schein*," that the individual therein named has been duly vaccinated; the number of the registry, name of the district, and date of the vaccination, are given; and it is signed by the vaccinator. It is, in fact, a regular Government document, on stout paper, and headed with the Royal arms, etc.

Now, this certificate is the "*primum mobile*" of the Prussian system of vaccination; it is made a necessary document on all important occasions. No schoolmaster or schoolmistress can receive a child into his or her school without producing this certificate; a young person cannot be confirmed, cannot be apprenticed, or go into service; a young man cannot enter the University, etc., etc., without this necessary document; and the parties who neglect to enforce it are liable to a penalty.

By an enactment like this, not only is every facility given to have a child vaccinated free of expense, but it becomes a necessary step towards possessing that certificate, the possession and production of which is made so requisite upon every important occasion. It is not only the interest of the parents and guardians, and also of the child himself, when old enough, to possess this necessary, and therefore valuable, document; but it becomes also the interest of all who come, directly or indirectly, into contact with him at the different periods of his life.

It is well known what care and attention have been devoted by the Prussian Government to insure the most perfect state of vaccination in the Army. Not contented with the ordinary law, that every man, on becoming a soldier, should produce his vaccination certificate, and having reason to suspect that a considerable number of soldiers were still liable to small-pox, whether from carelessly-given certificates, imperfect vaccination, or from the system, after perfect vaccination, having again become susceptible, a general re-vaccination of the Prussian Army was ordered in 1833; and, in 1834, the results of this wise measure, as quoted in the *British and Foreign Medical Review* of July, 1836, from *Rust's Magazin*, were as follow:—

44,454 men were vaccinated.
33,634 had distinct marks of previous vaccination.
7,134 had indistinct marks.
3,686 had no marks.

44,454

For the further details, I must refer your readers to the Review itself; but in order to give some idea of the energy with which the Prussian Government continued to prosecute this important measure, I will merely state the number of vaccinations for three successive years.

In 1833, 48,478 individuals were re-vaccinated.
„ 1834, 44,454 „ „
„ 1835, 39,192 „ „
„ 1836, 42,124 „ „

Similar measures were also taken at about the same time by the Governments of Denmark, Austria, and Wirtemburg,—and why

should not this all-important subject excite a similar amount of interest and energy in our own country?

The machinery for carrying into effect the laws which are enacted in Prussia, for insuring general vaccination, is of the simplest and most inexpensive character. What prevents these or similar laws being placed upon our own Statute Book? Why should not we have that *primum mobile* of Prussian vaccination, the certificate? And why should it not be penal in England for a schoolmaster or schoolmistress to receive a child without it? Why should not every individual, who employs others, be made thus far responsible for their safety against small-pox? The manufacturer, the shopkeeper, the farmer, the artisan, the merchant, etc. etc.? Let the vaccine certificate be required of all seeking confirmation; let its production be necessary for a young man entering the university, the army, or the navy.

And when cases of small-pox occur, let them be made as much the subjects of rigid inquest as sudden death or fire is. They would properly belong to the duties of a coroner, or officers might be appointed, whose sole duty was to investigate the particulars of every case. And I have no doubt, that, in the course of a year or two, we should have the pleasure of seeing you quote far different statistics of mortality from small-pox, to those which I have alluded to at the beginning of this letter.

EDWARD RIGBY, M.D.

SALIVATION, WITH FETOR OF THE BREATH, PRODUCED BY THE TINCTURE OF THE SESQUICHLORIDE OF IRON.

To the Editor of the Medical Times and Gazette.

SIR,—The following case seems to me to be of sufficient importance to be widely circulated, as it tends to correct a false impression.

Not long ago my opinion was asked respecting a case of salivation occurring in a lady in the fourth month of pregnancy. She had taken no mercury, but had been taking seidlitz powders procured from a chemist's. There was no doubt whatever that these did not contain any mercurial compound. Her medical attendant, however, refused to believe that the salivation was anything but mercurial, because the breath was fetid. I looked into the authorities on this subject, and found that it was broadly laid down, that fetor of the breath was the diagnostic mark between mercurial and other salivation. As the number of cases which had hitherto been reported were very small, it seemed to me to be somewhat presumptuous to lay down such a dogma, especially when we know that foul breath may be produced by other causes than the taking of drugs. For the future, this sign will not have more than a corroborative value; it can never again be looked upon as pathognomonic or diagnostic. John Kenny, aged 64, was admitted into the Northern Hospital, Liverpool, April 1, 1853. He was suffering from an attack of gout. He was treated with colchicum at first, which was subsequently combined with tonics. The gout left him about the first week in May, but, as he was still weak, he was ordered to take twenty-five minims of the tincture of the sesquichloride of iron three times a-day, with an ounce and a half of water. He had not had a particle of mercury while in the house, and he had not taken any medicine for two years before his admission, and then for a first attack of gout. On the 15th of May, he began to complain of soreness and stiffness about the parotid and submaxillary glands, which were somewhat swollen. As he had not been taking anything usually supposed to produce salivation, this was attributed to the effects of catarrh. On the 17th, the mouth was very sore, tender, and ulcerated, the tongue swollen, and the gums spongy; the breath was extremely fetid and offensive. A second inquiry was now made as to the possibility of his having had mercury by mistake. The nurse, House-surgeon, and dispenser were examined, as well as the patient, without there being any evidence whatever of mercury having been taken. A suspicion was now raised against the tincture of iron; it was at once discontinued, and a wash containing gallic acid was ordered for the mouth. For the first three days, the sputa resulting from this wash were black as ink. The fetor of the breath during that time was excessive. The colour of the sputa gradually diminished, and, *pari passu*, the salivation improved. The ulcers of the mouth healed about the 27th, under the use of a solution of nitrate of silver.

At the height of the salivation, *i. e.*, the 21st, he experienced a return of gout in the foot.

Whatever doubt there might have been about the case previously to the gallic acid wash being used, there could be no reasonable difficulty afterwards; the blackness of the sputa when the mouth was cleansed, sufficiently indicated the actual presence of iron in the salivary glands.

T. INMAN, M.D.,
Liverpool. Physician to the Northern Hospital.

THE LIBERTY OF THE SUBJECT AND THE LUNACY LAWS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As there exist many groundless fears, and much ignorance in the public mind, as to the effects of the Lunacy Laws on the Libertly of the Subject, and moreover, as certain vague suspicions are entertained, even by some medical men, that these laws are not altogether reconcileable with our notions of freedom, the present opportunity, while the Bills of Lord St. Leonards are before the Houses of Parliament, would be the most seasonable for discussing the question. It is the more desirable also to bring this question to some satisfactory and conclusive settlement, inasmuch as there have lately appeared in the *Lancet*, several editorial articles, calculated to encourage these foolish apprehensions, and which it only requires a better acquaintance with the subject to disperse.

When it is considered how many delicate points of social interest the subject involves, and with how many pre-existing laws it must necessarily come in contact, we cannot but expect that difficulties and complications of all kinds will embarrass the Legislature. Unfortunately, this cannot be otherwise. The class of persons for whom we are called upon to legislate, is so peculiarly constituted, so different in their thoughts and habits to all other men; often with perverse wills, deranged reasoning powers, and frequently with dangerous moral propensities, that to expect to regulate them under any Act of Parliament, without violating to some extent such as are adapted to meet the wants of a rational state of society, would be extravagant and vain indeed. Looking, then, at the great and paramount necessity which the Law of Lunacy is required to meet, in a case where a large fraction of our fellow-creatures is excluded, by extraordinary circumstances, from the ordinary privileges of citizenship, and this effected, be it remembered, by an unavoidable and yet natural cause, I cannot see how any Act can be otherwise than "deeply affecting the liberty of the subject;" or "a system which renders nugatory the *Habeas Corpus* Act;" or than "opposed to the rights of the community," and constituting "a disgraceful (necessary?) anomaly which deforms our Statute Book;" all which terms are applied, by the Editor of the *Lancet*, to the Lunacy Bills of Lord St Leonards. It is the disease—an inevitable destiny—which occasions all these anomalies, not the Act of Parliament which regulates them.

The principal opposition he makes to the passing of the Bills is, I perceive, based on this objection—that the same instrument which is used in restraining the liberty of an insane person, may, in the hands of designing people, be so perverted as to endanger the rights of the community. This is a supposition sufficiently grave to demand the most searching inquiry.

It will assist us in coming to some fair conclusions, to bear in mind that it is only upon general principles that any law, to be practically, as well as professedly efficient, can possibly be established; and that there must always be (such is the short-sightedness of man) some exceptional cases, which no particular law can meet nor prevent. Now, although it is the duty of a wise Legislature, to surround the more assailable avenues of every enactment with as many barriers as the circumstances of each law will allow, as well as the privilege of Englishmen, to guard their existing rights from infraction; yet, let us remember, that when any special law is made for a special purpose, its primary design may be so embarrassed by clauses, for the exclusive benefit of a secondary and extraneous set of claimants, as to be rendered almost void.

It would appear, then, that that system of jurisprudence is the most philosophical and just, which is so organised as to make of the various clauses of an Act one uniform whole, in which the spirit and letter of the law so harmonise, as to insure to the parties, whose interests it is chiefly intended to subserve, unalloyed, and impartial justice; and that it is possible, by over-caution in protecting a law against any particular evasion, to frustrate the primary object of its enactment.

The general principle, then, of a practical and humane lunacy law, is clearly this, viz., such unequivocal means of interfering with the liberty of the subject, that an insane person may promptly and effectually be protected from the consequences of his own folly. Our suspicions and fears of confining a man of sound mind, must, in framing laws for the protection of the insane, give way to those great and extensive emergencies which are continually occurring in a disease so often sudden and dangerous in its attacks. If this lamentable state of things forces upon the Legislature so irksome, and apparently so unconstitutional a necessity, why so much outcry about the shadow of a fraud, and so little consideration for those whom the law mainly concerns? Let us, therefore, ascertain, before we condemn the existing statutes, whether their provisions

are really adequate to their exigencies; whether, in fact, they do afford sufficient protection for personal liberty, without compromising their primary object towards the lunatic.

In looking into the Acts it will be found that very stringent provisions are made to prevent improper confinement on the imputation of insanity. The provisions, indeed, are such as could only be set aside by a deep laid scheme of conspiracy, in which various disinterested persons must be concerned. The plot must consist of at least four principal actors, two, and often three, of whom must be members of our own Profession, with the ultimate connivance of the magistrates who visit the asylum, and of the Commissioners in Lunacy. Such a transaction, too, could not, in accordance with the customs of English society, be concealed from many near relatives and a few private friends of the individual.

If, in the face of these difficulties, a plot of the above character could possibly succeed, it must be beyond the power, and, indeed, beyond the province, of any practical, working lunacy Act to prevent.

Whether it be owing to the improved morality of the people, or to the sufficient stringency of the Lunacy laws, is not for me to decide; but, in proof of my argument, that no further measures are required than those now in use for the protection of our personal liberties, I point to the pleasing fact, that, to the best of my belief, we have no veritable grounds for supposing that any person in England and Wales has been confined, with felonious intent, in a lunatic asylum since the present law has been in force.

From the foregoing, I can arrive at only one conclusion,—viz., that, in consequence of certain legal impediments,—a lunatic asylum being the last place in England and Wales to which a sane person is likely to be consigned,—the liberties of the subject, far from being endangered, are jealously and effectually protected by the Acts 8 and 9 Vict. c. 100 and 126.

Before quitting this subject, it will be useful to ascertain what facilities are afforded for restoring the liberty of a person who has recovered from insanity. Different people attach such different significations to what is meant by "recovery," and the insane themselves are so apt to practise upon us successful deceits, that it often becomes a matter of extreme doubt, even with the experienced, when that event has happened. The discharge of many patients, remember, is often attended with grave responsibilities on the part of those who discharge them. Prematurely exercised, it might protract a case for years, which would perhaps, by a few weeks' longer detention, have ended in complete recovery; a too protracted detention might be equally injurious. Again, fearfully tragic events have occasionally followed immediately after the discharge of patients supposed to be well. It is evident, therefore, that such difficulties as these cannot be removed by legal definitions, and that much must be left to the discretion and good feeling of the Medical Officers and authorities. Nevertheless, it must be admitted, that the measures of the present Act which regulate the discharge of recovered patients are scarcely equal to their requirements.

Now, the way in which the Editor of the *Lancet* proposes to obviate these and all other difficulties connected with the present law is, in my humble opinion, calculated to do vastly more injury than good. If submitting all the affairs of the insane to the investigation of "juries;" if allowing the free access of solicitors and friends to the patient,—if subjecting the proceedings of the Commissioners to the control of public observation,—if holding an inquest upon the body of every patient dying in an asylum,—are the means calculated to effect the ends desiderated, I, for one, must confess that I have turned to very little advantage some rather unusual opportunities of becoming acquainted with the subject. To speak the truth, I can only detect in such vain and impracticable suggestions a narrow-minded view of the whole matter, —a selfish provision for the protection of the sane, with an entire disregard to the interests of the insane. It is this groundless suspicion of the law and its administrators which I regret to see pervading his remarks, and of which I would fain hope to disabuse the minds of my medical brethren and the public at large. To guard against the unlikely incarceration of one sane person, or the prolonged detention of one recovered lunatic, he would subject thousands and thousands of the insane to a routine that would strike at the root of all curative treatment. He would convert the quiet and seclusion of a house of "recovery," or of "retreat," as the case might be, into a "house of correction," or a "gaol." He would, by feeding one of the most general and prominent symptoms of insanity,—suspicion,—aggravate, prolong, or perhaps confirm the disease; and, by destroying all confidence in those on whom the sufferers should chiefly rely, he would plant in the genial soil of an unsound mind the seeds of hatred, malice, and all uncharitableness, to the exclusion of those moral virtues which are at once the antidote of the disease, and the studious object of every superintendent to cultivate. If it were possible to increase the confusion of such an asylum, and the misery of its patients, as the alternate states of restlessness and alarm which the visits of special "juries" at one time, and of "Coroners," with their juries, at another, would create; we have only to carry out his suggestion to its full, by acquainting them that "the proceedings of the Commissioners were subject to public observation." Henceforth, farewell to the buoyant hope—the solitary ray—of many a lunatic, that his mental and moral infirmities (so unfeelingly stigmatised by the world) were at least entrusted to the secret keeping of a few honourable men.

Happily, by a proposed Clause in the amended Bill, the acknowledged deficiency of the present Act may henceforth be supplied with some fair hope of removing from the public mind all fears of undue detention of lunatics. It is intended, by a Clause, "to empower the Commissioners to appoint any competent person to visit and report to them upon the mental and bodily condition of any lunatic or alleged lunatic." This, as far as it goes, appears to be a wise provision, and, I have no doubt, is meant to imply, that the Commissioners are but too sensible of the incompetency of "visiting justices" in discharging the important duties which the present Act imposes on them. Indeed, were the ideas which this Clause suggests magnified and extended, by appointing, as under the Poor-law Act, certain permanent Assistant-Commissioners, the same valuable duties which the Commissioners are called upon to do only once or twice in the year, could, with a little such assistance, all be rendered monthly or oftener. It is well known, and must be painfully felt by the Commissioners in Lunacy, that their numerical force is unequal to the immense and increasing demands made upon them. Assistance, therefore, of this sort—with one mind, one spirit, one uniform design pervading the whole—would, by its unity of action, and similarity of purpose, effect vastly more towards the improvement of asylums and the treatment of lunatics than could possibly be accomplished by the somewhat incongruous elements of which the "Committee of Visiters" is composed.

I am, &c. W. M. B.

Weston-super-Mare, Somerset.

THE UNIVERSITY OF LONDON.

M.B. FIRST EXAMINATION.—1853.

FIRST DIVISION.

Bartrum, Robert Henry	Guy's Hospital.
Brown, Thomas Edwin Burton	Guy's Hospital.
Edwards, St. John	University College.
Elsey, Joseph Ravenscroft	Guy's Hospital.
Evans, David Conway	King's College.
Fawcus, James	University College.
Jones, William Price	University College.
Kiallmark, Henry Walter	University College.
Morris, William Whytehead	Leeds School of Medicine.
Pittock, George Mayris	Guy's Hospital.
Pout, Augustus	King's College.
Powell, Frank	St. Bartholomew's Hospital.
Scurrah, John Dewherst	University College.
Smith, Frederick Porter	King's College.
Williams, Clement	Guy's Hospital.

SECOND DIVISION.

Fulcher, George Augustus	St. Bartholomew's Hospital.
Hadow, Edward Ash	Bristol Medical School.
Hardwick, Robert George	Leeds School of Medicine.
Holberton, Vaughan H. Alex.	King's College.
Mantell, Riners	London Hospital.
Siordet, James Lewis	University College.
Spencer, William Isaac	University College.
Thornton, James Howard	King's College.

MATRICULATION.—1853.

EXAMINATION FOR HONOURS.

ANATOMY AND PHYSIOLOGY.

Brown, T. E. B.	Exhibition & Gold Medal	Guy's Hospital.
Edwards, St. John (Gold Medal)		University College.
Williams, Clement		Guy's Hospital.
Bartrum, R. Henry	Equal	Guy's Hospital.
Scurrah, J. Dewherst	Equal	University College.
Jones, William Price		University College.
Pittock, George Mayris		Guy's Hospital.

CHEMISTRY.

Jones, W. Price ...(Gold Medal)	University College.
Williams, Clement (Gold Medal)	Guy's Hospital.
Brown, Thomas Edwin Burton ..	Guy's Hospital.

Scurrah, John Dewherst		University College.
Elsey, Joseph Ravenscroft		Guy's Hospital.
Bartrum, Robert Henry		Guy's Hospital.
Edwards, St. John		University College.
Pittock, George Mayris		Guy's Hospital.
Fawcus, James		University College.

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

Brown, T. E. B.	Exhibition & Gold Medal	Guy's Hospital.
Jones, W. Price ... (Gold Medal)		University College.
Elsey, J. Ravenscroft..	Equal.	University College.
Fawcus, James		
Bartrum, Robt. Henry	Equal.	Guy's Hospital.
Williams, Clement		

STRUCTURAL AND PHYSIOLOGICAL BOTANY.

Brown, T. E. B. ... (Gold Medal)	Guy's Hospital.
Williams, Clement	Guy's Hospital.
Scurrah, John Dewherst	University College.
Pittock, George Mayris	Guy's Hospital.

MATHEMATICS AND NATURAL PHILOSOPHY.

French, A. J. ....(Exhibition)		Wesleyan Coll. Inst., Taunton.
Fawcett, Henry	Equal.	King's College.
Hanson, E. P. C.		King's College.
Davies, Alban Thomas		Queen's College, Birmingham.
Ashton, John Perkins		Mill-hill Grammar-school.
Needham, Frederick Manning...		University College.
Heath, James		King's College.
Broadbent, William H.	Equal.	Private tuition.
Harrop, Robert		Chorlton High School.
Smith, Alfred Fish		Private tuition.
Gillespie, George John Knox		Private tuition.
Clear, Walter Wedgborough		Private tuition.

ZOOLOGY.

Prout, E. S.....(Prize of Books)	New College.
Herbert, Thomas Martin	Spring-hill College.

BOTANY.

Black, A. O. ...(Prize of Books)	St. Paul's School.
MacOwan, Peter	Private tuition.

CHEMISTRY.

Foster, George Carey	Equal.	University College.
Marshall, Alfred		Westminster Hospital.
Broadbent, W. H.	Equal.	Private tuition.
Lawrence, G. W.		King's College.
Howlett, Frederick		Private tuition.
Muskett, Joseph James		St. Bartholomew's Hospital.
Carnley, Henry	Equal.	Hull School of Medicine.
Prout, E. S.		New College.
Whitaker, William		University College.
Cook, Edward Rider		University College.
Walker, Thomas James		Private tuition.
Traer, James Reeves		King's College.
Herbert, Thomas Martin		Spring-hill College.
Earle, Edward Septimus		St. Bartholomew's Hospital.

CLASSICS.

Heath, E. James ...(Exhibition)		King's College.
Charnley, Alexander	Equal.	Stonyhurst College.
Young, William		City of London School
Hennell, John		University College.
Anstie, James		King's College.
Tidy, William Meymott		King's College.
Waugh, Alexander		Grammar School, Leatherhead.
French, Alfred John		Wesleyan Coll. Inst., Taunton.
Tyler, William James		Mill Hill Grammar School.
Lambert, Brooke		King's College.
Dawson, Robert		Mill Hill Grammar School.
Grabham, George Wallington		King's College School.

HEALTH OF ENGLAND IN THE QUARTER ENDING JUNE, 1853.

From the Registrar-General's quarterly return just issued, it appears that 107,861 deaths were registered in the three months of April, May, and June. This number is the highest that has ever been registered before in the corresponding season, and exceeds by 7048 the deaths in the spring quarter of 1852. The rate of mortality in England is highest in the winter (2·467 per cent.), lowest in the summer quarter (2·129 per cent.), while the mortality of the spring quarter (2·223) holds an intermediate rank, near the average of the year. This average is exceeded by the present return, which shows a mortality at the rate of 2·383 per cent. per annum higher than the rate in the corresponding quarter of every year 1843-52, except the spring quarter of 1847, when the population was infested by scurvy and its attendant diseases, after the great failure of the potato crop in 1846. The rate of mortality was then 2·506.

The mortality of the quarter was above the average both in the town and in the country districts; the annual rate of mortality was 2·606 in 117 districts, comprising the chief towns, and 2·196 per cent. in 508 districts, extending over the rest of the Kingdom. The Registrar-General remarks:—

"The population of England is, there is reason to believe, collectively healthier than any equal amount of population in any other kingdom; but the rapid increase in the proportion of the town population,—in which the mortality is 27 per cent. higher than it is in the country, and the sickness, the suffering, the debility, the physical degeneracy of race are in an equal excess,—makes this question of the health of towns and the fertilisation of the surrounding fields one of the great questions of the day, demanding immediate solution. It is difficult for the imagination to conceive all the beneficent effects that would flow from the possible diminution of the mortality which the subjoined figures express in town and in country throughout the changing seasons of the year:—

Quarters.	Average Annual Number of*		
	Deaths to every 10,000 Persons living in Towns.	Deaths to every 10,000 persons living in the Country.	Lives Destroyed by the Matters which are Poisons in Houses, Streets, and Streams, but are Fertilising Manures in Fields.
Jan. to March	69	56	13
April to June	62	52	10
July to Sept...	63	46	17
Oct. to Dec....	64	49	15
The Year	258	203	55

* This Table is derived from the returns of the 10 years—1843-52.

In London the mortality has considerably exceeded the average, and it is chiefly due to diseases of the respiratory organs, typhus, hooping-cough, diarrhœa, and violence of various kinds. 12 deaths were referred to privation, 26 to poison, 88 to burns and scalds, 86 to hanging and suffocation, 81 to drowning, 171 to mechanical injuries of various kinds, 33 to wounds; and in nearly all these cases the numbers exceed those returned in previous years. The violent deaths, including a few from intemperance, want of breast-milk, and privation, in London, increased from 1296 in 1840 to 2140 in 1852; and in the last quarter the excess in deaths from violence alone over the deaths of 1852 was 131. The increase of steam-vessels, railways, omnibuses, and new mechanical forces of every kind, as well as the obstructions of the streets, may partly account for this loss of life, as well as for the numerous injuries and mutilations not fatal,—in the battle of every day.

The mortality in the South Eastern Counties has been above the average, and the greatest excess has occurred in Godstone, Croydon, Bromley, Dover, Eastbourne, Lewes, the Isle of Wight, Alverstoke. Woking has been unusually healthy. Scarlatina has been rife in Sevenoaks, Maidstone, and other districts.

In the South Midland Counties, Wisbeach continues to experience a high rate of mortality; the deaths in three months, out of a population of 36,215, were 274. In Cambridge on the other hand, the deaths out of a population of 27,815 were only 110. Hooping-cough and bronchitis prevailed at Wisbeach; while in Cambridge the Registrar reports, that "great improvements have been made by the local authorities in the sanitary arrangements; they have been assisted very materially by the reports and suggestions of the Medical Profession."

Romford, Tendring, Colchester, Witham, and Saffron Walden, in Essex; Sudbury, Thingoe, and Stow, in Suffolk, experienced a high rate of mortality. Typhus has been fatal to many persons in High Easter, Dunmow; in Downham, Norfolk, ague and fever have prevailed; in Norwich the mortality has not exceeded, and in the whole county has been below, the average.

In the South-Western Counties, the general mortality has slightly exceeded the average. The typhus in Longbridge Deverill broke out a second time; and the deaths in the sub-district equal the births. In one house, the man, wife, and six children were all attacked; and one child, nine years of age, died. At Exmouth,

fever has prevailed. In Whipton, Heavitree, small-pox is raging; several children are suffering, and two have died; "still the people refuse cow-pox." In Barnstaple, typhus and small-pox have prevailed; the deaths have exceeded the births. The emigration from Redruth has been extensive, and the births have consequently decreased; in another district of Cornwall, Lerrin, the Registrar says:—"The births and deaths are much below the average. Numbers are yearly leaving this district for other parts of this country, or for America and Australia, which is the only explanation I can give of the decrease."

Measles has been very fatal in Truro. In Frome the deaths from pulmonary diseases are much above the average; the same diseases have prevailed in Bath.

In the West Midland Counties, the mortality is somewhat above the average; small-pox prevails in Gloucestershire; Bristol, Gloucester, and Stroud, have neglected vaccination; carbuncles, boils, and purulent eruptions have been very prevalent in Stow-on-the-Wold as well as in London. This extensive epidemic has not yet obtained all the attention which it deserves from the Medical Profession. A bad form of scarlatina has prevailed in Staffordshire, "the cause of which," the Registrar of Bilston conceives, "is insufficient drainage, cesspools stagnating, and filth of the most offensive character accumulated in the yards and folds of the poor, who have been the victims of the fever." The excess of births in West Bromwich and Westbury-on-Severn is ascribed to the increase of population caused by employment on railways. The prosperous state of trade and the improved circumstances of the people are also mentioned in connexion with a low rate of mortality.

The deaths in Lincolnshire have been below, in Nottinghamshire and Derbyshire above, the average.

Cheshire and Lancashire have not been more than usually unhealthy. 2759 deaths were registered out of a population of 411,515 in Liverpool and West Derby; 2365 in Manchester and Salford out of 315,956. The mortality in these districts was below the average to which they are subject. This district, says the Registrar of Hulme, Chorlton, "never was in a more healthy state. No kind of epidemic prevails. The operative classes are all well employed, and although the prices of various kinds of provisions are on the advance, their appears a general disposition to increase wages in proportion."

In Yorkshire 11,442 deaths were registered. The mortality exceeded the average, and most notably in Skipton, Keighley, Huddersfield, Halifax, Bradford, Sheffield, Rotherham, Doncaster, Thorne, and Driffield. In Leeds and Hull, the mortality declined. One death from cholera was registered in the workhouse, Horton, Bradford. Influenza prevailed in Leyburn; scarlatina in Reeth.

In the Northern Counties, 5621 deaths were registered. Ague, typhus, and hooping-cough have prevailed in many of the Durham colliery districts; 23 persons died of measles in Yarm, Stockton.

The deaths in the Welch Division (7288) exceed the average; hooping-cough prevailed in Newport, Swansea, and Haverfordwest; small-pox and bronchitis in Cardiff and Carmarthen. The excess of births and deaths in Rheidol, Aberystwith, is referred to the great increase of the mining population. Small-pox, scarlatina, and typhus still prevail in the Wrexham district. "The Board of Guardians are causing proceedings to be taken against the owners and occupiers of houses, as directed by the Nuisances Removal and Diseases Prevention Act, and in all cases where they have summoned have succeeded in getting convictions."

MISCELLANEOUS.

The following statements of District Registrars are worthy attention:—"I am afraid there is something wrong among the lower class, (of Irish, in particular.) There is no sexton in my district that will bury a still-born child without a note from me. I have kept an account of the applications, and find there have been 17 in the quarter just ended." "It is a question, whether the fatal character of these diseases, (measles and scarlatina maligna,) in some cases, if not in many, may not be attributed to local circumstances, and to the habits of the people which I have referred to on former occasions. It is too much the custom of many to drug their children with spirits, to bring out, as they say, the rash; and this terminates in pneumonia."

BIRTHS, INCREASE OF POPULATION, AND EMIGRATION.

As the births of 158,718 children, and the deaths of 107,861 persons of all ages, were registered in the quarter, a balance of 50,857 remains in favour of the population. The excess of births over deaths is less by eight or twelve thousands than the excess in the corresponding quarters of the three previous years, chiefly owing to the high rate of mortality in 1853. The emigration from the United Kingdom has been at the rate of 8920 a-week, equal to the number of inhabitants in a majority of the 368 municipal boroughs of Great Britain.

MEDICAL NEWS.

Death of Mr. Bransby Cooper.—It is with sincere regret that we announce the demise of Mr. Bransby Cooper, which took place suddenly on Thursday afternoon, at the Athenæum Club, of which he was a member. He was crossing the hall, when he stopped, and called for a glass of water; before this could be brought, blood spouted from his mouth; he fell, and was almost instantly a corpse. We shall publish a memoir of this amiable and excellent surgeon very shortly.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Aug. 11, 1853:—

Allen, Robert Austen, County Tyrone, Ireland.
Fox, John, Weymouth, Dorset.
Stocks, Alfred William, Salford.

Royal College of Surgeons.—Mr. Ewart has given notice, that he will move for returns of the number of persons who presented themselves for examination, to be admitted Members of the Royal College of Surgeons of England, in each year, from the 11th day of July, 1834, to the 18th day of August, 1853, stating the number of rejections in each year, the average duration of each examination, the subjects examined on, the average age of candidates, the number educated at each Medical School in Great Britain and Ireland, or Foreign Schools, and the number rejected belonging to each school.—Of the number of persons admitted to the Fellowship of the Royal College of Surgeons of England, in the years 1843-44, and the rules observed by the Council in regulating their admission.—Of the number of personswho presented themselves for the examination of Fellowship in each year, since the 1st day of January, 1845, to the 6th day of July, 1852, stating the number who were Members of the College, the number of rejections in each year, together with the number refused examination.—Of the number of candidates for the classical examination required for the Fellowship, since the 1st day of January, 1850, to the 18th day of August, 1853, stating the number who were already Members of the College, the number of Members rejected for this examination, together with the gross amount of rejections, and the subjects examined on.—Of the number of candidates for examination for the Fellowship, from the 6th day of July, 1852, to the 18th day of August, 1853, stating average age, and number rejected.—Of the number of Members of the College of Surgeons of England, admitted for the Fellowship by seniority, on payment of ten guineas, since the 6th day of July, 1852, to the 18th day of August, 1853, stating the number refused admission, and the number on whose admission divisions of the Council took place.—Of the various fees received by the Council and Court of Examiners.—Of a detailed statement of the annual income and charges, and of the actual receipts and payments of the College, during the last three years, ending the 18th day of August, 1853.—Of the different professors, office-bearers, and servants, of the College of Surgeons of England, from the 1st day of January, 1834, to the 10th day of August, 1853, the names of the different officers, together with the amount of salary or gratuity paid or voted to each and every such professor, officer, or servant, with the dates of appointment, dismissal, or resignation.—Of the different editions of the bye-laws of the College of Surgeons of England, regulating the education and examination of candidates for the Fellowship and Membership, from the 1st day of January, 1834, to the 18th day of August, 1853.—Of the number of Medical Schools and Hospitals, from which the recognition of the College of Surgeons has been withdrawn, within the last three years, ending the 18th day of August, 1853, together with a list of Schools and Hospitals that have applied to be recognised as Schools of instruction for Medical Students, in the same years, and the causes which led to the withdrawal of any Schools or Hospitals.—Of the number of volumes purchased for the Library of the College of Surgeons, from the 1st day of January, 1834, to the 10th day of August, 1853, together with a list of the number presented.—Detailed accounts of expense of the Library of the College of Surgeons of England, for the last three years, ending the 18th day of August, 1853.—Of the expense of Museum of the College of Surgeons of England, for three years, ending the 10th day of August, 1853.—Of the expense of entertainments to the Council and Court of Examiners of the College of Surgeons of England, in each year for the last three years, ending on the 18th day of August, 1853.—And of all monies paid to each Member of the Council and Court of Examiners, within the last three years, ending the 10th day of August, 1853, stating the amount paid in each year.

APPOINTMENTS.

Medical.—Guy's Hospital.—We are informed that an appointment in the East India Company's Service, placed, by the liberality of H. P. Astell, Esq., at the disposal of the Medical officers of Guy's Hospital, has just been awarded to Mr. Ewart, after a severe examination.

Naval.—Assistant-Surgeons: William N. Brake (1845), from the London, 90, at Portsmouth, to the Dolphin, 3, brigan-

tine, at Sheerness ; William E. Hambly (1847), from the Imaum, 72, receiving ship at Jamaica, to the London ; H. M. Dixon (1852), from a naval hospital, to the London. Promotions.—Assistant-Surgeons : William Macleod, M.D. (1842), serving in the Prince Regent, 90, and Richard D. Pritchard (1841), serving in the Impregnable flagship at Devonport, to be surgeons.

MILITARY.—33rd Foot: Assistant-Surgeon John Ogilvy, M.B., from the Staff, to be Assistant-Surgeon, vice Macbeth, promoted on the Staff. 54th Foot: Staff-Surgeon of the Second Class, James M'Grigor Grant, M.D., to be Surgeon, vice Macpherson, who resigns. Hospital Staff.—Assistant-Surgeon James Macbeth, M.D., from the 33rd Foot, to be Staff-Surgeon of the Second Class, vice Grant, appointed to the 54th Foot. Francis Lewis Fitzgerald, gent., to be Assistant-Surgeon to the Forces, vice Ogilvy, appointed to the 33rd Foot.

MILITIA.—Durham Militia Artillery : James Trotter, Esq., to be Surg. 2nd or North Durham : John Bland, gent., to be Assist.-Surg. Kent Militia Regiment of Artillery : William Sankey, gent., late Assist.-Surg., 95th Rifle Corps, to be Surg.

DEATHS.

BANKIER.—The Correspondent of the *Times* at Hong-kong, says :—"We regret to report the death of that distinguished medical officer, Dr. Bankier, R.N., and lately of Her Majesty's ship Minden. He was upwards of ten years on this station, and was greatly esteemed by all."

BROMLEY.—August 3, at Cleveland-place, Dawlish, Devon, Dr. C. Bromley, M.D., much regretted.

COOPER.—August 18, suddenly, at the Athenæum Club, Bransby Blake Cooper, Esq., F.R.S., F.R.C.S. (Hon.) 1843; Senior Surgeon Guy's Hospital ; Assistant-Surgeon Royal Artillery ; Consulting Surgeon Western Infirmary; Lecturer on Surgery, Guy's Hospital ; Author of—1. "Lectures on Anatomy ;" 2. "Surgical Essays ;" 3. "Treatise on Ligaments ;" 4. "Life of Sir A. Cooper ;" 5. "Lectures on Osteology ;" and "Lectures on Surgery."

SCIENCE has sustained a loss in M. Adrien de Jussieu, Member and President of the Academy of Sciences, Professor of Botany at the Museum of Natural History, etc. The burial was attended by a large number of friends and admirers of the deceased.

WE regret to announce the sudden death of Dr. Pravoz, of Lyons. His unexpected illness was mentioned in a preceding Number of this Journal.

BEQUEST.

COVENTRY AND WARWICKSHIRE HOSPITAL.—The late Richard Sawrey Cox, Esq., of London, has bequeathed 1,500*l.* to this charity, *free of legacy duty*, accompaninied with a wish, that a ward in the hospital shall be named after him, as an incentive to others to follow the example.

PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.—The Anniversary Meeting of this Association was held at Swansea on Wednesday and Thursday, the 10th and 11th instant. Dr. Ogle, of Oxford, took the chair, and resigned it to Dr. Bird, of Swansea, the President elect. It appears that the number of members has increased to 1853,—an increase of 225 since last year. The Address in Medicine was read by Dr. Radclyff Hall, of Torquay ; and a number of papers were read by Mr. Tunstall, Dr. Williams, Dr. Sibson, and Dr. Conolly. Dr. Conolly will deliver the Address in Medicine at Manchester next year, Mr. Wilson being the President elect.

YELLOW FEVER.—By advices from New York to the 2nd instant, we learn, that at New Orleans the yellow fever was raging beyond all precedent ; there were 500 deaths during the week ending the 23rd ult. ; on the 29th, the deaths were 126 ; and on the 30th, 100. It has also appeared in Philadelphia, and is at the New York Quarantine in several vessels.—WEST INDIES—The Parana arrived at Southampton on Wednesday. She has not had a single death since she left England. The yellow fever was on the decline in the West Indies. Fever still prevails at Spanish Town. Some cases of yellow fever had occurred at Dominica and Antigua. Barbadoes was very healthy.

CHOLERA.—NORTH OF EUROPE.—Among other victims to this disease are nine physicians, one of whom, Witthusen, formed part of the Medical establishment of the King's household. The St. Petersburg Journal states that cholera is at present raging in the Governments of Kiew and Tolyw, and that it has burst out in the great commercial town of Beryczew.

HEALTH OF GLASGOW DURING JULY.—The mortality increased during this month by 105, the deaths being 1298, against 1193 in the month of June. This increase occurs entirely in the class of zymotic diseases, which have this month increased from 399 to 541, or by 142, all the other classes remaining much the same as last month, or, at least, showing very trifling differences. The increase in the zymotic diseases is almost exclusively confined to measles and diarrhœa, the former of which has risen to the unprecedentedly high number of 168,—an increase of no less than 58 above the very high mortality by this disease last month. The deaths from diarrhœa amount to no less than 131, being an increase of 68 above the previous month, and 61 above the average of the month of July in the two preceding years. The deaths by dysentery are 24, against 7 in June. Tubercular diseases have diminished by 9, and diseases of the lungs, &c., by 10.

FRANCE.—Dr. Conneau, the Emperor's first physician, has been raised to the rank of officer of the Legion of Honour.

MM. TRIQUET AND MASSON, having appealed to the Imperial Court at Paris against a decision which condemned them to a fine of fifty francs for "imprudence in the administration of chloroform, by which death ensued," have been pardoned the fine, and obtained costs. We notice the fact with satisfaction, and give the verdict of the Superior Court *verbatim* :—"Considering that inquiry has discovered, on the part of MM. Triquet and Masson, no act of imprudence, of negligence, or of inattention,—no want of precaution, or deviation from the ordinary rules of art in the application of the chloroform administered by them at Breton, in an operation which justified its use,—the Imperial Court reverses the former judgment, and dismisses MM. Triquet and Masson free of expense."

ALLEGED CHARGE OF PROCURING ABORTION.—At the Chester assizes, on the 11th August, before Mr. Baron Platt, Mr. Thomas Goulden, aged 59, surgeon, "a respectable-looking man, whose anxious countenance betrayed that he felt the degradation of his position," was indicted for using an instrument upon the person of Mary Ann Lockwood, for the purpose of procuring abortion. After the statements of Council and the evidence had been heard, the jury retired, and in a quarter of an hour returned a verdict of Not Guilty. The prisoner was immediately discharged. Mary Ann Lockwood, the witness against Goulden, was then indicted, as being the patient in the above charge of procuring abortion. The jury were directed to find a verdict of Not Guilty, which they did, and the prisoner, after being admonished by the Judge to avoid taking ardent spirits at night, as "they were very bad things," was discharged.

DOMESTIC DRUGGING.—At Maiden Bradley, last week, a child was poisoned. It appears that the mother had left her infant in the care of a little girl seven years of age, and the girl having seen its mother give it something out of a bottle, to put it to sleep, she accordingly did the same, and gave the whole of the contents to the child. It proved to be laudanum. The child soon expired, the bottle containing enough to have killed two or three men.

ACTION AGAINST "DR. HENRY."—In the Leeds County Court on Wednesday week, the case of Ackwood *v.* Davis was called on ; but it appeared that it had been settled by the defendant paying the plaintiff's demand with costs. The plaintiff was Wm. Ackwood, of Parkgate, near Rotherham, and the defendant Mr. Alfred Davis, of Howard-street, who practices a branch of the medical art under the name of Dr. Henry. The plaintiff, in his notice of action, alleged, that the defendant, by professing to be a surgeon, and to effect cures by sovereign remedies, had induced the plaintiff to employ him and pay him 4*l.* ; but that he was not a surgeon, and did not cure the plaintiff, whereby he sustained damage to the amount of 5*l.*

MORTALITY NOTABILIA.—The mortality of London has exhibited little variation during the last four weeks. In the week that ended on Saturday, the number of deaths registered was 984. In comparing the results of the last two weeks, as regards fatal diseases, it will be seen that, while tubercular diseases and diseases of the heart continue of the same amount, and diseases of the nervous system have declined from 119 to 89, those of the respiratory organs from 97 to 77, the epidemic class has risen from 279 to 320. Typhus, which rose in the two weeks from 42 to 60, has partly contributed to the increase of the last-mentioned class; but the principal cause is diarrhœa, which continues to grow in activity. This complaint, which numbered, in four previous weeks, 54, 73, 81, 110 cases, rose last week to 139; and cholera, registered under various designations, "English," "infantile," and, in one instance, "Asiatic," exhibits a still more rapid augmentation, for, in the preceding week, the number was only 4; last week it was 19. Two or three of these 19 cases appear to have been of violent character and short duration ; 16 occurred to children, nearly all very young, and 3 to persons of advanced years. In respect of one of these cases, Dr. Brown, the Medical attendant, adds on his certificate :—"The room in which this child was lying was so insufferable, from the crowding into its small space of so many human beings, that the only matter of astonishment is, that human life could be sustained in it at all. In Rotherhithe, at 3, Neptune-court, on the 7th of August, the daughter of a blacksmith, aged 12 years, "cholera (43 hours)." Mr. Pitt, the Registrar, says :—"The house is dark, and badly ventilated; a drain running under the two lower rooms, about a foot below the level of the street. The sister of deceased just recovered from severe typhoid fever." In a case which occurred in St. John's, sub-district of Westminster, at 9, New Rochester-row, on the 11th of August, (the daughter of a musician, aged 6 years, "cholera 7 hours,") the Medical attendant says:—

"This was a very violent case. According to informant, there were no premonitory symptoms."

Diarrhœa and Sausage-making.—In South St. Giles-in-the-fields, at 34, Parker-street, on the 7th of August, the son of a bricklayer, aged 15 months, "diarrhœa (2 weeks)." Mr. Faulkner, the registrar, remarks:—"This is the second death from the same cause, in this house, within the last two months. The informants in both cases complained most bitterly of the horrible smells arising from the sausage-manufactory next door, *where all sorts of domestic animals are kept.* As this is the third complaint I have received respecting this place, I visited it yesterday, but did not perceive any very remarkably bad smell, although there certainly was a something not very fragrant in the atmosphere. The informant says, that the very bad smells are not constant, but occur principally in the morning, when the *various processes* are in activity. I have a little patient in the same house suffering from a low fever."

Typhus.—In Hoxton New Town, at St. Luke's workhouse, on 7th August, the wife of a lapidary, aged 36 years, died of typhus. Mr. Ansell, the registrar, says:—"I am informed by the medical officer that a great many cases of typhus are being brought in; 7 cases have just been admitted out of one house, No. 28, Playhouse-yard. This house is represented as in a most filthy state, and the neighbourhood altogether is a sink of filth."

The Living and the Dead.—In the sub-district of Hoxton Old Town, at 23, Aske-street, on 4th August, a dressmaker, aged 28 years, died of phthisis. Mr. Pearce, the Registrar, adds:—"In this house I am informed, that till within the last three or four weeks the private drain has been so defective that the inmates were fearful of disease making its appearance. Within this dwelling live twelve or thirteen children of different families, and in one of the rooms where the body now lies live and sleep a female and her child. The effects produced by the warm weather rendered it necessary to have the coffin screwed down."

Births.—Last week the births of 709 boys and 752 girls, in all 1461 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1351.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·072 in. The variations of reading during the week have been unusually small. The mean temperature of the week was 61·2°, which is slightly below the average of the same week in thirty-eight years. The wind blew for the most part from the north-east.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending August 13:—

	Males.	Females.	Total.
Workhouses	31	41	72
Military and Naval Asylums.. ...	10	...	10
General Hospitals	28	10	38
Hospitals for Special Diseases ...	2	1	3
Lying-in Hospitals	...	1	1
Lunatic Asylums	2	1	3
Military and Naval Hospitals ...	4	...	4
Hospitals for Foreigners, &c. ...	...	...	...
Prisons	...	...	...
	77	54	131

DEATHS *in the Metropolis for the week ending Saturday, August* 13, 1853.

CAUSES OF DEATH.	AUG. 13. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	518	283	172	984	10941
SPECIFIED CAUSES	517	283	171	971	10882
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	241	51	28	320	4282
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	12	20	38	455
3. Tubercular Diseases	76	112	8	196	1731
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	45	18	26	89	1121
5. Diseases of the Heart and Blood-vessels	1	11	17	29	279
6. Diseases of the Lungs and of the other Organs of Respiration ...	40	13	24	77	748
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	17	21	6	44	729
8. Diseases of the Kidneys, etc. ...	2	17	3	22	90
9. Childbirth, Diseases of the Uterus ...	...	4	1	5	76
10. Rheumatism, Diseases of the Bones, Joints, etc.	2	4	2	8	65
11. Diseases of the Skin, Cellular Tissue, etc.	1	2	...	3	12
12. Malformations	2	...	...	2	24
13. Premature Birth and Debility ...	20	1	...	21	246
14. Atrophy	41	...	10	51	290
15. Age	...	...	23	23	403
16. Sudden	2	2	...	4	52
17. Violence, Privation, Cold, and Intemperance	21	15	3	39	279
CAUSES NOT SPECIFIED	1	...	1	13	59

TO CORRESPONDENTS.

A. C.—We have very carefully examined the preparation of the aneurism in which Mr. Lane tied the common carotid artery, and have no doubt whatever that the artery was tied. Mr. Lane's colleagues, to whom he showed the artery, and to whose judgment and sanction he appealed at the time of the operation, without exception agreed that the structure included in the ligature was the artery, and the artery only. All the symptoms which followed the operation, and the progress of the case to its termination, corresponded with the obliteration of the artery, and the specimen we have examined incontestably proves that the artery was tied.

Wm. Pritchard.—If a medical man is summoned by the police to attend a patient at the station-house, he has a claim for 3s. 6d. during the day, and for 7s. 6d. during the night; which sum will be paid to him by application to the Commissioners of Police. There is no Act of Parliament on the subject, so far as we are aware; but the above charges are authorised by the Commissioners of the Police Force.

A Young Subscriber.—The books to be studied for the preliminary examination at Apothecaries' Hall were announced in an Advertisement in our last Number. It is optional for our Correspondent to come in under the new or the former examination.

We have been informed by Mr. Callender, House Surgeon to St. Bartholomew's Hospital, in reference to a statement of Mr. Chapman, in Saturday's "Medical Times and Gazette," (speaking of an operation recently performed by Mr. Stanley)—viz., that "adhesion did not, however, take place, and the flap sloughed, leaving the sore in *statu quo*,"—that adhesion did take place, only the edge of the flap sloughed; and that the sore is now almost healed, with every prospect of being properly cured.

Auriscalpium will no doubt find the information he requires in Mr. Toynbee's forthcoming work on the Diseases of the Ear.

Mr. Woolrych.—Received with thanks.

Honorius.—The defendant Dawson in the late cause many years ago obtained, from the President and Elects of the College of Physicians, letters-testimonial authorising him to practise as a physician in the *Country*. His name was expunged from the list of Extra-Licentiates when it was found that he was practising in *London*.

E. C.—We have been told of the robberies before. Ordinary thieves are easily punished, but literary property is stolen openly every day—though not by any one with whom any man of honour would be seen "on the loneliest bog in Ireland, with only an old crow for a spectator."

Mr. Hingeston, Brighton.—Thanks.

Mr. Badcock's letter shall be inserted.

L.R.C.S.E.—Question 1. Legally, yes; but not to be on good terms with his professional neighbours.—Question 2. Yes, if he do not dispense his own medicine.

A clever letter from a *Medical Student* shall be inserted.

Dr. E. Smith's reply to Mr. Hancock is too long for insertion this week.

Our Edinburgh Correspondent's Letter arrived too late for insertion this week.

M. B. must obtain the licence of the Apothecaries' Society if he intends to dispense his own medicines. If M. B. will send his name, we can give him further information in reply to his questions.

An Old Subscriber.—The Act has not received the Royal assent.

Mr. W. E., Chilham.—Either Quain's or Erasmus Wilson's Anatomy.

Mr. Yearsley has sent us a letter, with copy of a testimonial, from Mr. Harrison, the tenor singer, in which this gentleman states, that excision of his tonsils had "a marvellous effect on his voice," which he says is "improved in tone and brilliancy."

COMMUNICATIONS have been received from—

Dr. HAWKINS; HENRY SMITH, Esq.; J. TOYNBEE, Esq.; Mr. WOOLRYCH; LAURENCE ORMEROD, Esq.; FREDERICK ROBERTS, Esq.; Dr. F. J. FARRE; W. R. WILDE, Esq.; Sir CHARLES HASTINGS, Worcester; Dr. PHILIP FRANK, Vienna; N. WALKER, Esq.; Professor PACINI, Florence; Dr. LANDI, Florence; Dr. HOFMANN; Dr. RIGBY; Dr. E. SMITH; A. C.; WM. PRITCHARD; A YOUNG SUBSCRIBER; Mr. CALLENDAR; HONORIUS; E. C.; Mr. HINGESTON; Mr. BADCOCK; L.R.C.S.E.; A MEDICAL STUDENT; etc. etc.

HOSPITALS *v.* WORKHOUSES.—On Thursday week, the Secretary of King's College Hospital attended at Bow-street Police-office, to complain of the officers of St. Giles's Workhouse under the following circumstances:—Some time ago, an Irish child was brought to the hospital in a sad state of disease, by its mother, who had since left London. On the recovery of the child, a day or two ago, it was sent up to the workhouse. The porter refused to take it in, but the messenger from the hospital insisted on leaving it. In an hour afterwards the child was brought back to the hospital, put into the doorway, and left there. Mr. Hall directed an inquiry into the subject, and expressed his regret that there was not a better understanding between the two institutions.

ORIGINAL LECTURES.

LECTURES

ON THE

ORGANIC DISEASES AND FUNCTIONAL DISORDERS OF THE STOMACH.

By GEORGE BUDD, M.D., F.R.S.

Professor of Medicine in King's College, London.

Lecture V.

CANCER OF THE STOMACH.

Cancer originates in the stomach more frequently than in any other organ, with the single exception of the uterus.

The organs in which cancer most frequently originates are, the uterus, the stomach, and the female breast. Out of 9118 cases of death from cancer, recorded in the Mortuary Registers of Paris, from 1830 to 1840, M. Touchon found, that the disease was seated in the uterus in 2996 cases; in the stomach, in 2303; and, in the breast, in 1147 :(a) or, taking the proportionate round numbers, in the uterus, in about $\frac{1}{3}$rd of the cases; in the stomach, in about $\frac{1}{4}$th; and in the breast, in about $\frac{1}{8}$th.

The stomach now and then becomes involved in cancerous disease, commencing in the subjacent cluster of lymphatic glands; but, almost always, cancer of the stomach is primary—that is, the stomach is the part first affected with cancer.

All the principal varieties of cancer—schirrus, medullary cancer, and areolar or colloid cancer—occur, separately and in combination, in this organ; and the last-named variety, areolar or colloid cancer, though much less common than the other varieties, is more frequent in the stomach than anywhere else.

The different parts of the stomach are not equally liable to cancer. The pyloric end is by far the most frequent seat of it; next after this, perhaps, the cardiac orifice; then, the space along the smaller curvature, between the two orifices. The part least liable to cancer, as to the perforating ulcer, is the big or splenic end.

Sometimes, the cancer, at the time of death, is of small extent; but occasionally, and especially in colloid cancer, the disease spreads until the greater portion, or even the whole of the stomach, is involved.

The changes which the stomach undergoes, and the course of the disease, vary with the kind of cancer.

Scirrhous or fibrous cancer, which is the most common variety, appears first as a thickening and induration of the submucous cellular tissue, difficult to be distinguished from the thickening and induration caused by the contraction of effused lymph, except by the circumstance, that it is less uniform, and that the mucous and muscular coats soon become adherent to the hard tissue between them. From the part first affected, the disease spreads into the cellular tissue beyond, and gradually involves the muscular coat on one side and the mucous coat on the other.

The muscular layer becomes affected early, and in an even, uniform manner. The cancerous matter developes itself between the muscular fibres, causing great apparent thickening of the muscular coat; and, if a transverse section of the coats of the stomach be made in the earlier stages of the disease, gives to the cut edge a very peculiar appearance, which is seen in all the varieties of cancer, and which consists of whitish or bluish-white lines, perpendicular to the surface of the mucous coat, and in striking contrast with the red muscular fibres. After a time, the muscular fibres waste, and what remains of them is blended with the cancerous mass, so that this peculiar appearance is lost.

In the submucous cellular tissue, the cancerous matter likewise spreads as by infiltration, but much less evenly than in the muscular coat; often forming lobular masses which project into the cavity of the stomach.

The mucous membrane, from the invasion of the cancer, undergoes various changes, which have been well described by Rokitansky, in nearly the following terms:—

"Sometimes it degenerates into an areolar cancerous tissue, which discharges large quantities of a gelatinous mucous fluid; sometimes it is converted into a medullary tissue, and sprouts into fungoid or medullary masses, which suppurate, and thus partially expose the schirrous cellular tissue; but, most frequently, it becomes the seat of a sloe-black softening, with hæmorrhage; and the schirrous submucous cellular tissue is at length found invested by a thin, gauze-like, black remnant of the mucous membrane, or quite denuded, merely retaining here and there on its surface a few black, convoluted vessels.

"The scirrhus, too, undergoes various metamorphoses. It may, after it has been denuded of the mucous membrane, become gangrenous in large patches, or in round circumscribed spots, the tissue exfoliating by layers, so as to give rise to deep, smooth excavations in the crude cancer; or it may become developed into a more highly organised cancerous growth, such as medullary sarcoma, accompanied by bleeding fungoid tissue; this soon becomes destroyed by a suppurative process, leaving an ulcer which is surrounded by an elevated lardaceous margin."

The diseased mass constitutes a hard, irregular tumour, which can often be felt through the walls of the belly.

Medullary cancer, when primary, may originate in the mucous membrane, or in the submucous cellular tissue. The chief points in which it differs, in course and effects, from the varieties of hard cancer, are, that it grows more rapidly, becomes sooner and more widely disseminated, and sprouts into exuberant medullary or fungoid masses, which undergo rapid transformation.

Areolar or colloid cancer appears first as an infiltration of the peculiar jelly-like matter of this variety of cancer into the submucous cellular tissue, and between the muscular fibres, and into the interstices of the mucous coat. This infiltration renders the walls of the stomach much thicker than natural, and gives to a section of the muscular coat the striated appearance I just now described. The infiltration into the cellular tissue, and between the muscular fibres, is very even; but the diseased mucous membrane is apt to sprout here and there into roundish spongy masses, the cells of which are filled by the jelly-like matter. After a time, the exposed surface of these projecting spongy masses wears away; the whole inner surface of the diseased mass becomes eroded, all traces of muscular fibres and of mucous membrane disappear, and the walls of the stomach are converted into a gelatiniform tissue, an inch or two thick, in which no traces of the muscular or mucous coats are seen.

The disease, like the other varieties of cancer, is most common at the pyloric end, which it usually encircles evenly. From this end, the cancer spreads continuously and evenly towards the splenic end, but it very seldom extends in the opposite direction, along the duodenum. In some cases, the entire stomach is at length involved; but, generally, death occurs before this happens, and the diseased portion then often terminates abruptly, and forms a funnel, of which the pyloric ring is the small aperture. The outer surface of the diseased mass is covered by the peritoneum, and, when the disease has extended far, is roughened by the partial projection of unequal, semi-transparent, cancerous cells. Whatever be the kind of cancer, the ulcer resulting from it has seldom, if ever, the repulsive smell which is so common in open cancer of other parts, and which is here doubtless prevented by the antiseptic and solvent action of the gastric juice on the sloughing surface of the sore.

The size of a stomach affected with cancer varies greatly, according to the site and extent of the diseased portion. When the disease is limited to the pyloric end, and, by obstructing or narrowing the pyloric orifice, or by preventing the free action of the muscular fibres, greatly impedes the passage of food into the duodenum, the stomach generally gets much enlarged,—in some protracted cases, so much so, that the pylorus falls into the right iliac fossa, and the great curvature of the stomach reaches almost down to the pubis. When, on the contrary, the pyloric orifice is not obstructed or narrowed, and a large portion of the body of the stomach is invaded by the cancer, the stomach sometimes becomes much contracted.

In those cases in which the pyloric orifice is obstructed, and the stomach has grown large, the mucous membrane in the larger end is frequently found much softened or digested after death. This change, which gives a clue to the cause of some part of the gastric disorder, arises, I need hardly say, from the circumstance that the stomach, in consequence

(a) See Walshe on Cancer, in which this Table is given.

of not readily emptying itself, frequently contains at the time of death some muriatic or lactic acid.

When cancer of the stomach has existed for some time, and reached the surface of the organ, the diseased mass often becomes agglutinated to the liver, or to a cluster of enlarged cancerous glands behind it.

The disease frequently proves fatal without extending beyond the stomach; but, like cancer originating elsewhere, it is apt, after a time, to become disseminated, and thus to give rise to secondary cancerous tumours in other parts of the body.

These secondary or remote effects of the disease vary with the kind of cancer.

In medullary cancer, and in scirrhous, the mesenteric glands in the neighbourhood of the primary disease, or to which the lymphatics of the stomach run, become first tainted with the cancer, and, after a time, numerous scattered cancerous tumours form in the liver. This extension of the disease is effected by the transfer of cancerous germs from the primary seat of disease through the lymphatics and the veins. It seldom happens that the disease becomes disseminated more widely. The wide diffusion of cancer is everywhere effected mainly through the veins, which serve as channels for the transfer of the cancerous germs; but the veins of the stomach all run to the liver, and the cancer-germs conveyed to this organ seem all to be stopped in the plexus of capillary vessels which goes to make up its lobular substance. None of them pass through the liver to form cancerous tumours in the lungs or other remote parts of the body.

In colloid cancer dissemination does not take place in this way. The germs of the disease are too large to be transmitted by the veins, and cancerous tumours do not form in the liver, as in other varieties of cancer. But, occasionally, small scattered tumours, or even considerable masses of colloid cancer, are found in the omentum and mesentery, and on the intestines, especially near their mesenteric attachment. These small tumours are sometimes under the peritoneum, and spring probably from germs transmitted through the lymphatics; in other cases, they grow on the outer surface of the serous membrane, and seem to result from the mere transplantation of germs detached from the surface of the original cancer. Now and then, in cases of cancer of the stomach, the uterus, or ovary, or rectum, is found affected with cancerous disease, which, as these parts are common seats of primary cancer, most probably arose, not from cancer-germs transmitted from the stomach, but from the constitutional disposition to cancer leading to cancerous degeneration of these several organs independently of each other.

In almost all cases, the cancerous disease that co-exists with cancer of the stomach is limited to the abdominal cavity. Of the causes of cancer of the stomach no more is known than of those of cancer of other parts.

A few instances are on record, in which a tendency to the disease was clearly inherited. The most striking instance is, perhaps, that of the Napoleon family. The Emperor Napoleon, his father, and his sister Caroline, are stated to have all died of cancer of the stomach. In the great majority of cases, however, no inherited tendency can be traced; the victim is the first of his family afflicted with cancer.

The disease is rather more common in men than in women, and, like primary cancer of the liver, hardly ever occurs before the age of 35. Cases are, indeed, now and then met with, in which it occurs much earlier in life. I have met with an instance of its occurrence in a woman at the age of 26. A case is related by Andral, in which a woman died of it at the age of 22, and in which the disease seems to have begun before the age of 20; but such instances are extremely rare. In nine cases out of ten,—probably in a much larger proportion, it comes on after the age of 35.

The disease occurs in all classes of society, from the emperor to the beggar; in the temperate as well as in the dissipated; in people who live in the country, as well as in those who dwell in towns. Indeed, no habits or conditions of life have as yet been shown to have any powerful influence in bringing it on.

The *symptoms* of cancer of the stomach have seldom any characters that are peculiar or especially significant, until the disease has existed a considerable time.

The first complaint is generally of a dull pain, or a sense of uneasiness at the pit of the stomach, which comes on gradually, without fever or other illness, and is always aggravated by taking food. This pain or uneasiness is attended with impairment of appetite, and with flatulence, heartburn, and other results of disordered digestion.

As the disease makes progress, the disorder of digestion increases. The patient usually loses all relish for food, is troubled with occasional eructation of a sour fluid, occurring at various hours of the day, and now and then, soon after meals, brings up, in the same manner, small quantities of food. He loses flesh, and, in most cases, becomes much depressed in spirits. Still he is free from fever; the pulse is no quicker than it should be; the tongue is clean, or only slightly furred; and there is no unnatural heat of skin, and no thirst.

The pain at the epigastrium and the disorder of digestion continue, but the symptoms vary in some degree according to the seat and extent of the disease. When the cancer involves the body of the stomach, and the orifices are unobstructed, vomiting, if it occur at all, occurs soon after meals, and what is brought up at a time is moderate in quantity, and consists of the secretions of the stomach and the food, or portions of the food, recently swallowed.

When, as happens much more frequently, the disease is confined to the pyloric end of the stomach, the pyloric orifice usually becomes obstructed, or narrowed, or the passage of the food through it is impeded by the restrained action of the muscular fibres. In such cases, vomiting is a necessary result, but it takes place later after meals than in the former class of cases; more is brought up at a time, and the matters vomited are very sour.

Several conditions,—undue retention of the food,—a scanty supply of gastric juice,—and the presence of unhealthy and decomposing secretions furnished by the cancerous surface,—conspire to promote in the contents of the stomach some unnatural fermentation, which leads to the formation of enormous quantities of acid, and often to an abundant evolution of gas. The acid irritates the stomach, and much additional suffering results from flatulent distension. Occasionally, and especially when a cancerous *ulcer* exists in the stomach, the food unduly detained there undergoes the butyric fermentation, or common putrefactive changes, and thus gives rise to fetid eructations and the other symptoms of "surfeit," which, from their infrequency in other chronic diseases of the stomach, are often important evidence of the existence of cancer. In many cases, perhaps in all those in which the body of the stomach remains sound, the obstruction of the pyloric orifice leads, after a time, to great enlargement of the stomach. When this has taken place, vomiting occurs, more rarely at the end of each day, or every two or three days, or at still longer intervals, and a great quantity is brought up at once, the matter ejected comprising the accumulated secretions of the stomach, and all the food not capable of absorption in the stomach that had been eaten since the last vomiting.

When, on the other hand, the disease involves the *cardiac* orifice, the entrance of food into the stomach is impeded. The act of swallowing causes pain, or a sense of uneasiness, at the epigastrium, passing through to the back; and very commonly a small portion of what is swallowed lodges in the lower end of the œsophagus, and is immediately or speedily brought up again by an effort of eructation rather than of vomiting. The patient himself is aware, that the food does not readily enter the stomach.

In all cases where much is rejected by vomiting, and but little, consequently, passes into the duodenum, the bowels become confined; but where the pylorus is not obstructed, the costiveness is interrupted now and then by a transient diarrhœa, produced by the irritating matters which pass from the stomach into the bowel.

When the cancer involves the body of the stomach or the pylorus, the matters brought up from the stomach, besides the natural secretions of the stomach and portions of the food more or less digested or otherwise altered by some fermentative process, often contain a considerable quantity of glairy mucus, secreted, for the most part, by the diseased portion of the mucous membrane. It sometimes happens, early even in the disease, that this mucus is mixed with black or brown flakes, consisting of blackened and altered blood. At a later period, and especially after ulceration has occurred, an abundant hæmorrhage not unfrequently takes place. A sense of weight or oppression at the epigastrium is then felt, with faintness and nausea, and a large quantity of matter

is vomited, which, according to the time the blood remained in the stomach, and the quantity of free acid the stomach contained, is of a soot-black, or of a dirty reddish brown, justifying its familiar comparison with coffee-grounds. This matter owes its peculiar colour to black or brown flakes, formed of blood that oozed from the diseased surface, and as it issued from the vessels was clotted and blackened by the acid secretions of the stomach.

But, before the disease has advanced thus far, the patient has generally lost much of his flesh and strength, and has the pallid and faded look so constantly seen in the latter stages of malignant disease. By careful examination of the belly, we may now generally feel an irregular tumour formed by the cancerous mass. The situation of this tumour, of course, varies with the site of the disease as regards the stomach itself and also, when the pyloric end is the part diseased, with the degree of displacement which the stomach has undergone.

When the disease involves the cardiac orifice, which does not admit of displacement, or when it occupies the body of the stomach without obstructing the pylorus, the tumour is necessarily in the place which the diseased portion of the stomach naturally occupies.

Most commonly, as we have seen, the disease involves the pyloric end of the stomach. In that case, also, the tumour is usually felt about the place which the diseased portion naturally occupies; but when the stomach grows large, and the diseased portion has not contracted unnatural adhesions to the contiguous fixed parts, the pylorus falls in the belly, and the tumour may be felt much lower down in the right side, and even in the right iliac fossa. The tumour is felt more or less readily and distinctly, according to the part it occupies. A tumour at the cardiac orifice of the stomach, which lies deep, directly behind the lower end of the sternum, so that the hand cannot be pushed against it, is much more difficult to define or to feel than one which is somewhat lower down in the belly. Deep-seated tumours can, indeed, in all cases be most readily and distinctly felt when they are near the middle of the belly, for the reason that the hand can there be pushed to a greater depth. If the linea alba be considered as a cord attached to two fixed points,—the lower end of the sternum and the pubes,—it will be plain that the middle of it is the place at which this can be pushed to the greatest depth from the straight line joining the two points.

Great enlargement of the stomach, which so constantly results from strictured pylorus, may be generally ascertained by an unusual resonance on percussion. Often, too, on looking at the belly, the outline, or part of the lower outline, of the distended stomach may be seen, and, if such examination be made day after day, this outline will be found to vary according to the degree of distension of the stomach at the time.

The tumour can be the more readily felt, and the outline of the stomach be the more distinctly traced, in consequence of the thinness of the walls of the belly, which results from the general wasting, and in consequence, also, of the bowels being generally empty and contracted. When the aperture of the pylorus is much obstructed, and but little, consequently, passes from the stomach into the duodenum, the belly, except where it may be raised by the tumour or by the distended stomach, is almost always sunk or hollowed. The intestines contain but little fæcal matter, and, notwithstanding the costiveness, are seldom distended with gas.

The course of the disease is in some degree further modified by the development of secondary cancerous tumours in other organs.

When the primary cancer is either scirrhous or medullary, the lymphatic glands near the stomach, and to which the lymphatics of the stomach run, become tainted, and secondary cancerous tumours sometimes form in the liver, leading to enlargement of the liver, and now and then to an unevenness of its surface, which, from the empty state of the bowels and the general wasting, can in most cases be readily felt.

The dissemination of gelatiniform, or colloid cancer, usually leads, as we have seen, to scattered masses of gelatiniform cancer over the peritoneum and omentum, and its most striking results are, distension of the belly and ascites.

While these organic changes are taking place, and revealing themselves more and more distinctly to our senses, the pain at the epigastrium continues, attended usually with pain in the corresponding part of the back, and in the loins, and the patient grows gradually thinner and weaker; he becomes, also, more irritable and morose, and his nights are restless. The loss of appetite is generally complete; but, even now, unless the cancer be in rapid growth, there is seldom fever: the skin is cool, the pulse not quicker than it should be, and the tongue clean, or only slightly furred.

After a time, usually varying from six months to two years, but occasionally, especially in colloid cancer, extending to several years, the patient, worn-out by want of nourishment, by pain, and broken rest, and, it may be, by loss of blood, dies of exhaustion; the mental faculties and the senses remain in most cases unimpaired almost to the last. Such is the usual course of cancer of the stomach. Cases, however, are now and then met with in which some of the most characteristic symptoms are wanting. Thus, in a person advanced in life, and where the cancer grows slowly, the pain, instead of being severe, or harassing, as it usually is, may be so slight that it is little, if at all, complained of; or the tumour, from being small, and at the back of the stomach, may not be felt; or, again, the disease may not obstruct the pylorus, and may involve only a small portion of the stomach, and vomiting may not be frequent enough to attract much notice.

The cases most difficult to distinguish as cancer are those in which the disease involves only a small portion of the hinder part of the stomach, and does not obstruct either of its openings. There are then, as in other cases, loss of appetite, more or less complete, progressive waste of flesh, and, after a time, the cachectic condition which cancerous disease so commonly causes, but, in other respects, the symptoms, even when ulceration has occurred, may differ but little from those of simple ulcer. The pain after food may, indeed, be less severe, and the vomiting less frequent, than in cases where there is a simple ulcer of equal size, because the raw surface is often less tender and irritable in a cancerous ulcer than in one occurring in healthy tissues.

Instances of this kind are, however, comparatively rare; and, in the great majority of cases, the disease follows more or less closely the course I have described.

The existence of cancer of the stomach is the more difficult to ascertain, from our not knowing its causes, or any circumstances in which it is especially apt to occur. It does not, indeed, often occur before the age of 35; but in persons beyond this age it is met with, and with no observed differences as to frequency, in all conditions of society. Rokitansky has remarked, that tubercle and cancer are seldom developed together, and seldom arise in succession, in the same person; and infers, that the constitutional states which favour the occurrence of the one disease, oppose the development of the other. It is not impossible that future observation may disclose some unsuspected relations between cancer and other forms of disease, and point out even some more direct indications of the cancerous diathesis; but, at present, we have no light of this kind to guide us. In persons, therefore, beyond the age of 35, there are no circumstances that give unusual significance to symptoms; and, until the disease has lasted some time, the symptoms, as we have seen, have seldom any characters that are peculiar or especially significant. Pain or uneasiness, referred to the stomach, and increased by food, sour eructations, occasional vomiting, and lowness of spirits,—which are often the only symptoms noticed for some weeks, or even months,—may all arise from simple ulcer of the stomach, and from many other conditions.

After some time the disease is easier to detect. The circumstance that the symptoms have continued, or, rather, that they have got gradually worse; that the pain has become more harassing, and the vomiting more frequent,—in spite, it may be, of a restricted diet, and of other means which usually relieve such symptoms, when they are the effect of superficial inflammation of the mucous membrane, or of mere functional disorder,—the circumstance, I repeat, of this continuance, or rather of this aggravation of the symptoms, leads to the inference, that they result from organic disease; while the progressive loss of flesh, and the faded look, and often a morbid moroseness or despondency, must excite a strong suspicion that this disease is cancer. Such a suspicion will be confirmed if much mucus, especially mucus mixed with brown or black flakes, should be thrown up from the stomach. When the mucous membrane is invaded by cancer in considerable extent, this frequently happens; but in simple ulcer of the stomach, the disease most likely at

this time to be mistaken for cancer, it happens but rarely. In cases of simple ulcer, indeed, the disease is limited to the ulcerated spot; the mucous membrane in other parts of the stomach, even up to the edge of the ulcer, being usually healthy.

After the disease has existed for some months, and the patient is much wasted, a tumour may, in most instances, be felt in the region of the stomach. When such is the case, and when the discovery of the tumour has been preceded by the symptoms I have mentioned, and the patient is of an age when cancer of the stomach is common, little doubt can remain that the disease is cancer. Vomiting of a large quantity of matter of a soot-black or dark brown, like coffee-grounds, which, as I have already observed, often happens in advanced stages of cancer, would, of course, render this inference still more sure.

In a person who has led a temperate life, the same inference may be drawn when, without any palpable tumour, the symptoms show clearly that the pylorus is much obstructed. Stricture of the pylorus sometimes results, as we have seen, from the hardening and contraction of lymph, poured out in consequence of inflammation, in the cellular tissue under the mucous coat; but this disease, like cirrhosis of the liver, which is likewise caused by the interstitial deposit of coagulable lymph, is almost always the effect of spirit-drinking. Stricture of the pylorus may be caused, too, by the cicatrisation of a simple ulcer at the pyloric end of the stomach, or in the upper part of the duodenum; but such an event is extremely rare, compared with stricture of the pylorus from cancer; and when it does occur, the symptoms which preceded those of stricture, and sometimes the age of the patient, help us to distinguish the disease from cancer.

In distinguishing cancer of the stomach, it is also very important to consider the time the disease has already lasted, and the actual condition of the patient with reference to it. In cancer, the disease makes continual progress, the patient grows gradually thinner, and, in three cases out of four, dies of exhaustion within twelve months; in a very large proportion of cases, within two years. Simple ulcer of the stomach, the organic disease most likely to be confounded with cancer, may, on the contrary, exist for many years, causing almost constant, and even severe, suffering, but without destroying the appetite, or producing much waste of flesh. If the disease, therefore, has existed for several years, or even for many months, without much loss of flesh, the chances are greatly against its being cancer.

In some cases it is possible, after a time, not only to tell that the disease is cancer, but also to specify the particular kind of cancer.

The different kinds of cancer differ in their rate of progress. Medullary cancer grows much more rapidly, and becomes sooner and more widely disseminated than scirrhous and colloid cancer.

They differ, also, in leading to the formation of secondary cancerous growths in different organs. Scirrhous and medullary cancer, when they become disseminated from the stomach, usually give rise to cancerous tumours in the liver, and thus cause enlargement of the liver and other symptoms of primary cancer of this organ. Colloid cancer, on the contrary, when it becomes disseminated, leads to secondary cancerous tumours in the mesentery, but very seldom to the formation of any similar tumours in the liver.

The different kinds of cancer differ, moreover, in the degree of pain and constitutional disturbance they occasion. Medullary cancer and scirrhous cause much more pain and constitutional disturbance than colloid cancer, which, when it involves the pylorus, generally causes death by its mere mechanical effect in obstructing the passage of food.

If, therefore, after the disease has lasted some months, the liver grows large, and there are other symptoms indicating the existence of cancerous tumours in it, the inference may be drawn, that the cancer is medullary or scirrhous; if the disease make very rapid progress, that it is medullary rather than scirrhous.

If, on the contrary, the disease progresses slowly, and causes little pain that is not fairly attributable to distension of the stomach and little constitutional disturbance, and if, at the end of twelve months, there is no enlargement of the liver, the inference will be, that colloid is the variety of cancer. This inference will be confirmed if ascites or any other symptoms should render it probable that there are secondary cancerous growths in the peritoneum or omentum.

In cancer of the stomach, the chief object of treatment is to lessen the sufferings of the patient.

One of the most effectual means of doing this is by properly regulating the diet. In this disease there are, as we have seen, many conditions,—the destruction of a portion of the digesting membrane by the cancer, the decomposing or unhealthy secretions furnished by the cancerous surface, the impediment to the natural movements of the stomach which the disease causes, and, very frequently, obstruction of the pyloric orifice—which tend to prevent the healthy action of the stomach, and give rise to various disorders of digestion that terribly aggravate the sufferings that are directly attributable to the cancer itself.

It is obvious, when such impediments to healthy digestion exist, that the digestive power should never be over-taxed, and that great care should be taken that the food required to nourish the body is reduced to its most easily-digestible form.

When the pylorus is obstructed, the solid food should be reduced to a state of pulp, so that, if not dissolved in the stomach, it may pass with the least possible difficulty into the duodenum.

In advanced stages of the disease, when a large portion of the stomach is involved in the cancer, and its digestive power is greatly impaired, the food should be such as will pass readily through the pylorus, and can undergo some kind of digestion afterwards. Arrowroot, and other light farinaceous food; beef-tea or nicely prepared soup; the yelks of eggs beaten up with sugar and with cold arrow-root that has been boiled in water, and then mixed with water and wine; and a small quantity of the cooked pulp of some fruit,—are the substances of which the diet should mainly consist.

Much alleviation of suffering may also result from the judicious use of medicines.

When, for example, much mucus is secreted in the stomach, or when, as seems sometimes to happen, the irritation of the cancer causes an excessive secretion of gastric acid, benefit often results from the astringent action of bismuth, which is best given a short time before meals.

When there is an excess of acid, much relief is obtained from neutralising this by lime-water and magnesia. While there is a great excess of acid in the stomach, there is usually a repugnance to food; but the disposition to take food, and some power of digestion often return, when the excess of acid has been neutralised by a dose of magnesia. The excess of acid commonly results from a process of fermentation in the stomach, which leads also to the generation of carbonic acid, or some other gas; and the acid and the gas together bring on vomiting. The fermentation may be impeded, and the evils resulting from undue acidity and flatulence, be to a certain extent prevented by brandy, and by dill-water and other aromatics, which may be combined with bismuth, or with alkalies, when these are necessary.

When there are fetid eructations, indicating the development of sulphuretted hydrogen, pills, containing small doses (from $\frac{1}{4}$ to $\frac{1}{2}$ minim) of creosote may be given with advantage at each meal; or a few grains of the bisulphite of soda, which has lately been recommended in the vomiting of sarcinæ, or some finely-powdered wood-charcoal.

It is requisite, also, to obviate constipation, which is a very common effect of cancer of the stomach, and which almost always renders the patient more irritable and uneasy than he otherwise would be. The best way to obviate constipation is to give occasionally an aloetic, or a compound colocynth pill. The pill does not oppress the stomach by its bulk; and aloes and colocynth, which exert their chief action on the large intestine, are less apt to offend the stomach than most other purgatives.

Again, cancer of the stomach, especially when far advanced, causes loss of sleep, harassing pain in the stomach and back, and much nervous irritability; and, to mitigate these evils, recourse must be had to sedatives and narcotics. These may be given singly, or in various combination, according to the particular object in view, or the effects which they are found to have on trial. To procure sleep, no other sedative is so efficient as opium. To alleviate pain, and to allay general nervous irritability, the medicines most in repute, and probably the best, are conium and belladonna, which have the additional advantage of not confining the bowels and checking the secretion, as opium does.

Proper regulation of the diet, the well-timed use of alkalies and sedatives, prevention of constipation by pills of colo-

cynth or aloes, and avoidance, as much as is possible, of conditions which exhaust the strength, are the principal means we have to alleviate suffering and prolong life. In many cases the relief, even from the most judicious employment of these means, is comparatively small. The cancer gradually spreads, everywhere changing the coats of the stomach as it creeps on, and blending them with its own mass; and, at length, by blocking up the pylorus, or by greatly impairing digestion, and, also, in many cases, by causing hæmorrhage, exhausts the strength of its victims.

It is clear that such results (and it is not in our power to prevent them) cannot be produced without much suffering of various kinds.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. IV. (Concluded.)

EXTRACTS FROM A REPORT ON SCARLATINA IN HER MAJESTY'S SHIPS AGAMEMNON AND ODIN, IN 1853.

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SYMPTOMS.

The accession of the disease was in many cases insidious, the men denying that they were ill; but the after-symptoms were, even in the slightest, and at first dubious cases, often as severe as in those that were well-marked from the first. In a great proportion, the pyrexia on the first seizure was decided, and was ushered in by rigors or shiverings, and followed by increased heat. In a few, the first symptom was what the patients denominated a stunning sensation in the head; and, in two or three, there was for an hour or two, at the commencement, loss of consciousness. In one of the relapses which occurred on board the Agamemnon, the man, who believed himself to be at the time in perfect health, fell down in a state of collapse, insensible and with a livid skin, in which state he continued for half-an-hour, when febrile re-action took place, and a vivid eruption on the skin followed. Three somewhat similar cases occurred in the hospital, two being women and one a man, in the wards appropriated to the healthy visiters.

The redness of the skin varied greatly in intensity; but, in a greater or less degree, it was present for a time in every case. In the majority, it was merely a faint blush, which did not readily catch the eye until the fingers were laid on the skin, when a gentle pressure removed the increased vascularity from the spot, to return immediately after the hand was raised. In comparatively few, the eruption was as vivid as it is in ordinary scarlatina, and between these extremes every gradation occurred. It was generally most visible on the upper part of the chest, often very conspicuous on the back of the hands, wrists, and legs, and seldom so evident on the belly as elsewhere. Rarely was it bright on the face, though it was so in a few instances. Its medium duration was about three days, during which period it frequently faded in the morning, and became deeper and more general in the evening. It was seldom observed in blotches, and never figured. When the febrile symptoms were kept up by the presence of inflammatory action in the head, chest, or abdomen, the eruption often recurred for three weeks or more, at intervals of various length. In one of the patients who was sent to Melville Hospital, and who died there, the eruption was said to be of a dark, purplish-red colour.

Desquamation took place between the fourth and the ninth day, in form of a minute scurf, which, in a great majority of cases, was so little apparent as to be wholly overlooked. If closely questioned, however, the patients mostly admitted that they had an itching of the skin during that period. In several instances, however, and especially in two of the females, the desquamation was more extensive, and the cuticle of the fingers and toes continued to peel off for several weeks.

Well-marked œdema did not occur in above three or four cases.

A constant symptom was an erysipelatous redness of the fauces, most generally confined, in the first instance, to the uvula and edge of the velum, but, in process of time, occupying the posterior fauces, which, after some weeks, often became granular, or showed aphthous specks. The redness did not generally spread forwards on the roof of the mouth, but terminated by a defined transverse line; though, in a few cases, the whole inside of the mouth was inflamed. Almost always on the accession of the disease, the tip and edges of the tongue showed a mulberry-like granulation. The local erythema of the fauces, as it might be termed, after the subsidence of the fever, was the most enduring of the symptoms, in some of the cases continuing for more than three months, and, while it lasted, the patients affected with it were subject to attacks of smart pyrexia, with redness of the skin, on incautiously exposing themselves to the atmosphere in cold, raw, northerly, or north-east winds. The best marked of these relapses, or second paroxysms, occurred generally between a month and six weeks after the first; but, in some instances, there were two such relapses; and, in a few, three or even more; the latter cases, however, being confined to patients affected with tuberculosis, or palpitation of the heart connected with a rheumatic diathesis. Gargles had little permanent effect on this erythematous condition of the throat, each new application producing some temporary improvement, but failing to procure lasting amendment. Tannin, borax, chloruret of soda, chloride of zinc, and nitrate of silver, were used in succession. The patients themselves experienced so little uneasiness from the state of the fauces, that they generally denied having a sore throat at all. It was only in the few cases in which the tonsils were enlarged that any difficulty of swallowing was complained of.

Cough was a very common, almost a universal, symptom; and, being unattended by expectoration, was, in the uncomplicated cases, seemingly caused solely by the irritation of the inflamed uvula, or by its elongated œdematous condition at a later period.

In very many of the cases, the pyrexia was strictly ephemeral, the pulse having subsided from between 90 and 120 or 130 down to the natural standard on the day after the attack. In some, a small and very frequent pulse continued for many days, though the patient declared himself to be quite well, and had an excellent appetite; but, eventually, most of these cases showed more or less decided indications of tubercular deposit in the lungs. The heat of the skin was seldom much augmented beyond the natural standard, and never for long; and in no case did the skin give that dry, burning sensation to the hand which is perceived in scarlatina simplex of a more intense form. On the contrary, there was very generally a tendency to moisture of the skin; and, in a few, the accessional fever went off with profuse sweating. The continuance of the eruption was not coincident with the duration of the fever, as it often remained visible for some days with a pulse at the natural standard, and the appetite for food and powers of digestion unimpaired. The eruption of the skin seemed, in fact, to sympathise more with the erythema of the fauces than with the state of the circulation. . . . . .

No death occurred on board, nor in Haslar Hospital, from the direct agency of the uncomplicated epidemic; and I am unacquainted with the particulars of the single fatal case among the scarlatina patients sent to Melville Hospital. Three of the men, however, received into Haslar for scarlatina, have died of other complaints up to the present date (June 20); and, from the progress of some of the phthisical cases, others are likely to be added to the number in the course of a few months. The first of these fatal cases was that of an ordinary seaman, 19 years of age, who was attacked by the epidemic on the 19th of March, and had extensive pneumonia of both lungs from the commencement. He was seized with a degree of trismus and retention of urine, requiring the use of the catheter on the fourth day; and he died on the nineteenth day of his illness. In addition to hepatization of both lungs, a *post-mortem* examination disclosed an almost scirrhous hardness of a portion of the parietes of the abdomen above the pubes, with disintegration of its central part, the result, it was supposed, of an injury received some months previously.

A boy of 16 years of age was the next of the scarlatina cases who died. This lad had a more vivid eruption than usual in the epidemic; pneumonia developed itself on the fourth day, and went on to the stage of grey hepatization; he became greatly emaciated, and, notwithstanding every care, and the use of a water-bed, sphacelation of the hip

took place, and he finally died sixty-eight days from the date of the first attack.

The third fatal termination took place in the case of an able seaman, aged 23, who was phthisical when attacked with scarlatina. Symptoms of pneumonia occurring at the first were subdued by bleeding, but he died of pure phthisis upwards of three months after his admission into the hospital.

With respect to the susceptibility of the contagion, the "ordinary" and newly-raised "able-seamen" from the merchant service were, as has been already mentioned, the most ready subjects of the epidemic; and the boys, who are usually most prone to receive the contagion of scarlatina, were more tardily attacked. Under the superintendence of the seaman's schoolmaster and master-at-arms, the daily ablutions of the boys were carefully attended to.

Exposure to cold weather in the night watches, from which the seamen were exempt in port, may account for so many marines and marine artillerymen being attacked, and also for the greater prevalence of diseases of the respiratory organs among them.

Of the activity of the contagion there was abundant evidence. One midshipman who went on board for an hour while the ship was lying at Spithead, and then left her on leave of absence, had the scarlatina after reaching his home. A washerwoman who handled the clothes of the first party that was received into the hospital, and five nurses employed in the scarlatina wards, were attacked with the disease, also one seaman belonging to the party of "visiters," who, having intruded into one of the infected wards, was caught there, and detained in quarantine. None of the nurses of the other wards were affected. The fresh cases occurring in the Agamemnon after the return of the convalescents the first time, seem also to prove that relapsed cases were likewise contagious.

In regard to the number of relapses, they took place in 114 patients in the hospital, and 48 were sent back from the ship, making together 162. Some of these patients who remained long in the hospital had a second relapse, or third paroxysm well marked; without reckoning the occasional accessions of fever in the phthisical cases, accompanying temporary attacks of pneumonia, or the more regular paroxysms of tertian ague mentioned above.

An official letter from the surgeon of the Agamemnon, dated at Lisbon twenty days after the ship sailed from Portsmouth, states—"That owing to continuous wet weather after leaving England, and exposure of the crew in their night watches, catarrhal complaints, and a disposition to a recurrence of the symptoms of the recent epidemic scarlatina became apparent among the ship's company; I consequently addressed a letter to Captain Sir Thomas Maitland, suggesting the propriety of proceeding into harbour, which suggestion was carried out with good effect, there being only 15 cases of catarrh under treatment at this date, two of them exhibiting symptoms of scarlatina. I have, therefore, reason to expect from the improvement already made, that a little fine weather, hitherto denied to us, will have the effect of reinstating the health of the crew." The Agamemnon subsequently went on a cruise to the southward, and returned to the anchorage at Spithead on the 18th instant (June), with the crew in perfect health.

From a Return of patients sent to Haslar Hospital from the Agamemnon, for scarlatina, between the 11th of February and the 26th of April, 1853, it appears that the numbers were—Received, 336; cured, 258; invalided, 45; died, 3; remaining, 30.

Of the 45 invalided, having become unfit for further service, the following were the causes of their unfitness:—Phthisis, hæmoptysis, and tuberculosis, 35; epilepsy, 8; other diseases, 2: total, 45.

Of the 30 remaining in the Hospital, the diseases which accompanied or supervened upon the scarlatina, and for the treatment of which they are still retained in the hospital, were as follow:—Phthisis, hæmoptysis, and tuberculosis, 23; epilepsy, 1; rheumatism, 3; other diseases, 3: total, 30.

Scarlatina of a similar character to that described above became epidemic on board the Odin, another screw-steamer of war, of much smaller dimensions and complement. Some brief intercourse, by means of boats' crews, had taken place between this ship and the Agamemnon, on the day of the arrival of the latter at Spithead from Sheerness, but for nearly two months communication between them had been entirely cut off, when, on the 4th of April, a man was sent from the Odin to the hospital for influenza, but was found on his being received to have all the characteristic marks of the Agamemnon's epidemic, and no catarrhal affection other than the cough which the inflamed velum palati excited in all the cases. On the 7th of the month, 3 more scarlatina cases were landed from her; on the 8th, 6; on the 9th, 10; and on the 11th, 29; making in all 54, up to the evening of that day, when she sailed for Portugal, by Admiralty orders issued in pursuance of the recommendation of the Director-General. The surgeon of the ship stated that the man first sent to the hospital had been on shore, on leave of absence, that the four men taken ill on the 7th were in the same mess, and that those seized on the 8th were members of the adjoining mess. He mentioned, moreover, that some men showing similar symptoms had been treated on board for influenza, prior to the 6th, and were then well. A boy who had been sent from the Odin to the hospital, on the 24th of March, for syphilis, and confined to bed in the surgical wards from that date, was discovered on the 28th to have the scarlatina eruption and inflamed fauces. Deputy-Inspector Lindsay's attention was drawn particularly to him, by his complaining of heat of the skin, and thought from the boy's description of his symptoms that the eruption had most probably come out on the preceding day. No one from the infected wards had entered the one in which this boy lay, if the testimony of the nurses, very positively given, may be relied upon. There is, therefore, a strong presumption that he had imbibed the contagion before coming on shore.

The cases received from the Odin presented precisely the same symptoms as those from the Agamemnon, except that several of them had inflammation and enlargement of the tonsils; but they almost invariably exhibited also the peculiar erythema of the velum, which came to be regarded by us as a diagnostic symptom. In a considerable proportion of them the cutaneous efflorescence was bright, and general desquamation followed.

From a Return of men sent to Haslar Hospital from the Odin, for scarlatina between the 6th of April, 1853, and the 19th of May following, it appears, that of 61 received, 41 were cured, 2 invalided, and 18 remained.

In regard to the treatment pursued in this epidemic, a very few words will suffice. For the cases of simple scarlatina no medicine was, in fact, required, except the applications to the fauces that have been already spoken of. Warmth gave the greatest relief, and, when the patients could be induced to remain quietly in bed, recovery was very speedy; but the febrile symptoms were either prolonged or brought back, and the erythema of the velum, with the cough it induced, aggravated by a very short exposure to a current of cold air. Rheumatism was also an accident that occurred to a number from such exposure. The cases that were complicated with pneumonia or pleuritis, were treated in the ordinary antiphlogistic way, there being no asthenic tendency to forbid evacuations, or a depression of the circulation by antimonials. Bleeding by leeches, however, was more generally resorted to than blood-letting from the arm.

On referring to the history of the epidemics of the middle ages by Hecker, I have been struck by the similarity of many features of the scarlatina of the Agamemnon to those of the sweating sickness. They resemble each other in their origin after extremely humid seasons, in the ephemeral duration of the febrile paroxysms, in the tendency to relapse a second or a third time, in the danger of checking perspiration by exposure to cold, and in the beneficial effects of moderate warmth. In other respects there are great dissimilarities; indeed, epidemics occurring in such widely different states of society, are not likely to have a close resemblance to each other. No eruption is mentioned as marking the fatal epidemic of 1485, nor any affection of the fauces, but at a period when scarlatina had not as yet been described, such symptoms might be readily overlooked in a malady ushered in by violent fever and profuse sweating, which hurried its victims to the grave in twenty-four hours. The skin, in the scarlatina of the Agamemnon, had almost always a tendency to moisture as soon as the rigors and shiverings had passed off; but, except in the comparatively few cases in which intense headache was a symptom, and in those wherein the patient having previously had ague, the paroxysms of that disease returned with the scarlatina, there was no profuse sweating. Neither did the extraordinary mortality of 1485 attend the recent epidemic, but it is rather

with the milder visitation of the sweating sickness in 1506, when there were few fatal cases, that I would make the comparison.

Addendum.—Since the above paper was drawn up, scarlatina has appeared on board H.M.S. Edinburgh, lying at Spithead, the contagion having been brought in her from Plymouth, where the first case occurred. It prevailed chiefly among the boys. Having been, since the 22nd of June, in a distant part of the country, on leave of absence, I saw only part of the cases at their commencement; but the following extract from a letter of Dr. Baikie's, Assistant-Surgeon, will suffice to show, that in this ship the epidemic was altogether of a slighter character:—"Scarlatina is completely on the decline. All the Edinburgh's cases were mild, and out of 56 there were only about 10 relapses. The great part, fully one-half, are now discharged to duty. The sore throat in them is less persistent, and seldom of so bright a strawberry colour as in our former cases." During upwards of fifteen years that I have had charge of the medical wards of Haslar Hospital, boys and young men affected with scarlatina have been often sent from the ships in harbour to the hospital; but until this year the disease has never spread in any one ship to more than five or six cases, the progress of the contagion having always been arrested by the early removal of the affected.

ON EXCISION OF THE KNEE-JOINT.

By HENRY SMITH, Esq.,
Surgeon to the Westminster General Dispensary.

The greatest triumph, perhaps, achieved by what was first so appropriately termed by the Surgical Professor of King's College, Conservative Surgery, is the substitution of excision of the elbow-joint for the ordinary operation of amputation in cases of incurable disease of this articulation. There is not any one to be met with now who would call in question the correctness of this assertion, or who would, at least, affirm, that excision of the elbow is not a far preferable proceeding to that of amputating the greater portion or the whole of the arm. Yet, when it was at first recommended to the Profession, there were not wanting surgeons who ridiculed the operation, and who attempted to prevent its adoption. Every one acquainted with the history of this part of his profession knows that the man who rendered himself one of the most conspicuous, both by example and precept, in favouring the spread of conservative surgery, was at the first a most strenuous opponent of the operation in question; but Mr. Liston lived sufficiently long to alter his opinion on this subject, and, for some years before his death, he was an ardent advocate of a measure which will ever reflect honour upon the names of Park, Moreau, Crampton, and Syme.

Possibly and probably, the cause of the rejection of this proceeding, by Mr. Liston and by other surgeons, was, that, in the earlier instances of its performance, the success attending it was not so great as was anticipated. The operation of excision was found to be a more difficult and tedious affair than the straightforward and rapidly performed amputation; and, in those cases where recovery did take place, the convalescence was protracted, and it was sometimes found necessary to amputate the arm after a large share of skill and attention had been shown in the treatment subsequent to the first operation. I am now occasionally seeing a case where the operation of excision of the elbow was performed. The parts have entirely healed, but the limb is almost entirely useless; and I do not doubt that, some day or other, the patient, who is a middle-aged female, will want her arm taken off.

The question of the propriety and superiority of excision of the elbow being set at rest, it was but natural that surgeons should turn their attention to similar modes of proceeding in the other joints of the body. Disease in the knee was found to be a more serious and more frequent affection requiring amputation than even that in the corresponding part in the upper extremity. And it would have been surprising if the same surgeons who rendered themselves conspicuous in applying the resources of conservative surgery to the upper extremity had not made an attempt of applying the same to cure the affections of the lower. Park, Moreau, Crampton, and Syme, each did make the experiment, but, from circumstances which cannot be explained, and from causes which a writer on the subject cannot sufficiently understand, these eminent men have not repeated the attempts often enough to enable us to come to any just conclusions on this subject; and it remains for the surgeons of the present day to furnish those data which were wanting before, and to decide a question which is of an important nature, both in reference to the character of surgery itself, and the welfare of those numerous individuals who suffer under disease of the knee-joint.

This question is now in a fair way of being settled, as, since a new impulse was given to it by Mr. Fergusson, in 1850, a considerable number of operations of excision of the knee-joint has been performed, and the success has been such as to lead to its repeated adoption; and it is by no means unlikely, that it will become among surgeons a recognised operation, although it will doubtless have to struggle against difficulties which beset all proceedings of a novel and unusual character.

It is impossible to come to a correct conclusion respecting any surgical proceeding of this kind, unless every case bearing upon the question, whether successful or otherwise, is submitted fairly to the Profession.

Although, during the last two years, many cases of this operation have occurred in various parts of Great Britain, as far as I am aware of, three instances only have been met with where it has been performed in London. I had opportunities of seeing each, as they were under the care of Mr. Fergusson, in King's College Hospital. The results of these experiments in conservative surgery are by no means of an encouraging nature, as two out of the three patients died from the direct interference of the surgeon; nevertheless, as it would be out of the question to come to any conclusion respecting the merits of any operation, even if there were not other instances to guide us, they will serve as a valuable addition to the data which are being collected by others.

I will relate the case operated upon last. It is as follows:—

Emma Saville, aged 28, unmarried, admitted into King's College Hospital, January 22, 1853. Eleven years since, while performing the duties of a very laborious situation as housemaid, she first began to notice that her left knee became swollen, and felt more weak than the other. She sought surgical advice, and the symptoms were removed by the remedies employed; but from time to time the knee got weak and swelled, and did not remain sound for a length of time together.

About three years since, one of these attacks occurred, and she began to feel considerable pain in the knee-joint; she was consequently compelled to leave her situation, and to go into an hospital, where she remained three months, after which period she was discharged greatly improved. Two years ago she sought assistance in this hospital, the knee having become worse again; she, however, only remained in the house one month. She returned to her home, and since then has been compelled to lie up altogether.

Appearance on Entry.—Left knee much larger than the right, the chief difference being over the head of the tibia. The joint is bent outwards, as though there had been a partial dislocation. Considerable pain is experienced through the joint, and is much aggravated in the night. On rubbing the bones together, a very distinct grating is experienced; any attempt at motion on the part of the patient gives intense pain. There is no disease whatsoever of the soft parts, and the swelling is not great, and there does not appear to be any, or at least any quantity of, fluid within the joint. Her general health is weak; she has lost much flesh, and the countenance is of a sallow and unhealthy appearance; sleep is prevented at night by the pain.

The patient was placed under the treatment ordinarily adopted in such cases; the limb was bandaged from the toes, and was placed upon a splint, and perfect rest was enjoined. Under this treatment, the patient experienced relief from pain, but permanent benefit did not result; the patient continued in her weak state of health, and became most anxious to have some operation performed, but refused to undergo amputation. It was therefore determined upon to perform excision.

Saturday, April 2, 1853, 2 p.m.—Excision of the knee-joint was performed by Mr. Fergusson. He did not remove any of the skin, as in the instance next related; but more of the femur was taken away, in consequence of the periosteum being stripped off from the bone for some inches. There was a considerable amount of disease in the joint; the cartilages

had entirely disappeared, and it contained a quantity of cheesy, strumous material. The head of the tibia was more implicated than any other portion. There was only slight bleeding during the operation. The wound was united by sutures; wet lint was placed over it, and the limb was enclosed in a proper apparatus, and suspended on the swing splint; and the patient was ordered half a drachm of laudanum.

3rd.—Has had much pain and starting in the limb at night; pulse 160; had only slept one hour.

4th. Slept better last night, and is in less pain to-day; pulse 140; to have effervescing draughts, with morphia every four hours.

5th.—Has no pain in the limb; pulse 130; slept two hours in the night, being much disturbed by a patient dying in the ward. She has been taking beef-tea and brandy every few hours since the operation. The wound was dressed yesterday afternoon, and was found to be looking remarkably well, and the limb lay in good position; she did not suffer pain from the dressing; her bowels have been opened twice by castor-oil; pulse 130; tongue dry; complains of thirst.

6th.—Pulse 110; no pain in the limb; good healthy pus coming from the wound; slept pretty well.

8th.—Since last report, the patient had continued much about the same. Yesterday, however, she fainted two or three times, and to-day she looks pale, and coughs. There is a small sore over the sacrum, and this annoys her much.

Amadou plaster and cotton wool to be applied over it.

9th.—More cheerful to-day; pulse 125; appetite better, takes nourishment well; but she still coughs very much.

On the 11th, there were more serious symptoms of mischief; the tongue became brown and dry; pulse 130, and countenance anxious. The cough became more harassing, and could not be relieved by the remedies used.

On the 14th, the symptoms continuing, she had a severe rigor; the respiration became rapid; and the countenance had the unmistakeable appearance of one labouring under the effects of purulent absorption. From this day, she gradually got worse; and, in spite of all the remedies, stimulating and otherwise, died at seven o'clock on the 18th. During this time the wound looked healthy, and the discharge was of a good character.

Unfortunately, a *post-mortem* examination was not allowed by the friends; but, although the cause of death could not be positively affirmed, still it is pretty evident that this patient died from purulent infection. Mr. Fergusson, however, managed to examine the parts in the wound, about forty-eight hours after death, and found them in a flabby condition. The ends of the bones looked unhealthy, and the periosteum was easily stripped off.

The next case, and the one which has turned out successful, is as follows:—

Ann Goring, aged 20, an unmarried female, of rosy complexion, well-nourished, and apparently suffering little from constitutional disturbance, was admitted into King's College Hospital, under Mr. Fergusson, April, 1852. She had disease of the left knee-joint of a severe character, of six months' duration. The joint had first become swollen, then painful, and previous to her admission the swelling had increased much.

At this period the knee was largely and universally swollen, and the pain in it was intense at night. The limb was placed upon a straight splint, and an issue was made on each side of the joint.

These and other measures were tried for some length of time; but the swelling of the joint gradually increased, and it became evident that there was a considerable quantity of fluid within. At the latter end of August, Mr. Fergusson made a small puncture into the joint, and a quantity of turbid serum flowed away. This proceeding neither did good nor harm; the symptoms continued as before, but without much damaging her health. She was accordingly placed under the influence of mercury. This did no good; and, although the swelling of the joint and the pain continued, the girl looked so well, and her age was such, that more than one of Mr. Fergusson's colleagues doubted whether there was any serious disease in the joint or not, and seemed inclined to think that it was more of an hysterical character, and were accordingly averse to any operation. However, although Mr. Fergusson himself had no doubt of its nature, he, to satisfy others, had the girl placed under chloroform, and then rubbed the ends of the bones forcibly together, when very distinct grating was felt. A few days afterwards, viz., on the 30th of October, Mr. Fergusson performed resection of the knee-joint, by making an H incision over the joint, raising the upper and lower flaps thus made, and then sawing off the ends of the bones forming the joint, and taking away the patella. The amount of disease in the joint was very great; all the articular surfaces being deprived of their cartilages, and the extremities of the bones themselves being soft. After the operation, the limb was placed in a straight-channelled splint, with a foot-board made for the purpose, and the whole was then hung in Salter's swing-apparatus.

It would be useless and tedious to give the particulars of this case during the treatment, which was of a very protracted nature.

She suffered somewhat severely for the first few days after the operation; but, at the end of the first week, she was described in the dresser's book as "cheerful," and "takes her food; no pain in the limb; pulse, 100."

On the 21st of November, the remark is, that "the ends of the bones are in close apposition, and covered with healthy granulations, while the external wounds are healing rapidly.

On Dec. 7th, after variable suffering on her part, Mr. Fergusson discovered a large abscess over the upper end of the tibia, and evacuated an immense quantity of purulent matter, which gave great relief. On the 30th, two more large collections of pus were evacuated.

On Jan. 25 she could turn the whole limb together as she lay in bed. Anchylosis was taking place, and she was in a fair state of health.

On Feb. 3 she unfortunately got attacked by erysipelas, which spread over the whole limb. She lay in a most precarious condition for many days; but, by the constant care and attention shown by Mr. Lawson, the House-Surgeon, she rallied slowly, and recovered; and—as often happens after erysipelas has attacked a wound—the healing process went on more rapidly in the knee, but the limb became very œdematous, for which bandages were continually applied.

Early in April the girl was enabled to get about on crutches,—the consolidation of the bones going on,—the limb becoming firmer at the cicatrix.

This young woman is now restored to vigorous health; she walks about by the aid of crutches, and can plant her toes upon the ground; can swing the limb freely backwards and forwards. She has not yet been permitted to wear a high-heeled boot, but an apparatus is in the course of being manufactured for her, and doubtless, with the aid of this, she will be enabled to move about freely.

The other case in which this operation was performed by Mr. Fergusson, occurred in the summer of 1850, and the particulars published by myself will be found in the *Medical Times* for Aug. 31 of that year; but it will be well to refer to them again in this place.

The patient was a man aged 21, of slight stature, and had suffered with disease of the knee for three years. The more acute symptoms had subsided. The joint was swollen to some extent; the limb was fixed in a slightly-flexed position, and could not be moved without great pain; the skin was not at all diseased. The operation of excision of the knee-joint was performed by Mr. Fergusson on Saturday, July 20. The patient progressed pretty well until the 23rd, when he had a rigor, which was followed by feverish symptoms; the shivering fit was repeated on several occasions, diarrhœa set in, and the man died ten days after the operation.

On examination after death, the internal organs of the body were found to be in a healthy condition, but the extremities of the femur and tibia were in a state of acute necrosis, pus being diffused through the medullary cavity of the former to the extent of three inches.

Now, it cannot be denied that, in looking at these three cases by themselves, we should be naturally inclined to judge very unfavourably of such a proceeding,—two deaths to one protracted recovery being a serious consideration; but it is not right to come to hasty conclusions respecting any surgical proceeding which may supersede the severe mutilation of amputation, from limited data. If surgeons had drawn conclusions concerning other severe measures, from the results of only a few cases, how often would it have happened that some of the most useful and brilliant operations of surgery would have been rejected as altogether disastrous and unjustifiable. I would instance the common operation of amputation of the thigh,—the ligature of large arteries for aneurism,—or the most uncertain of all, viz.,

lithotomy. Sometimes it will happen that case after case of these operations turn out badly in the hands of the most careful and experienced men, for certain conditions obtain, and particular accidents arise, which thwart the best skill.

Now, it cannot be doubted that, in the two fatal cases above related, death was due to the interference of the surgeon; but we may reasonably doubt whether it was owing to the particular kind of operation employed; and it is only fair to presume, that the morbid actions which were excited, and which led to death, might have been caused by the ordinary operation of amputation of the limb through the thigh. In certain conditions of the system, and under particular states of the atmosphere, purulent absorption, and acute inflammation of the bone, are produced after amputation. The same conditions, therefore, will necessarily be attended by similar effects after the performance of excision of a joint in any part of the body; pyœmia and necrosis, followed by death, is every now and then the result of excision of the elbow, of the head of the humerus, and of that admirable operation, amputation of the foot through the ankle joint.

But, fortunately for the sake of this operation, we are not without other data, which are so satisfactory, that the Profession is enabled to conclude, that excision of the knee-joint is by no means of that dangerous character which some would lead us to suppose it to be. Thanks to other enterprising and able surgeons, this operation is now placed in a very different aspect; and, indeed, surgery is much indebted to Mr. Jones, of Jersey, and Dr. Mackenzie, of Edinburgh, for having given it a fair trial. In their hands it has been most successful. Mr. Jones has most courteously obliged me with the particulars of five cases in which he has performed it. Four out of the five have done well. The particulars of most of them have been published in this Journal; and Dr. Mackenzie, in his able paper on the subject in the *Edinburgh Monthly Journal* for June, has given us the report of two cases performed by himself. Both have done well.

It is to Mr. Jones, of Jersey, most undoubtedly, that the Profession is chiefly indebted for having furnished the most numerous, most important, and most satisfactory data respecting this operation. While I am writing this, I have received another communication from this gentleman, containing the details of a sixth instance in which he has excised the knee-joint. It may, with truth, be affirmed, that in all his cases, six in number, he has succeeded,—for dysentery, not the surgeon, destroyed the only one of his patients who is now in her grave. It is useless to attempt concealing the fact, that she did die of this disease, and not of anything else. Mr. Jones, in a letter to me states, that everything connected with the operation was progressing most satisfactorily, and that "scores of persons died in the neighbourhood" of dysentery.

According to Dr. Mackenzie, there are two other authenticated cases in which this operation has been performed with success within the last two years,—one by Dr. Stewart, of Belfast, the other by Mr. Page, of Carlisle; so that, in fact, the entire number of operations of excision of the knee-joint has been thirteen since the proceeding was first revived by Mr. Fergusson; of these three have turned out badly, the remaining ten are alive; and if we take away Mr. Jones's single unsuccessful case, we have only two fairly attributable to the interference of the surgeon,—a proportion of deaths by no means great when compared with ordinary amputation through the thigh. There is still one point of great importance, in reference to this particular operation, which is to be considered,—viz., the utility of the limb as a means of progression after the joint has been excised, and a cure has been effected. The evidence on this subject, so far as it can be obtained at present, is on the one hand of a nature highly satisfactory, while on the other it is the reverse. In the remarkable case where Park first operated so successfully, the man returned to his occupation of a sailor, and "was enabled to go aloft with considerable agility, and to perform all the duties of a seaman; surely this is more than could be reasonably expected. Mr. Jones wrote to me some time ago as follows concerning one of his cases:—"He walked without the assistance of crutch, stick, or any appliance whatever to the limb, up and down the largest room in the hospital, quite as fast I could." On the other hand, Mr. Syme's patient did not, I believe, have much use of his limb eventually. Although the exact particulars of the condition and aptitude of the member have not lately been obtained, there is reason, however, to believe, that it is not satisfactory, as Mr. Syme has evinced great opposition to the operation.

However, there is no doubt that strong union of the parts in the site of operation does take place, and that, by careful attention to position, a very useful substitute for a sound limb may be effected. In some instances the union is only ligamentous, but in others it is bony, as was the case in Sir Philip Crampton's patient.

Here, however, the limb was not of very much use; and any gentleman who will take the trouble to walk into the pathological department of the Hunterian Museum, and examine the large glass case on the basement floor, will at once see the reason of this; for he will there find the preparation of the parts, and will observe, that the divided bones had become joined by strong bony anchylosis, almost exactly at right angles. Sir Philip Crampton informed a friend of mine, that the limb had not been kept steadily in the extended position after the operation; thus arose the awkward anchylosis. But this case, instead of proving anything against the operation, speaks much for it, as the parts are firmly knit together by bony junction. And doubtless this union might have been effected in the straight position.

In concluding these observations on the cases above detailed, I cannot avoid expressing my conviction, that excision of the knee joint, as a substitute for amputation, may worthily occupy the attention of surgeons; and I doubt not that the merits of the operation will in time be fairly tested, as such enterprising men as Mr. Fergusson, Mr. Jones, of Jersey, and Dr. Richard Mackenzie, have taken the subject up. We can hardly expect to meet with such success as obtains in the proceeding on the elbow-joint; but there is not any reason why the excision of the knee-joint should not prove to be less fatal than the amputation through the thigh, in which procedure large nerves and vessels are divided, and a considerable portion is suddenly taken away from the rest of the body. If time proves such to be the case, and if, also, it be found that the limb is as useful to the patient as an artificial leg, surgeons will feel bound to adopt the operation. If, on the contrary, a greater mortality attends the removal of the joint than the amputation, and if the limb which is preserved becomes inferior to an artificial substitute, they will be bound to reject it altogether. The experience which has been obtained within the last two years, inclines to the belief, that it may ultimately be an operation recognised among surgeons.

13, Caroline-street, Bedford-square.

EXAMINATION OF A FIBROUS TUMOUR,

WHICH PRESENTED SOME POINTS OF RESEMBLANCE WITH A TRUE CYSTIC GROWTH.

By HOLMES COOTE, Esq., F.R.C.S.

Honorary Secretary to the Royal Medical and Chirurgical Society, Demonstrator of Anatomy at St. Bartholomew's Hospital, etc.

A FIBROUS tumour, the size of a turkey's egg, was removed, July 16, by Mr. Lawrence, from the front of the leg of a young man of stout build and healthy constitution. It was situated between the integument and the front of the tibia, midway between the ankle and the knee; was of five years' duration; had grown without pain, and was firm and insensible to the touch. Its extirpation was performed in the usual manner, but the base was found firmly adherent to the periosteum.

The cut surface of the tumour, when divided for examination, presented a well-marked, lobulated appearance. It seemed to be composed of a dense, fibrous, framework-bounding cysts, about the size of nuts, containing a softer and more yellow, apparently intra-cystic growth. These characters were so prominent, that, upon a superficial examination, it would have been unhesitatingly pronouced a cystic tumour. It was, however, macerated in spirit for a few hours, and then carefully dissected. I found that it was, as suspected by Mr. Lawrence, a fibrous tumour, springing from the periosteum. The soft, yellow-coloured fibres, resembling the intra-cystic productions, were traced to the periosteal fibres, with which they were continuous. It appeared as if the periosteum gave off flat bands, one to four lines in diameter, which soon swelled into bulbs, either from the splitting and multiplication of the fibrils at one spot, or by their convolution. In both cases, there was a capsule

of white fibrous tissue, which was so complete, that, when cleared out, it resembled a well-formed cyst. However, a little patient dissection proved, that all the bulbs, with their connecting fibres, could be traced to a narrow peduncle springing from the periosteum, and that the external fibrous covering was derived from the neighbouring tissues upon which the tumour had encroached. It was vascular, the blood-vessels being mostly arranged in loops, presenting a varicose dilatation at the prominent part, as seen in the vessels of fœtal cartilage or tooth.

Perhaps it may not be possible to say positively whether this tumour will return; looking, however, to the slowness of its growth, the absence of pain and its microscopical characters, one would be inclined to a favourable opinion.

I have troubled you with this short communication, thinking it of interest, because both cystic and pseudo-cystic tumours have occupied lately much of the attention of pathological anatomists. The more we investigate, the more do we find true cystic growths are limited to those regions where, in the normal state, there are ducts or tubes capable of enlargement. Sir B. Brodie has established the true nature of cystic sarcoma of the mammary gland. Mr. Curling lately read before the Medical and Chirurgical Society a paper describing the changes of structure in the rete testis, producing cystic disease of that organ. I have shown, by dissection, the origin of some apparently subcutaneous cystic tumours with large veins, which become tortuous, varicose, and ultimately degenerated into a mass of unconnected watery bags of various sizes. It is important to know that there are tumours which may resemble those of cystic character, although their true nature is very different.

It may be asked, what practical value is attached to this fact? Nothing connected with the development or the minute structure of tumours is unimportant; but, besides, the presence of a cystic growth, under circumstances and in situations where the cysts could not be referred to dilatations of gland-ducts, or changes in the walls of veins, would excite in the mind of the surgeon apprehension that the tumour was of unfavourable nature, and would be likely to return, either in the same or in some other part of the body.

It is, therefore, interesting to know, that the elements of a fibrous tumour springing from the periosteum may be so arranged, and grow in such a fashion, as ultimately to present a mass presenting many points of resemblance with a cystic tumour, the cavities of which have been filled by fibrous intra-cystic growths.

THE CURE OF SQUINTING BY THE USE OF PRISMATIC SPECTACLES.

By T. SPENCER WELLS, F.R.C.S.

Dr. Kurke, a Dutch physician, first recommended prismatic spectacles for the cure of squinting. He has recorded one case cured by their use in the Dutch journals. Dr. Von Gräfe, of Berlin, has since employed them very extensively. During a recent visit to Berlin I had frequent opportunities of observing their effects upon his patients, and I think that the result of his experience should be made known to the Profession in England.

The glasses are fitted in ordinary spectacle frames. They are simple prisms of various degrees, from 1 to 20. It would be possible to make them achromatic; but I have only seen the ordinary ones in use.

The operation upon the sound eye, as explained by Dr. Von Gräfe, is as follows:—When a prismatic glass is held before one eye on any point of sight in the converging direction of the optic axis, the light falling upon this eye is diverted from its former course, and no longer arrives upon the macula lutea, but forms a more or less excentric picture, according to the refracting power of the prism. From its position, this is no longer combined with the central picture on the other retina into one perception, but is perceived separately. Thus the object upon which the optic axes converge is seen double.

Theoretically this phenomenon should be observed when a prism of very moderate power is used; but observation teaches us, on the contrary, that no diplopia follows when weak prisms are employed, especially if the base be directed outwards. This might be explained in two ways. Either the picture on one retina is suppressed, or the eye which sees through the prism takes a new position, which is not perceived by the observer, so that the picture is not formed excentrically, but falls, like that of the other eye, upon the macula lutea. The improbability of the first supposition at once appears from the fact that no diplopia is produced by weak prisms, while more powerful ones produce it at once, and the greater the excentric position of the picture the more easily it would be suppressed. The truth of the second explanation is established by a more exact observation of the position of the eyes. On applying the prism we see the optic axes deviate from their former position and return to it as the prism is removed. At the moment of removal the object is seen double, because both axes are not directed upon it. Thus in order to prevent diplopia, an involuntary strabismus occurs and we can produce this in any direction by corresponding positions of the prism, but most decidedly so inwards, less so outwards, much less so downwards, and least of all upwards. We can also produce strabismus in this manner in diagonal directions.

It follows that by the use of prismatic glasses we have the power of altering the tension of any given muscle of one eye without producing any alteration in the other. This is the peculiar advantage which none of the ordinary orthopædic means formerly employed possessed. On the contrary, the result hoped for from their employment was not only frequently frustrated by the movements of association of the two eyes, but sometimes, as in cases of recent muscular paralysis, an effect directly the reverse of that desired was brought about.

The increased contraction called for from the relaxed muscle by the use of prismatic glasses is the source of their curative power. For example, in a case of convergent strabismus with diplopia a prism with its base directed outwards alters the position of the excentric picture on the retina of the squinting eye so greatly, and brings it so near the macula lutea, that single vision follows any voluntary power conveyed to the abductor muscle. Consequently, the angle of the squint is somewhat diminished. As it becomes less, and the power of the abductor increases, prisms must be used gradually diminishing in power, until at last a perfectly accurate corresponding position of the eyes is attained at all distances,—in other words, the squint is perfectly cured. I have seen patients of Dr. Von Gräfe's, who were thus completely cured in about six weeks, commencing with strong glasses of the numbers from 15 to 20, and gradually wearing them less and less powerful. They are principally applicable in young persons, who squint but slightly; and in cases of diplopia biocularis where the abnormal position of one eye is only observed when an object some feet distant is regarded they are the only certain means of cure.

In more marked degrees of strabismus the muscle must be divided, because the use of strong prisms, and the efforts of the patient to avoid diplopia, become very troublesome; and if the union of the two images causes too great an effort, an effect is produced exactly the opposite of that desired; for if the diplopia cannot be removed, the double images separate still further from each other, because, when distant, they are not so intolerable as when near.

In many cases after operations for the cure of strabismus by division of the muscle in one or both eyes, although great improvement follows the cure is not perfect. Some degree of squint still persists in one eye, and probably some diplopia when objects at certain distances from the eye are attentively regarded. In such cases, the prismatic glasses suffice to complete the cure commenced by the operation. I saw several instances in which this proved to be the case in the practice of Dr. Von Gräfe.

I have patients under my care at present who are wearing these spectacles, and I shall take a future opportunity of making the results known. Messrs. Watkins and Hill, opticians, of Charing-cross, have had the glasses ground and fitted for me, and make them at any angle which may be required. Messrs. Bland and Long, of Fleet-street, also make them.

July 24, 1853.

Note.—Of three patients who have used the glasses, two have been greatly improved, and still go on favourably. In the third, where the power of the squinting eye was very much less than that of the opposite one, the strongest prism which could be worn without producing diplopia was in-

effectual, and I had to recur to the old method of exercising the squinting eye while the other was covered. I do not use an ordinary shade or bandage as a covering, but have an India-rubber ring, which fits the orbit, covered on the outside with silk, and fastened by a ribbon. This allows free motion of the eye and eyelids, while the light is perfectly excluded.

30, Brook-street, Grosvenor-square, August 22, 1853.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

ABSTRACT OF EIGHTEEN CASES OF TYPHUS FEVER, TREATED BY THE FREE EXHIBITION OF BRANDY, Etc.

[Under the care of Dr. TODD.]

We have recently watched with great interest a series of severe cases of typhus fever, under the care of Dr. Todd, in this hospital, in which an almost uniform plan of treatment, by means of the very free exhibition of stimulants, more especially brandy, has been resorted to with great success. Reflecting instructively, as these cases do, on one of the most important questions in the whole range of practical medicine, we hasten to bring their chief features before the attention of our readers. The series consists of eighteen cases; and as we cannot, of course, find space for the details of the whole, we shall content ourselves by recording, by way of example, the particulars of a few of the more interesting, and append to them a brief synopsis of the rest. The whole having occurred within the last few months, and several of them within a few weeks, they present, we believe, fair specimens of the form of fever lately and still prevalent in the Metropolis. They do not, however, comprise all which have been under Dr. Todd's care during the time referred to, but only those of well-marked typhus type, and which agreed in presenting the following symptoms previous to the commencement of the treatment:—A copious eruption of scattered measle-like spots (mulberry or typhus rash;) bowels either confined or but slightly relaxed; great prostration of strength; delirium (in six cases, coma was present;) a small and very rapid pulse. It may be well to premise, that they were treated as is done in almost all general hospitals in the open wards, their beds being purposely arranged so as to occur at some distance from each other, in order to prevent the accumulation of contagious emanations. The treatment pursued consisted in administering, either every hour or every half-hour, day and night, from half an ounce to an ounce of brandy, with a draught every second hour, containing sp. æth. chlorici ♏x., ammoniæ carbonatis gr. v., aq. pur. ʒj. The patients were induced to drink as much strong beef-tea as possible; the head was always shaved; and, in most, a blister was applied to the scalp. We are indebted to the careful observations, noted daily by Mr. Macnamara, the clinical assistant in charge of the cases, for the whole of the particulars respecting them. The first to which we shall allude was a very severe attack, and happened to an elderly and unfavourable subject; the beneficial effects of the alcoholic stimulant is strikingly shown, and there even appears some cause to infer the superiority of brandy over wine.

Elizabeth B., aged 70, was admitted June 16, 1853. She complained of severe headache, and of much pain in her limbs; was very deaf, and could see but very indistinctly. Her daughter stated, that the two latter symptoms had commenced four days previously, and the illness was of about a fortnight's duration, having begun with aching pains in the limbs and head, and great prostration of strength, followed, after four or five days, by several successive shivering fits. Pulse 122; tongue thickly furred.

℞ Tinct. opii ♏xx. h. s. sumend.

℞ Sp. am. arom. ♏xx., aq. pur. ʒiss. 4tis horis sum.

18th.—The skin of chest and abdomen is covered with an eruption of measly spots. The patient has been delirious during the night; her tongue is dry and furred; pulse 124; the bowels have acted but once since admission. Pt.

19th.—Has been very delirious; pulse 126; other signs as before.

℞ Am. carbon. gr. v., sp. æth. chloric. ♏xv, aq. ʒiss. 3tis horis. Wine ʒviii. per diem.

21st.—Much worse; lies in an almost comatose condition, and allows her urine and fæces to pass into the bed. Pulse 130. The head is to be shaved, and a blister applied. Instead of the wine, half an ounce of brandy is to be given every half-hour.

Rep. mist.

22nd.—Pulse 124. The half-comatose condition still continues, and is only interrupted by low, muttering delirium.

23rd.—Pulse 120. The coma is passing off, and the delirium is less constant during its intermissions. The spots have now entirely disappeared from the skin. The patient takes her beef-tea much better than she did.

24th.—Pulse 114. This morning the head symptoms are much less severe; and, on being questioned, the patient occasionally returns rational answers. The bowels act daily, but are not loose. To continue the same treatment.

25th.—Pulse 96. The skin for the first time is moist. The patient states, that she feels much better, and can be got to understand clearly where she is, which has not been the case on any previous occasion since her admission.

26th.—Pulse 90. To take half an ounce of brandy every two hours.

From the last date she continued to improve. To aid her convalescence, quinine and other tonics were administered. She was discharged quite well, six weeks after admission.

In the next case, the progressive decrease in the frequency of the pulse subsequent to the employment of the stimulant, was equally well marked as in the above. It occurred in a much younger subject.

James E., aged 18, began to feel ill on the 27th of June; and, on the 29th, was seized with shiverings, pain in the limbs, and great prostration of strength. He was admitted into the hospital on July 5; and, at that time, the skin was hot and dry, and covered with the typhus rash. The ocular conjunctiva of each eye was red and congested, and the tongue brown and furred. Pulse 112.

Ordered ℞ Am. carb. gr. v., aq. pur. ʒiss. ter die. Beef-tea *ad libitum*.

July 6.—Pulse 120. The bowels have acted once to-day. Delirium was present during the night.

Rep. mist.

7th.—Pulse 124, very weak. The delirium has been so constant, that the nurse has found it impossible to induce him to take any nourishment. Rep. Mist. The head is to be shaved, and half an ounce of brandy is to be administered every hour.

8th.—Pulse 120, still very feeble. Bowels act daily.

9th.—Pulse 112. The delirium is much abated, and the patient takes his beef tea well.

11th.—Pulse 100, much improvement. The brandy is to be continued.

12th.—Pulse 92. For the first time the skin is moist and perspiring. From this date the patient gradually recovered.

At one time, most of the members of an Irish family living in a dirty alley in the neighbourhood were in the hospital together, all suffering from the same type of fever. The following case is that of one of the sons:—

John C., aged 15, admitted June 28, having been seized on the 23rd with shivering, pains in the limbs, prostration of strength, and severe purging. He had, at the time of admission, the usual symptoms of fever, was very restless, and at times slightly delirious. The bowels were not much relaxed; there was loud rhonchus heard over both lungs. Pulse 116, skin hot and dry. To drink beef tea.

29th.—Pulse 118, very feeble. The delirium is increased. Half an ounce of brandy every hour.

July 1.—No improvement. Pulse 120, and very weak. The boy lies in a semi-comatose condition. Believing that the administration of the stimulant had not been well attended to, Dr. Todd ordered a special nurse for the case, and directed that the brandy and beef-tea should be regularly given day and night.

2nd.—Pulse 100. The patient is less stupid, and seems to understand the questions which are put to him.

4th.—Pulse 92. There is no delirium present. The tongue is much cleaned, and the respiration is unattended by any degree of rhonchus.

5th.—Pulse 80. The skin is moist. The brandy is to be given every two hours.

8th.—Is rapidly getting better. The brandy is discontinued, and two pints of porter per diem substituted for it. From this time the patient very quickly recovered.

Out of the whole eighteen cases, but one terminated fatally. The subject of it was very violently delirious on the day of her admission, and no account of her previous symptoms could be obtained. Death occurred on the third day afterwards. On making the autopsy, the brain was found to be slightly congested, and the grey matter was of a darker colour than usual. Peyer's patches in the small intestines were enlarged and very distinct, but not ulcerated. The spleen was enlarged, full of blood, and very soft; but all the other organs appeared to be in a normal condition.

Excluding, then, this fatal case, we will now examine the condition of the circulation in the remaining 17, more especially with regard to the influence of the treatment upon it. On the day that the administration of brandy, etc., was commenced, the pulse had, in five cases, a frequency of 136 per minute; in three, of 126; in seven, of from 120 to 126; and in one, of 116. After the measures above specified had been pursued for four days, the pulse had, in eight cases, fallen to 92; in five others, it had fallen below 92 on the fifth day; and, in the remaining four, to below 90 on the sixth. Again, taking the day on which treatment was commenced as our starting point, the skin, previously hot and dry, relaxed, and became moist and perspirable, on the fifth day, in nine cases; on the sixth day, in five cases; on the twelfth day, in one case; and in the remaining two the date of this crisis was not recorded.

The degree of success exhibited by the above facts is, we suspect, very considerably beyond that usually obtained in cases of so severe a type as those under consideration, and is very encouraging to a pursuance of a similar plan of treatment in future. That the success did really depend on the treatment, appeared to be conclusively evidenced in several cases, in which the pulse, progressively increasing in frequency up to the time that the brandy was ordered, steadily fell from that day forwards. The relapses of one or two, in consequence of the accidentally inefficient administration of the remedy, also afford important support to the same conclusion. In respect to the numerical age of the fever at which the brandy treatment was commenced, it varied so much in the different cases, that there does not appear to be any practical advantage in attempting to state it. In all, however, the first stage had passed, and low "typhus" symptoms had become fully developed. Dr. Todd is continuing the same plan of treatment on the fever patients now under his care, and hitherto with very pleasing results. We shall probably return to the subject at some future time.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

SEVERE DOUBLE EPICANTHUS CURED BY OPERATION.

[Under the care of Mr. HAYNES WALTON.]

THE deformity learnedly known as Epicanthus, and which consists in the congenital extension outwards of a fold of skin from the nasal commissure of the eyelids in such a manner as to overlap and conceal part of the eyeball, although sufficiently common among some tribes of the Calmucks to have become a national characteristic, is, fortunately, a very rare one in this country. We very seldom indeed see examples of it, and the following case which has been treated most successfully by operation at this hospital seems worthy of a short mention:—

Henry F., aged 18 months. The affection was quite symmetrical, the fold of skin in each eye extending so far outwards as to conceal the inner margin of the cornea from sight. The bridge of the nose was, as Mr. Walton remarked that he had commonly observed it to be in these cases, unusually flat. The mother of the child stated, that she had shown the case to an ophthalmic surgeon some time previously, who had discountenanced interference, and that she had now been induced to seek advice again by having observed that the inner lashes of each lid were becoming turned in on the eyeball, and producing great irritation. Mr. Walton found that by pinching up a fold of skin on each side of the nose, the deformity might be entirely removed, and the inversion of the lashes rectified; and, under these encouraging circumstances, he determined to attempt an operation. Having ascertained by experiment the amount of skin it would be necessary to remove, two elliptical portions, one from each side of the nose, were accordingly excised, great care being taken to make the incisions symmetrically and in a vertical direction, in order to decrease, as much as possible, the deformity produced by the cicatrix. To prevent undue tension, the edges of the wound were then on each side dissected up so as to allow of their being readily brought into apposition, in which they were retained by small harelip pins and the twisted suture. On the fourth day, and before they had caused any suppuration, these pins were withdrawn, when the edges of the wounds were found to have united favourably. The most happy results ensued: the deformity, as well as the turning in of the lashes were entirely removed. It is now eight months since the operation was performed; and Mr. Walton informs us, that he has seen the patient within the last week, and that there has been no tendency whatever to a relapse. The child's eyes now present a natural appearance, and the small linear cicatrices are scarcely visible.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE MONTH OF JULY.

THE appended statement comprises, we believe, all of the more important operations performed during the month of July at the following hospitals:—University College, King's College, St. Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, and Charing-cross. We propose, on future occasions, to give the results of such of the cases as are at present remaining under treatment. We also trust to extend our list of hospitals, and to include in it the whole of the Metropolitan Institutions.

Lithotomy.—Number of cases, 7; recovered and discharged from hospital, 4; under treatment and progressing favourably, 2; died, 1. In the case which terminated fatally, the patient was an old man, aged 64, of very feeble power, who had previously suffered from abscess in the prostate. He died on the fourteenth day after the operation; and at the autopsy pus was found in the pelvis of one kidney. With one exception, all the other cases were in children. To the above, we should perhaps add an eighth case, in which lithotomy in the median line of the perinæum was performed for the removal of an impacted calculus from the prostatic urethra. Extravasation of urine and perineal abscesses had previously occurred, and the patient (a young man) was in an almost hopeless state at the time of the operation. He afterwards died; and at the *post-mortem*, the bladder, ureters, and both kidneys were found to be extensively diseased.

Lithotrity.—Number of cases, 2; progressing favourably, 1; died, 1. The case which is doing well is under the care of Mr. Avery, in Charing-cross Hospital. The stone is believed to have been large. The operation has been several times repeated, and the patient has not had a single bad sympton.

Herniotomy.—Number of cases, 4; recovered, 2; under treatment, 2. In only one of these was the sac opened. One of the two still under treatment is a case of oblique inguinal hernia, in an infant two months old, under the care of Mr. Lloyd, in St. Bartholomew's. The little patient suffered from erratic erysipelas, but, as far as the intestinal lesion is concerned, has done perfectly well.

Trephining the Skull for Compound Fracture with Depression has been performed once, by Mr. Simon, on a patient in St. Thomas's Hospital. The case was, from the first, a very unhopeful one, as the dura mater had been torn, and a considerable portion of cerebral substance lost. The operation, however, relieved the urgent symptoms, and, during the first week, some hopes were entertained of a successful result. Death occured at the end of the third week.

Ligature of Arteries.—One case of ligature of the femoral artery for popliteal aneurism has occurred. Compression had previously been tried. The patient is under the care of Mr. Le Gros Clarke, in St. Thomas's Hospital, and is doing well. Two other cases of popliteal aneurism are under treatment by compression; one in St. Bartholomew's, under the care of Mr. Lloyd; and one in Guy's, under that of Mr. Hilton.

Amputations.—Number of cases, 15; recovered and discharged, 2; under treatment, 8; died, 5. Of the cases discharged, one was a case of amputation of the thigh for diseased knee-joint, under the care of Mr. Lawrence, in St. Bartholomew's; the other a primary amputation of the greater part of the hand, in St. Thomas's.

Of the cases remaining under treatment, 4 are of the upper part of arm, 1 for erysipelas, on account of a compound fracture (primary), 1 for diseased elbow-joint, and 1 on account of injury inflicted by a circular saw (primary). One through the scapula, for compound fracture and laceration of the shoulder (primary). The patient is in Guy's Hospital, under the care of Mr. Birkett, and is doing remarkably well. Two (primary) of the forearm, 1 of which by Mr. Stanley, was performed at the wrist joint. One of the greater part of the hand.

Of the cases which have terminated fatally, 2 were double primary amputations of the legs; 1 single primary of the leg; 1 secondary of the thigh; and 1 primary of the foot. In the last mentioned, the entire foot with the exception of the astragalus was removed by Mr. Simon, in St. Thomas's Hospital. The stump was progressing very favourably, when the patient was attacked and carried off by traumatic tetanus.

Excision of Bones.—Removal of the left upper maxilla for epithelial cancer of the antrum, by Mr. Lawrence, in St. Bartholomew's Hospital. The parts healed rapidly, but the disease is already returning.

Removal of Necrosed Bone.—Number of cases, 8, all of which are progressing favourably. In one of them, a very large

sequestrum of the femur was removed, and in another, under the care of Mr. Fergusson, in King's College Hospital, the ramus and angle of lower jaw, the necrosis having been consequent on the extraction of a molar tooth.

Excision of Malignant Growths. — Number of cases, 7; 2 amputations of the penis for epithelial cancer, 1 under the care of Mr. Cock, in Guy's Hospital, the other under that of Mr. Curling, in the London Hospital. One of epithelial cancer of the nymphæ, 1 of the same disease in the cheek and gum, another of the same in the lip, and 2 of scirrhus of the breast.

Excision of Non-malignant Tumours.—Number of cases, 12; recovered and discharged, 6; progressing favourably, 6.

Operation for Urethral Stricture.—In 1 case, in St. Thomas's, Mr. Simon opened the membranous urethra behind the stricture, making the incision in the median line of the perineum. The patient is doing well.

Paracentesis Thoracis.—Number of cases, 2. In one, the operation was performed three times, with much temporary relief; the patient ultimately died, and in the left lung was found a large mass of medullary cancer. In the other, under the care of Dr. Bennett, in St. Thomas's Hospital, and operated on by Mr. Le Gros Clarke, the operation has been twice performed, and the patient is doing well. On the first occasion, although seven months after the pleuritic attack, the fluid removed was serous, on the second, sero-purulent.

Paracentesis Abdominis.—Number of cases, 5. 4 of these were for ovarian dropsy; 1 for ascites. All are doing well.

Ligature of Nævus.—Number of cases, 2. 1 cured and discharged; the other, yet under treatment.

Cauterisation of Vascular Growths.—Two cases of vascular growths, within the meatus of the female urethra, have been operated upon by Mr. Marshall, in University College Hospital, by means of the galvanic cautery, 1 one of which is cured, the other remains under treatment.

Radical Treatment of Hydrocele.—Number of cases, 4, 3 of which have been completely successful; the fourth is under treatment.

Plastic Operations.—Hare lip, 3 cases, 1 double and 2 single, all under the care of Mr. Fergusson, in King's College Hospital, and all successful. Staphyloraphy.—2 cases, one under the care of Mr. Fergusson; the other under that of Mr. Avery, in Charing-Cross Hospital. Both successful. Division of Cicatrix after Burn.—1 case, under the care of Mr. Hilton, in Guy's Hospital, and still under treatment. Taliacotian.—1, under the care of Mr. De Morgan, in the Middlesex Hospital. Successful.

Operation for Fistula in Ano.—Number of cases 4. One cured, the others remaining under treatment.

Operation for Cataract.—Number of cases, 4 (all by extraction). 3 performed by Mr. Wharton Jones, in University College Hospital, all successful; and 1 by Mr. Lawrence, in St Bartholomew's, progressing favourably.

Operation for Artificial Pupil.—One, by Mr. Wharton Jones, in University College Hospital. Successful.

NEW INSTRUMENT FOR INJECTING THE PERCHLORIDE OF IRON IN CASES OF NÆVUS, ETC.

During the last two months we have witnessed several trials of the acid solution of the perchloride of iron, as an injection for producing the coagulation of the blood in nævus, etc. In more than one instance, very severe inflammation of the part has followed its use, and in one, a nævus on the scalp, sloughing, and even exfoliation of a portion of bone resulted. There appeared, however, some reason to think, that the powerful agent had been too freely used, and that, had a much smaller quantity been injected, the promises made by its introducers might possibly have been borne out. Other objections also applied to the method and instruments in ordinary use; they required that an opening should be made for the introduction of the syringe: and the flow of blood produced by the puncture, to say nothing of the smallness of the aperture, sometimes rendered the latter difficult of accomplishment. We have been shown, during the past week, an ingenious little instrument contrived by Mr. Fergusson, of Giltspur-street, which looks likely to aid very materially the efficient accomplishment of this procedure. It consists of a very small glass syringe, the point of which terminates in a fine platinum tube. This tube is encased in another one, about a quarter of an inch longer than the first, ending in a sharp trocar-like point, and having, near its extremity, an oblique opening in one side. By rotating the outer tube on the contained one, their apertures may be made to correspond or otherwise, at the will of the operator. Thus, then, the necessity for two instruments is quite done away with. The syringe having been charged, the operator rotates the outer tube, so as to conceal the orifice of the inner one entirely, and protect it from the ingress of blood. In this state the instrument is passed into the centre of the tumour, and, having been stirred about as much as may be thought desirable, the tube is turned back, so as to expose the orifice; and the piston being at the same moment depressed, a drop or two of the solution is squeezed out. It may be supposed, that the smallness of the whole instrument, and the diminutive size and oblique position of its aperture, will afford considerable guarantee against the injection of too large a quantity, while on its advantages, in ease of employment, it is scarcely necessary to insist.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

COUNTY LUNATIC ASYLUM, COLNEY HATCH.

CASE OF WOUND OF THE NECK, IMPLICATING THE LARYNX, PHARYNX, AND SUPERIOR THYROID ARTERY, AND PUNCTURE OF THE ABDOMEN, IN ATTEMPTED SUICIDE BY A LUNATIC.

By D. F. TYERMAN, Esq., Resident Medical Officer.

January 24, 1853.—C. D. H., aged 42, highly-educated, strong, stout, and muscular; for many years the subject of monomaniacal insanity, characterised by dangerous violence, made, at ten o'clock this morning, most determined attempts at suicide, by stabbing himself in the throat and abdomen, with a carving-knife, the blade of which was ten inches in length, and which he procured from a box, to the key of which he obtained access.

Soon afterwards I found him lying upon the floor, with a gash, more than an inch in length, and transverse, in the throat, above the thyroid cartilage; very little blood flowing externally from the wound, which was jagged and uneven, and evidently inflicted with the somewhat blunt point of the instrument. The larynx, from which air passed with a stridulous sound, and the pharynx were perforated, the lips being covered with blood, portions of which had been thrown from the mouth; and deglutition of the blood flowing into the pharynx was performed with difficulty and pain. The voice was faint and indistinct.

In the abdomen, to the right of the umbilicus, was also a gaping wound, from which the knife had just been withdrawn, an inch and a-half in external length, and extending downwards for two or three inches, through the cellular tissue and abdominal muscles, then entering the abdominal cavity, into which, on my examination of the puncture, the tip of my finger passed. There were also five or six other wounds, superficial, in a vertical and slanting direction below it, and in its vicinity, inflicted by several ineffectual attempts to cut open the abdomen. The trowsers, where the folds of cloth were double, the shirt, and the flannel waistcoat, were perforated and jagged in several places, corresponding in situation with these wounds, which were inflicted through the entire thickness of the patient's dress.

The pulse was 96, occasionally intermitting, and disposed to falter; and tremulous motion of the thorax and abdomen, owing to the bounding pulsation of the aorta, was observed. The voice, although faint, was sufficiently distinct to enable him to communicate the circumstances of the occurrence, which he did in an intelligent manner, and without reserve. He stated, that he was "desperate, and resolved to kill himself if he could; and that after stabbing himself in the throat, he pushed the knife into the abdomen, and attempted, by turning it upwards, to pass it up to the throat." In reply to a question put by Mr. Marshall, he said, that "he suffered a life-long pain."

At half-past eleven, a.m., the pulse was soft, somewhat full, and regular. The acts of deglutition excited by irritation, or flow of blood into the pharynx, were now also performed with difficulty. He did not require stimulants.

In the afternoon the pulse continued full, soft, and regular, and no external hæmorrhage had taken place.

A determined suicidal tendency was still manifest, by the occasional compression of the lips, the position of his doubled fists across the chest, as if in readiness to tear open the wound of the neck, and also by his tendency to compress the throat, the expression of his countenance being characteristic of desperation.

In the surgical treatment, after a careful examination of the extent of the wounds, the edges of the gashes were brought together, and one suture placed in the middle of each, but not so

as to prevent the external appearance of blood, should it subsequently escape from divided and lacerated vessels.

At nine o'clock, p.m., he felt an inclination to vomit; and, while raising himself in bed, a gush of blood suddenly took place from the wound in the throat, it being also evident, from the repeated acts of deglutition, that blood was flowing internally into the pharynx. I therefore immediately removed the suture; and, on laying open the wound, a considerable jet of blood appeared, flowing from the left superior thyroid artery, which, with some difficulty, I secured with the toothed forceps and ligature. An oozing of blood continued for some minutes; but, as it diminished, I placed within it a little lint, and laid a dossil over it. All hæmorrhage soon entirely ceased, and he was tranquil, and promised to make no further attempt at self-injury. Half a grain of acetate of morphia had been given, to be repeated every eight hours, and a liquid diet, with juice of oranges, was ordered, and constant vigilance by two, or, at intervals, more attendants, enjoined.

At half-past eleven, p.m., the pulse was tranquil, 72, rather full, and very soft; hæmorrhagic; large quantities of blood had undoubtedly passed into the stomach previous to the ligature of the thyroid artery, the tendency to vomiting having been thus induced.

Below the abdominal wound the integuments were tumid and puffy; and, anticipating that the bladder might require relief, I passed a catheter, half a pint of urine only being drawn off. He complained of abdominal pain, and was disposed to draw upwards the knees. There was no alvine evacuation; nor was it thought expedient, as an intestine might have been wounded, to administer laxative medicine.

25th.—Half-past 1 a.m.—A strong suicidal impulse is manifest, and although he makes inquiries as to the probability of his recovery, he narrowly observes the attendants, as if watching an opportunity to attack them, or evade their vigilance.

10·45 a.m.—He has slept at intervals, and has not complained of much pain either in the throat or abdomen. Pulse 84. The voice is weak, but on placing the ear close to the patient's mouth, intelligible; his expressions indicating intolerable despair. He is tormented with imaginary "whining voices, accusing him of kill ing children and committing other crimes." "Would to God," said he, "I had been enabled at that moment to cut away my life!" He refers to the suicide of Cato, and justifies the act, as a mode of deliverance from misery.

In the evening he was visited in consultation by Mr. Bransby Cooper, who acquiesced in the treatment; and from the state of the abdomen, pulse, skin, etc., inferred that the prospect as regarded the patient's recovery was favourable.

26th.—Pulse 72, soft, and regular. Although there is more tumidity of the abdomen below the umbilicus and in the iliac fossæ, there is no distension above, nor is pain complained of even on gentle pressure being made. Uneasiness of the throat being complained of, a poultice is placed over it, and in the evening brought away the dressings, the ligature only remaining. Deglutition is less difficult and painful. Halitus offensive from partial sloughing of the lacerated wound. A poultice has also cleansed the abdominal wounds, from which there is healthy, purulent secretion. Much flatus has passed from the bowels, and urine has been abundantly evacuated.

Psychically he vacillates; a tendency to cheerfulnes and even jocularity being sometimes manifest through the prevailing suicidal gloom; but his glancing eye indicates the necessity of unrelaxed vigilance.

27th.—Below the umbilicus there is still irregular distension of the abdomen, which, however, is soft and yielding, nor does pressure cause pain. A scanty alvine evacuation has passed. Tongue moist, whitish. There is slight sero-sanguineous oozing from the wound in the throat. Deglutition is performed with some effort, but without pain.

Habeat olei ricini ℥j.

28th.—Bowels freely opened, the evacuations being healthy, the swallowed blood being perfectly digested. The ligature of the thyroid artery came away this evening without hæmorrhage, and the wound of the throat is looking healthy; but its margins are projected like a mouth, and it is half an inch in depth, and an inch in transverse length.

The abdomen is still irregularly distended in the hypogastric and iliac regions; but, in the epigastric region, it is somewhat sunk, its aspect being peculiar.

The suicidal intention prevails, but alternates with an apparently more hopeful state of mind. His conversation is intelligent, and he professes to persist in his religious faith, and expresses confidence in the mercy of God. But, at intervals, he admits the distressing influence of imaginary voices, and refers, with evident emotion, to these impressions.

Although his intelligence is unimpaired, the hallucination counteracts its normal influence over the emotions of his mind, and prevents the legitimate sway of the reasoning faculty. Such facts point to the physiology of suicidal lunacy in the well educated monomaniac. There are, however, other instances of the suicidal tendency which appear to be quite of a different order—in lunatics deprived of every spark of intelligence—the hopelessly demented, who would seem to be impelled to the act, (but such instances are probably rare,) by simply corporeal sensations; whereas, in the former class of cases, hallucination depending upon chronic changes in the nervous centres, and affecting the sense of vision, or more particularly that of hearing, induces intolerable despair, the immediate exciting cause of the suicidal impulse.

29th.—No unfavourable symptom has supervened to-day, and the patient appears more tranquil, his conversation being perfectly intelligent. The wound of the throat has a somewhat sloughy aspect, depending upon the contused and lacerated character of the stab. Pulse tranquil; the tongue perfectly clean, and appetite good.

From this date the case did well, and a rapid and perfect recovery from the wounds ensued. The suicidal tendency, however, persists, and no means for effecting his object have been left unstudied by the patient. His mental condition vacillates, rational conversation alternating with vague and disconnected remarks.

The gloomy aspect of countenance indicates the persistence of despondency; and, notwithstanding the unremitting vigilance directed to the case, it is to be feared that, by some desperate means not to be anticipated, he will eventually accomplish the object to which every effort of his mind is directed.

August 1, 1853.

Medical Times & Gazette.

SATURDAY, AUGUST 27, 1853.

MEDICAL REFORM.

Another Session of the Imperial Parliament has closed, and no step has been made towards an alteration in the political position of the Medical Profession. Halls of favourable, and halls of evil repute; colleges of all sorts and sizes; universities, good, bad, and indifferent,—are still to send forth their Extra-Licentiates, their Licentiates, their Members, their Fellows, and their Graduates; some well qualified, some moderately qualified, and some having no qualification at all, to practise our profession.

The College of Surgeons officially declare, that their members are, so far as the Examiners have ascertained, qualified only to meet the "ordinary exigencies of surgical ministrations;" that their regulations and their examinations are not even intended to create a body of surgeons to whose care serious cases of surgical disease ought to be entrusted,—a body of surgeons by whom capital operations ought to be performed. An excellent letter by "A Student" published to-day, in another part of our Paper, on the College Examinations, is worthy of attentive consideration.

The Worshipful Society of Apothecaries do what they can to compel their Licentiates to have some knowledge of pharmacy and physic; but they are hampered by an Act of Parliament, some of the Clauses of which are so worded as to restrict them from framing efficient regulations, while those commonly known as the restrictive Clauses of the same Act are, as far as concerns the purpose for which they are framed—viz., the restriction of the unlicensed—all but impotent.

The College of Physicians, by their own showing, are in a condition much to be pitied. Men, whom the College maintain they know not, go forth from Pall-mall with letters

testimonial of a laudatory character. On the broad-sheet published annually by the College are three columns, headed respectively, Fellows, Licentiates, and Extra-Licentiates. But, strange to say, those arranged under the last head are unknown to the College! The College coffers have received none of their money; the College appointed no examiners to test their professional knowledge; the College have had no evidence of their moral fitness to enter the profession of medicine; the College cannot repudiate them, though they practise the most disgusting quackery; the College knows no more of them than you, reader, if you have run your eye over the sheet on which their names are printed. The first and only intimation received by the College of Dr. Dash desiring to be an Extra-Licentiate, is the appearance of his name in the College "catalogue."

Oxford and Cambridge grant licences to practise medicine to those *only* who have studied at Colleges where none of the essentials for giving a sound medical education exist.

Durham fancies that it has certain little privileges of its own in regard of the licensing to practise medicine, but lacks, *in toto*, all means of instructing its students in the science itself.

The great recommendations of the Scotch degrees are the extreme ease with which they are procured, and the smallness of their cost.

The Edinburgh College of Physicians has dispensed with the farce of an examination, and admits Graduates of British Universities as Fellows, on the presentation of letters testimonial, *and the payment of eighty-four pounds.*

As to the Edinburgh College of Surgeons, the value of their diploma is incalculable; it is,—but we have said enough for our purpose; the utter worthlessness and inefficiency of the diplomas of our licensing bodies, as proof of professional knowledge, is beyond question.

All this is very sad for the members of our Profession, because it lowers their status in society, makes them the jest of the learned, and an object of ridicule even to the unlettered; but, bad as it is for us, it is yet worse for the public. About four hundred thousand persons die annually in England alone. A very large proportion of these, during their last illness, have no choice in regard of their medical attendant; some have one provided for them, being without pecuniary means to enable them to select for themselves; while others are, in this respect, as badly off as paupers themselves.

One of Squire Jobson's carters has his knee smashed; he must submit his thigh to the knife of the parish surgeon. The Squire himself meets with a like accident, and to whose tender mercies *must* he submit the care of his precious limb? In many parts of the country, for a day or two at least, to those of the same official. The life of the carter and the life of the Squire depend alike on the professional qualification of the parish surgeon. Now, we are ready to admit, that in a large number of instances, the parish surgeon is well qualified to perform his task, and that at no former period has the knowledge of the working men of the Profession been of so high a character as at present; but the public owe no thanks to our licensing bodies that such is the case.

The lives of thousands annually depend on judicious medical and surgical treatment; so important does the State hold this treatment to be, considered in the abstract, that it compels every parish in the kingdom to supply its poor with it gratuitously; and great would be the public indignation at the inhumanity of Guardians, who allowed the inmates of a workhouse to die without experiencing the assistance of the doctor. Boards of Guardians are altogether incompetent to form an opinion as to the qualifications of the medical men they employ. They, therefore, regard all who have licences from those corporate bodies which the State has empowered to grant them, as equally qualified to be entrusted with the care of the sick, and that without regard to the nature or severity of the sickness. Existing medical corporations neither insure to the public a supply of well-qualified medical attendants, nor prevent the practice of unlicensed men; and yet, strange to say, the State refuses to regard Medical Reform as anything more than a class question; refuses to believe that the public are concerned in any Bill for the better regulation of the Profession; and the Minister says, to the discordant bodies that clamour at his ear for the advancement of their individual petty interests, "Agree among yourselves, and then I will do what you all desire."

When would an alteration in the laws regulating the importation of corn have been effected, had the agreement of the Land Lords and the Cotton Lords on the subject been the necessary antecedent?

THE SWANSEA MEETING OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION.

The Twenty-first Anniversary Meeting of this important Association requires some notice from us; and we think it better to make a few general observations upon such of the questions discussed by the members as are likely to interest the Profession generally, than to occupy our space by a lengthened report of proceedings which only interest the members themselves, and with which they are supplied by the official organ of the Association.

With regard to Medical Reform, the meeting signified its confidence in the intentions expressed by Lord Palmerston, and re-appointed the Committee which has done such good service during the past Session.

The Report of the Medical Benevolent Fund proved that it had been most useful during the past year, and that it requires and deserves more active support.

The dispute between Mr. Syme and Mr. Hester, with regard to a regret expressed by the latter gentleman, in the last retrospective address in surgery, that the animosity and invective of Mr. Syme should have brought scandal on the Profession, was *regretted* by the meeting; but a resolution was passed to the effect, "that the Association does not hold itself responsible for the sentiments expressed in the papers which may be published in the 'Transactions,' and recommended for publication on account of their general merits."

Not much has been done towards the formation of a code of Medical Ethics; but the old Committee has been re-appointed, with the addition of some new members; and it is to be hoped that some good general rules, for the guidance of the Profession in matters of etiquette, will be the result.

The question which appeared to excite the most lively interest and the warmest discussion at the meeting, was that of the financial state of the Journal of the Association. In the Report of the Council, it is stated that the publication of a weekly Journal has increased the expenditure of the Society, which is now "greater than at any former period;" and that the present expenditure cannot be borne unless the income be steadily increased. The Council further express their regret in announcing, that the "Transactions," which have always been a striking feature in the proceedings of the

Society, in all probability will not be continued, the publication of a weekly Journal necessitating "so large an expenditure on that account, as to leave little room to hope that a surplus will be left for the publication of 'Transactions.'"

It appears that the gross expenses of the Journal for six months amounted to 1327*l.*; while the gross amount of deductions, for advertisements paid and owing, and for sales of the Journal, only amounted to 451*l.*; so that the Society had to pay 876*l.* from its funds for the support of the Journal for six months. It appears also that the circulation of the Journal is almost entirely among members of the Association, as only 48*l.* was deducted for sales effected during the period, paid or unpaid.

While all the members present appeared to agree in the great improvement which had been effected in the Journal by its present Editor, many seemed to concur with Dr. Conolly when he said, that if a weekly Journal interfered with the publication of the "Transactions," it was time to return to a fortnightly issue, and that "he was far from thinking that a weekly Journal, or a Journal at all, was necessary for the prosperity of the Association." Some sanguine members thought there was a prospect of both Journal and "Transactions" going on together; while Dr. Cowan and others regarded the "Transactions" as "a minor consideration compared with the Journal."

We should not have alluded to this matter at all had the question not been one interesting to the whole Profession, who have been gradually brought to regard the largest association of its members not so much as a Society meeting to promote medical science, and deliberate upon the politics and economy of our order, as a Society like the Sydenham or Cavendish carrying on the publication of a Journal. It is to the Journal that the accession of new members is attributed. Stoppage of the Journal is the threat held out to defaulters. It is the Journal which absorbs the greater part of the revenue.

We happen to know that many leading members of the Association very much regret this diversion of the funds from their original object, and wish that those gentlemen who desire to have a Journal should pay an additional subscription for it. Some think this would lead to a great diminution in the number of members; others, on the contrary, believe that the original objects of the Association, and the publication of "Transactions," are amply sufficient to support it; that a great many of its members do not care about the Journal, and would rather that their money was otherwise expended. These, however, are questions which we need not discuss.

COMPULSORY VACCINATION.

AN ACT FURTHER TO EXTEND AND MAKE COMPULSORY THE PRACTICE OF VACCINATION.

August 20, 1853.

Whereas an Act was passed in the fourth year of the reign of Her present Majesty, intituled "An Act to extend the Practice of Vaccination:" and whereas an Act was passed in the fifth year of the same reign, intituled "An Act to amend an Act to extend the Practice of Vaccination:" and whereas it is expedient that the practice of vaccination should be still further extended: be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

I. Within six weeks after the passing of this Act, the guardians of every parish or Union, and the overseers of every parish in which relief to the poor shall not be administered by Guardians, in England and Wales, shall, subject to the approval of the Poor-law Board, divide such parish or Union, if need be, into convenient districts for the purpose of affording increased facilities for the vaccination of the poor, and shall appoint a convenient place in each such district for the performance of such vaccination, and shall take the most effectual means for giving from time to time to all persons resident within such district due notice of the days and hours at which the Medical Officer or Practitioner contracted with for such purpose, will attend at such place to vaccinate all persons not already successfully vaccinated who may then appear there, and also of the days and hours at which such Medical Officer or Practitioner will attend at such place to inspect the progress of such vaccination in the persons so vaccinated.

II. The father or mother of every child born in England or Wales after the first day of August, in the Year of our Lord one thousand eight hundred and fifty-three shall within three calendar months after the birth of the said child, or in the event of the death, illness, absence, or inability of the father and mother, then the person who shall have the care, nurture, or custody of the said child, shall within four calendar months after the birth of such child, take or cause to be taken the said child to the Medical Officer or Practitioner appointed in the Union or parish in which the said child is resident according to the Provisions of the first-recited Act, for the purpose of being vaccinated, unless he shall have been previously vaccinated by some duly qualified Medical Practitioner, and the vaccination duly certified, and the said Medical Officer or Practitioner so appointed shall, and he is hereby required thereupon, or as soon after as it may conveniently and properly be done, to vaccinate the said child.

III. Upon the eighth day following the day on which any child has been vaccinated as aforesaid, the father or mother, or other person having the care, nurture, or custody of the said child, shall again take, or cause to be taken, the said child to the Medical Officer or Practitioner by whom the operation was performed, in order that such Medical Officer or Practitioner may ascertain by inspection the result of such operation.

IV. Upon and immediately after the successful vaccination of any child the Medical Officer or Practitioner who shall have performed the operation shall deliver to the father or mother of the said child, or to the person who shall have the care, nurture, or custody of the said child, a certificate under his hand, according to the form of schedule herein-after inserted (marked A), that the said child has been successfully vaccinated, and shall also transmit a duplicate of the said certificate to the registrar of births and deaths of the sub-district in which the operation was performed; and such certificate shall, without further proof, be admissible as evidence of the successful vaccination of such child in any information or complaint which shall be brought against the father or mother of the said child, or against the person who shall have had the care, nurture, or custody of such child as aforesaid, for non-compliance with the provisions of this Act.

V. If any Medical Officer or Practitioner shall be of opinion that any child is not in a fit and proper state to be successfully vaccinated, he shall thereupon and immediately deliver, without fee or reward, to the father or mother of such child, or the person having the care, nurture, or custody of the said child, a certificate under his hand according to the form or Schedule hereinafter inserted (marked B), that the child is in an unfit state for successful vaccination, and such certificate shall remain in force for two calendar months from its delivery as aforesaid; and the father or mother of the said child, or the person having the care, nurture, or custody of the said child, shall, unless they shall, within each succeeding period of two months, have obtained, from a Medical Officer or Practitioner, a renewal of such certificate, within two months next after the delivery of the said certificate as aforesaid; and, if the said child be not vaccinated at or by the termination of such period of two months, then during each succeeding period of two calendar months, until such child has been successfully vaccinated, take, or cause to be taken, to the said Medical Officer or Practitioner, such child to be vaccinated by him; and, if the said Medical Officer or Practitioner deem the said child to be then in a fit and proper state for successful vaccination, he shall forthwith vaccinate it accordingly, and shall deliver to the father or mother of such child, or person having the care, nurture, or custody of such child, a certificate under his hand, according to the form of schedule hereinafter inserted, marked (A), that such child has been successfully vaccinated; but if the said Medical Officer or Practitioner be of opinion that the child is still in an unfit state for successful vaccination, then he shall again deliver to the father or mother of such child, or person having the care, nurture, or custody of the said child, a certificate under his hand, according to the said form of Schedule (B), that the child is still in an unfit state for successful vaccination; and the said Medical Officer or Practitioner, so long as such child remains in an unfit state for vaccination, and unvaccinated, shall at the expiration of every

succeeding period of two calendar months deliver, if required, to the said father or mother of such child, or person having the care, nurture, or custody of such child, a fresh certificate under his hand according to the said form of Schedule; and the production of such certificate shall be a sufficient defence against any complaint which shall be brought against the said father or mother, or person having the care, nurture, or custody of such child, for non-compliance with the provisions of this Act.

VI. In all contracts to be hereafter made under the provisions of the first-recited Act by any Guardians or Overseers of the Poor with any Medical Officers or Practitioners for the vaccination of the persons resident in their respective unions or parishes, the sums contracted to be paid shall not be less than the following rates; that is to say, for every person successfully vaccinated at the residence of such Medical Officer or Practitioner, or within two miles therefrom by the nearest public road, a sum not less than one shilling and sixpence, and for every person successfully vaccinated at any place more than two miles distant from such residence any sum not less than two shillings and sixpence.

VII. In the event of any Medical Practitioner, acting under the provisions of this Act, being of opinion, that any child that has been vaccinated by him is insusceptible of the vaccine disease, he shall deliver to the father or mother, or person having the care, nurture, or custody of such child, a certificate under his hand, according to the form of schedule hereinafter inserted, marked (D); and the production of such certificate shall be a sufficient defence against any complaint which may be brought against the said father, mother, or person having the care, nurture, or custody of such child, for non-compliance with the provisions of this Act.

VIII. The Registrar of Births and Deaths in every sub-district in which the operation has been performed shall keep a register of the persons of whose successful vaccination a certificate shall have been transmitted to him as above provided, by the said Medical Officer or Practitioner, and shall at all reasonable times allow searches to be made of any such Register-book in his keeping, and shall give a copy, certified under his hand, of any entry or entries in the same, on payment of the fee of one shilling for each search, and sixpence for each certificate.

IX. The Registrar of Births and Deaths in every sub-district shall, on or within seven days after the registration of the birth of any child not already vaccinated within the said sub-district, give notice in writing in manner hereinafter directed, and according to the form of Schedule hereinafter inserted, marked (C), to the father or mother of such child, or in the event of the death, illness, absence, or inability from sickness or otherwise of the father or mother, then to the person upon whom the care, nurture, or custody of such child shall have devolved, that it is the duty of such father or mother, or person having the care, nurture, or custody of such child as aforesaid, to take care that the said child shall be vaccinated in the manner directed by this Act, and shall, together therewith, deliver to such person a notice of the days, hours, and places, within the district of such Registrar at which the Medical Officer or Practitioner as hereinbefore provided will attend for the purpose of Vaccination; and if, after such notice, the father or mother of the said child, or the person so having, as aforesaid, the care, nurture, or custody of the said child, shall not cause such child to be vaccinated, or shall not, on the eighth day after the vaccination has been performed, take or cause to be taken such child for inspection, according to the provisions in this Act respectively contained, then such father or mother, or person having the care, nurture, or custody of such child as aforesaid, so offending, shall forfeit a sum not exceeding twenty shillings.

X. A fee of threepence shall be paid to such Registrar for each child vaccinated, in respect of which he shall have performed the duties required in this Act; and he shall keep a book, to be provided as hereinafter directed, containing a Minute of his having duly given such notice as hereinbefore directed; and the said fee shall be payable in the same manner as the fee now payable to such Registrar for registering the birth of such child as aforesaid is paid.

XI. The Registrar-General for England and Wales shall, and he is empowered and directed, within two months after the passing of this Act, to frame and provide such books, forms, and regulations, as he may deem requisite for carrying into full effect the provisions of this Act, and shall transmit the same to the Superintendent-Registrars of each district in England and Wales, who shall deliver to the Medical Officers so appointed as aforesaid, and other duly qualified Medical Practitioners in the said district, such of the said books, forms, and regulations as they may require for the performance of the duties imposed upon them by this Act; and the expenses to be incurred by the Registrar-General under the provisions of this Act shall be defrayed in the same manner as the expenses under the Act of the sixth and seventh years of King William the Fourth, Chapter 85.

XII. All penalties by this Act imposed shall be recoverable before any two justices of the peace for the county, city, borough, or place where the offence may have been committed; and the provisions of the Act of the twelfth year of Her present Majesty, Chapter 43, shall be applicable to the recovery of such penalties

XIII. All penalties recovered under this Act shall be applied in aid of the funds applicable to the relief of the poor in the parish or place maintaining its own poor wherein the offence may have been committed.

SCHEDULES REFERRED TO BY THIS ACT.

SCHEDULE (A).

I, the undersigned, hereby certify, that , the child of , aged , of the parish of , in the county of , has been successfully vaccinated by me.

Dated this day of , 185 .

(Signed) A. B.

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (B).

I, the undersigned, hereby certify, that I am of opinion that , the child of , of the parish of , in the county of , aged , is not now in a fit and proper state to be successfully vaccinated, and I do hereby postpone the vaccination until the day of .

Dated this day of , 185 .

(Signed) A. B.

Surgeon of the Union or Parish (or other Medical Practitioner, as the case may be).

SCHEDULE (C).

I, the undersigned, hereby give you notice, and require you to have C. D. vaccinated within three (or four, as the case may be, according to the second section of this Act,) months after the birth, pursuant to the provisions and directions of the Act of the 16 Victoria, Cap. . As witness my hand this day of , 185 .

J. B.

Registrar of Births and Deaths for the sub district, (as the case may be).

SCHEDULE (D).

I, the undersigned, hereby certify, that I am of opinion, that , the child of , of the parish of , in the county of , is insusceptible of the Vaccine Disease.

Dated this day of , 18 .

Signed, A.B., Surgeon of the Union or parish of , (or other Medical Practitioner, as the case may be).

PARLIAMENTARY INTELLIGENCE.

HOUSE OF COMMONS.

On Friday, a Petition was presented by Mr. Macaulay, from the Royal College of Physicians at Edinburgh, praying that the situation of the Naval Assistant-Surgeons may be improved.

THE CHOLERA.

Mr. Butler inquired whether any accounts had been received of the cholera having broken out at Hamburg.

Mr. Wilson stated, that an extract from a Report to the Consul at Hamburg, stated, that thirty cases of cholera had occurred there; but it was not stated that one of them had been fatal.

On Saturday Parliament was prorogued.

REVIEWS.

Beiträge zur Vergleichenden Pathologischen Anatomie der Gelenkkrankheiten. Von Dr. E. Gurlt, Prakt. Arzte und Assistenz der Chirurgisch-Augenärztlichen Klinik der Universitat zu Berlin. Berlin. 1853. Pp. 656.

Contributions to the Comparative Pathological Anatomy of Diseases of the Joints.

This is a very elaborate work upon the Pathology of the Joints; and, although the author modestly avows in his Preface that his own experience upon the subject has not hitherto been very extensive, he has yet availed himself of every means within his reach, in order to give a character of completeness to the task he has undertaken. The diseases of the joints have as yet been less studied in Germany than in France and England, and Dr. Gurlt's Treatise will do much to supply the deficiency. The style of the Work is close and exact, and the various matters are brought forward with a continual view to a precise and scientific arrangement. A prominent feature introduced is the continual reference made to the characters of diseases of the joints, as they occur in the lower animals; and Dr. Gurlt has copiously availed himself of all the existing sources of information presented to him in this field of investigation.

Dr. Gurlt divides his subject into two parts: in the first, he describes the general character of diseases of joints as they occur in all parts of the body, both of man and the lower animals; in the second, he considers the special diseases of individual joints.

In the first section, he treats of the changes induced in the articular cartilages of joints, and he prefaces his observations by the relation of some experiments made upon the lower animals, by which it is proved that the cartilages are very little liable to inflammatory action, but that certain changes may be induced in these structures by artificial irritation, such as by red-hot iron, chemical agents, and incisions. The principal change appears to be an ossification of the cartilage-cells. Hypertrophy, or true increase of substance, occurs occasionally as a diseased condition of cartilage, but is more commonly combined with a soft and spongy state of that part. Atrophy of the articular cartilage is occasionally found in old persons. Fibrillation is the morbid process usually observed in diseases of the cartilages. In such cases, the diseased part has a felt-like appearance, and, when seen under water, the cartilage is found to be decomposed into numberless threads arranged in tufts, which are fixed at their base, but float about in the water. On more minute examination with a lens, the cartilage is found to be split up, to a greater or less depth, into numerous parallel filaments. This disease the author considers to be independent of any other co-existent disease of the joint, although it may be associated with it. Ossification of the cartilages sometimes occurs, but it is a rare disease.

In treating of the changes of the synovial membranes, the author describes, first, the effects produced artificially by stimulating fluids thrown into the joints of the lower animals, and also by ordinary injections into those of the dead human body; in the first case, to show the morbid changes induced in the living structures; in the second, the changes of form and position effected by mechanical distention. The acute inflammation of the synovial membranes is carefully described, with the aid of the light thrown upon this process by the experimental investigations made upon dogs by Richard and Lebert. The inflammations of the synovial membranes are divided into three groupes:—1. That cause by acute articular rheumatism; 2. That which results from pyœmia; and 3. that which is said to follow inflammation and widening of the urethra. In synovitis, accompanying acute rheumatism, the exudation may be small in quantity, but with remarkable injection of the synovial membrane; or the contents of the joint are increased in quantity, and consist of a red-coloured, more or less thick, partly oily and serous fluid, or of a purulent or sero-purulent exudation of various composition. There are also found secretions of fibrin, and occasionally, the articular cartilages are also diseased. In synovitis caused by pyœmia, a very great similarity is observed to the appearances presented in rheumatic inflammations of the joints, and to those inflammations produced by wounds, or without any known cause; but with this distinction, that in pyœmia the exudation into the joints is purulent or sanious, corresponding with the numerous purulent deposits in other parts of the body; while the synovial membrane itself often exhibits very slight traces of inflammation, and often, scarcely any reddening or vascular injection. The pyœmic inflammations of joints are divided into—*a*. the traumatic, which presents the same character whether arising from injury to a vein, or from any operation upon another part of the body; *b*. the puerperal, which is similar to the last, except that it often presents suppurative disease of the pelvic symphysis; *c*. the inflammation of the joints following glanders; and *d*, that which follows the malignant acute exanthemata, as small-pox and scarlatina, in which latter it has been occasionally observed in childhood, that the epiphyses of the ends of the bones have been loosened by extension of the inflammation. The author thinks, that the synovitis following inflammation and dilatation of the urethra is somewhat problematical, but he quotes two cases, one occurring in France, and the other in this country.

The chronic inflammation of the synovial membrane exhibits an exudation of a serous nature, but which is never purulent, and is similar to the fluid found in hydrocele. The changes which the synovial membrane itself undergoes, are generally inconsiderable, and are usually confined to a more or less considerable vascularity, and an increase and capillary injection of the elevations on its surface; so that it is found covered with a great number of small excrescences of the size of two or three pins' heads.

The shaggy excrescences of joints, lately named by Rokitansky dendritic vegetations of the synovial membrane, are very peculiar formations occurring upon the membrane, and resulting from chronic inflammation. In describing these bodies, the author adopts generally the views of Rokitansky, although he differs from him in respect to the secretion in them of cartilaginous and osseous matter. "Although," says Dr. Gurlt, "it is not doubtful that secretions of cartilage and bone may be developed in the shaggy excrescences, yet, I think, that Rokitansky goes too far in attributing the origin of all bony and cartilaginous growths in joints to the presence of these bodies; for, according to my opinion, in the greater number of cases, these bony and cartilaginous formations are due, in a far more certain manner, to chronic inflammation of the joints," p. 45.

The changes in the bursæ mucosæ are very similar to those observed in the synovial membranes, these sacs being subject to acute and chronic inflammation, and also occasionally presenting free and pedunculated corpuscles analogous, in their formation, to the shaggy excrescences found on the surface of synovial membranes.

By inflammation of the joints, the author intends to denote all the inflammations of the joints which are described by various authors as tumor albus, fungus articuli, arthrocace, luxatio spontanea, caries of the joints, and ulcerative inflammation of the joints, as contra-distinguished from those inflammations which attack only a single structure of the joint. The chronic inflammation of the joints comprehends many morbid states which have received different names from different authors, as "chronic rheumatic arthritis," "arthrite chronique sêche," "inflammatory osteoporosis," etc. A formation peculiar to this form of disease is that of the pedunculated and free corpuscles, called also corpuscula mobilia and joint-mice, which are sometimes found in great multitudes in certain joints, and offer the greatest varieties in their size and appearance. They consist for the most part of true osseous matter, which, however, is sometimes found only as a nucleus in a cartilaginous mass.

The gouty secretions of joints are limited by the author to those cretaceous, or gypseous masses, sometimes occurring in the fluid state, and which essentially consist of urate of soda and lime; and all those formations occurring around the joint, and consisting entirely of phosphate and carbonate of lime, are excluded from this division of the subject. We regret that our space does not allow us to quote the description of the peculiarities presented by gouty accumulations in and around the articulations; and we are compelled for the same reason to pass over the sections on hydatids in the joints, osteoid swellings, cancerous growths, and also those on congenital luxations, ancient traumatic luxations, and on united and ancient fractures in the joints.

The second, and most considerable part of the work, is devoted to the consideration of diseases of particular joints. These are considered in the following order:—Diseases of the articulation of the jaw, of the vertebral column, of the coccyx, of the costal articulations, of the sacro-iliac syn-

chondrosis, of the pelvic articulation, of the clavicular articulations, of the shoulder-joint, of the elbow-joint, of the hand and wrist-joint, of the metacarpal and phalangeal articulations of the hip-joint, of the knee-joint, and of the joints of the ankle, metatarsus, and toes; and the work concludes with a short description of the diseases of the phalangeal joints on the anterior and posterior part of the feet of some brutes, especially of the horse and the cow.

A good Index is appended to the volume, and the whole work is in all respects well worthy of perusal, and forms an excellent compendium of the existing state of science connected with the subject of which it treats; and it will give a very high reputation to its author.

Twenty-third Annual Report of the Belfast District Hospital for the Insane. Belfast. 1853.

This Report contains a useful contribution to the statistics of insanity, and some of the general subjects to which attention is drawn are of considerable interest. Since the last Report from this hospital, the dietary has been increased, at the suggestion of the Medical Officers, and the change has been productive of the most salutary effects upon the physical condition of the patients, and the chances of their mental improvement have been thereby promoted. The subject of the erection of a chapel and the appointment of chaplains was frequently brought before the Governors at large meetings, but was always negatived, as it was considered that, in a city like Belfast, where there was a great variety of different creeds, and where the spirit of religious controversy was very strong, the introduction of a number of ministers into the same asylum professing opposite creeds, would rather tend to increase than to soothe the mental maladies of the patients. It is a lamentable circumstance, alluded to in this Report, that in the Belfast Asylum a great proportion of the cases are still induced by intemperance, notwithstanding the praiseworthy efforts made by Father Mathew in the sister island.

Crétins and Idiots. A Short Account of the Institutions for their Relief and Cure. Pp. 32. London. 1853.

This pamphlet describes the various steps which have been taken to improve the condition of crétins and idiots since the establishment of the asylum of the Abendberg by Dr. Guggenbühl. So great has been the interest excited by the successful efforts made by this humane and enlightened physician in behalf of this miserable section of humanity, that institutions of a similar character have sprung up in various parts of Europe. One has been founded in the vicinity of Stuttgardt, another at Muhldorf, on the road to Vienna, and one is in contemplation near Aosta in Piedmont. In England, the cause of the idiot, who is in many respects more favourably situated than the crétin, has not been overlooked, and three asylums for idiots already exist. The pamphlet before us details several instances where the most material improvement has followed the plans proposed for the melioration of idiocy, and an urgent appeal is made to the benevolent for funds to carry out in England the system which has worked so well in the mountain-asylum in Switzerland, where we are told that by judicious and patient training, some of the most degraded of our species have been elevated from the condition of the brute to experience the feelings and the affections of human beings.

Report from Bethlem Hospital. 1853.

The present Report is addressed to the President, Treasurer, and Governors of Bethlem Hospital by Dr. Hood, the newly-appointed Medical Superintendent, who describes the alterations which are in progress in the management of the Asylum. All the gloomy associations connected with a mad-house are to be abolished as far as possible; the iron bars are to be removed from the bed-room windows; and the care and kindness of attendants substituted for dark and massive prison walls; familiar games, involving out-door amusements, are to be introduced, and social parties are to be held at frequent intervals, after the plan adopted at Hanwell and Colney Hatch; and last, not least, clinical lectures are to be regularly delivered upon the cases under treatment.

A number of statistical returns are appended to the Report, including the number of patients admitted and discharged, the nature of their cases, and the causes of their malady, so far as they can be ascertained, the religious persuasion of the inmates, the extent of their education, the state of their bodily health, and the number of their attacks, and the diseases which have induced death in the fatal cases. There is also a list of the officers, attendants, and servants, with their respective salaries.

Altogether this Report contains a large quantity of instructive matter in a very small space; and it will be read with interest and advantage by all who are curious to know the particulars of the internal arrangements of this richly-endowed, but hitherto mismanaged hospital.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, August 8, 1853.

How *can* you expect that at this season Edinburgh should be prolific of news!!

Imagine to yourself long lines of lofty houses, with papered windows, and notices of letters and parcels "to be left at the grocer's round the corner." Small-pox, measles, and scarlatina rusticated for the session, even doctors fled from the universal desolation, the grass growing on the deserted streets, cocks and hens roaming at large, and geese cackling where men were wont most to congregate. Still there is something. Symptoms now begin to be more apparent of a speedy

BREAK UP IN THE MONTHLY JOURNAL.

I hinted to you some time ago that the happy family engaged together in this periodical were not in that state of harmony which their proximity to one another rendered desirable. This was, of course, met by an indignant denial. Every means was taken to expend their belligerent propensities in foreign service, but, alas! in vain. Challenges innumerable were given to all their contemporaries; regrets were expressed that these were not accepted. At last a prospect of a fight appears. Io pæans are loudly sung. "Chemicus," rubbing his hands, exclaims with joy, "Lo! the old pirate has begun to blow his match and turn round upon us at last;"(a) but it comes too late. The mutiny has broken out on board their own vessel, and the testy little commodore and burly, bullying boatswain bespatter each other with the "smoke-balls and stink-pots" embarked for foreign service; and as the hull of the vessel, well battered in a hundred fights, sheers off, we have the uncomfortable feeling, that before we see it again all its crew will have disappeared, having shared the fate of the Kilkenny cats, and devoured one another.

Brief and troubled has its existence been. Let any one who doubts this, refer to the department headed "Medical news," which, from its commencement to the present time, has been little else than a chronicle of the quarrels in which its many editors have been either individually or collectively engaged.

Even the Number for August affords a pretty good specimen of what it can do in this way.

No. 1. Dr. L. R. Thomson, *versus* the Procurator Fiscal.
No. 2. Professor Syme to Lord Palmerston.
No. 3. Professor Syme and Mr. Glover.
No. 4. Professor Syme and Mr. Fergusson.
No. 5. Professor Syme, *versus* law in general, and the expense of quarrelling in particular.
No. 6. Professor Bennet *versus* Mr. Syme.

Pretty well, certainly, for one month! Having quarrelled with all and sundry, who would not for peace-sake submit to their dictation, having quarrelled with their London publisher, having attempted to quarrel with the "London Hebomadaries," with the London Medical and Chirurgical Society, with Mr. Guthrie, and Mr. Fergusson; they at last end, as might have been expected, in quarrelling with themselves.

STRIKE AMONG THE DOCTORS' COACHMEN.

Within the last year, a fearful irruption of doctors' broughams has paraded the streets of Edinburgh, and its bye-lanes and back streets are now disturbed by the long unaccustomed sounds of carriage wheels. Much of this is probably to be attributed to the cheapness of provender for the last year or two, which rendered

(a) See *Monthly Journal* for August, page 189.

the keep of a horse a less expensive matter than it formerly was. Those among us who still keep up the peripatetic system, whether for the benefit of our health or our pockets, have been not a little amused to hear of a "round robin," which, in the course of last week, was delivered to most of those medical men who prefer to roll in inglorious ease in their carriages.

Purporting to proceed from a body who appear to have established themselves in a corporate capacity, under the title of the "Doctors' coachmen" this strange document, of which a copy has obligingly been lent to us, sets forth their complaints in due order, which being disentangled from the verbiage in which they are concealed, appear to be threefold. 1st. Too low wages. 2nd. Too laborious employment. 3rd. Want of rest on Sunday. In regard to the first: we suppose the present rate of wages was fixed while provisions were high, and we are not aware that any diminution was proposed as wages fell. It is quite true, as these gentlemen allege, that mason's receive more at present; but they forget altogether, that few tradesmen have constant, regular work, that they have to uphold themselves in tools, often of a very expensive kind, and that they are not found in clothes.

It seems also absurd, that the wages of "Doctors' coachmen" should be all alike. Some have much more work than others, and should be paid in proportion; and the matter is one which can only be satisfactorily adjusted between each master and each man.

In regard to their second complaint, there are few well-paid occupations, carried on with less "sweat of the brow," than that of a coachman. If they are exposed to all weathers, they are well protected against their injurious influence; and we have only to direct an upward glance from our humble walk on the *pavé*, to the "Doctors' coachmen," who, condescendingly, touch their hats to peripatetics like to us, as they pass by, to be convinced that there is much less solidity under the aforesaid beavers, than under the waistband of their breeches.

A simple remedy will be speedily resorted to, should the men be determined to drive their masters into a corner. The enterprising proprietor of a post-horse establishment is ready to supply doctors with broughams, and men in livery, by the hour.

The best cure for these worrying vexations, will be to follow our example, and be content with a few hours of a hackney cab.

The attention of the scientific world here has been lately engrossed with the

TORBANE HILL COAL CASE,

which occupied several days in the Jury Court here.

The mineral, regarding which the dispute arose, is apparently an argilaceous shell, very largely charged with bitumen.

The gentleman on whose estate it was found leased the "coal and lime" to a party who derived great profit from extracting naphtha from the bitumen. The proprietor then sought to recover damages from his tenant, for working what, under the contract, he was not entitled to work; and the whole question turned on the point, whether this product was really coal or not. All the most eminent geologists, chemists, and microscopic observers, were examined in turn, and the scientific evidence appeared to be tolerably equally balanced; the jury, however, very properly threw overboard the scientific question altogether, and gave a verdict for the lessee, on the ground that the substance in question was familiarly known as coal, worked as coal, and sold as coal.

Referring to the proceedings in the Jury Court, reminds me of the

DANGER INCURRED BY SIGNING CERTIFICATES OF LUNACY.

Last week, an action was brought by Miss Rough, of Dundee, against her relatives and two respectable medical men, who had signed a certificate of her insanity; on which, the sheriff granted a warrant, by virtue of which she was confined for three years, in a private asylum, about six miles from Edinburgh. On her release, she put herself in the hands of an agent, celebrated for undertaking desperate cases, by whom this prosecution was raised. Her evidence broke down completely; but though the medical men have thus gained their action, it will cost them each a very considerable sum to defray the expense they were put to in defending themselves.

Cholera.—Death in Milbank Prison.—A female, aged 30, was found by Dr. Baly in a state of collapse from cholera. She died on Sunday morning. Verdict, "That deceased died from cholera." At the inquest, Dr. Baly said, there were no means of distinguishing between Asiatic and summer cholera. There had been fewer cases of diarrhœa in the prison this year than last summer.

GENERAL CORRESPONDENCE.

THE COLLEGE EXAMINATIONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—When a short time ago I took the liberty of addressing a few lines to you upon the mode in which the examination for the diploma of the College of Surgeons is conducted, I took upon myself the invidious task of animadverting upon the peculiarities of a gentleman to whose professional acuteness and skill the surgical practitioners of this country are greatly indebted. And upon further reflection, I do not think that so much blame ought to be attached to any one individual as to the system under which the College examinations are held. The whole thing is a practical absurdity. The education of a medical student at a London hospital lasts three years, and he is required to disgorge all the knowledge that he has obtained in that space of time in one hour. So the examiner gives short concise questions, and expects equally brief and distinct answers. If the student is sharp and quick of apprehension, he goes on glibly enough, and keeps himself and the examiner in good temper. But if the poor fellow's intellect be ponderous and slow, if he is a long time in considering how he ought to answer a simple question, the man in authority becomes peevish and fretful, begins to utter sarcastic remarks, inquires blandly, "At what school where you educated before you came to London?" or quietly recommends him "to go to one of those excellent preparatory seminaries near Brompton;" nay, some testy gentleman may even use strong language, and anathematise ferociously the trembling wretch before him. Now the weighty student may be a better man than the sharp one, yet he lacks the one thing needful at the college—assurance; blessed assurance that can place ignorance upon a pinnacle, and whose absence may cause knowledge to grovel in the mire.

When a man has passed the College, there gather around him all the students of his hospital. "Who examined you?" "Oh, Lawrence, and Green, and Stanley, and Guthrie." "Oh, what did Lawrence ask you about?" "Oh, all about hernia and the eye!" "*All* about hernia and the eye!" Why Mr. Lawrence himself has written two tomes about those subjects, which, to understand and appreciate fully, would take three or four months' hard reading. Yet, nevertheless, a man has to rattle over them in fifteen minutes, just enough time for him to describe properly the conjunctiva, and, perhaps, the two outer coverings of a hernia.

It is no uncommon thing for a man to say, that he has been examined upon the brain, the sole of the foot, the bladder, the minute anatomy of the liver, fractures of the base of the skull, morbus coxarius, and the diseases of the testicle and mammary gland. To give a most superficial and rapid account of one of these subjects would take a good hour. What can be the practical value of such an examination. It is not so much a test of knowledge, as a test for shrewdness and quickness of perception. As they stand now, the examinations are merely a trial of wit and sharpness between the members of the court, and the different grinders in the metropolis.

I have very strong doubts as to the efficacy of oral examinations. If used at all, they should be in conjunction with strict written questions, and their importance should only be deemed secondary. A medical student, not having the fear of a searching written examination before his eyes, is apt to become slovenly in his habit of acquiring knowledge, and, when he "goes up," trusts more to his wits than to his information. *Litera scripta manet.* His answers can be more carefully analysed by the examiner, if they are down upon paper, than in a rapid conversation of an hour's duration. This fact alone would tend to make students more particular in their studies; and, moreover, they would continually be practising how to obtain a fluent and elegant style of writing,—an accomplishment in which most of them are wofully deficient.

Moreover, the written examinations should extend over a period of three or four days; each day being devoted to a particular branch of the profession. They would gain greatly in popular estimation, and they would be more satisfactory to the industrious student. He would have more time to think over his answers; there would be no flurry or nervousness; and he would stand in a far higher position than he can do under the present system, inasmuch as such examinations would be of practical utility, which the present are not.

The examinations, instead of being held once a week, should be held once a year; the same set of questions should be afforded to each student; and, after a proper lapse of time, a list of the successful candidates for the diploma, placed in classes according to their merit, should be published; the first man to have an honorary rank such as appertains to the Senior Wrangler at Cambridge. At present no difference is made between a man of mere average

knowledge and one of great ability, industry, and professional acquirements,—the reward for each being the same. I do not know a greater stimulus to industry than this one regulation would prove. It would give merit its proper position in the Profession, and would do much to prevent the man of learning from languishing in poverty, and esteeming an appointment as the parish doctor the height of his ambition.

I am, &c. A Medical Student.

THE NECESSITY FOR BEDS BEING PRESERVED IN THE LONDON HOSPITALS FOR THE ADMISSION OF URGENT CASES OF DISEASE.

[To the Editor of the Medical Times and Gazette.]

Sir,—Through the medium of your Journal, as being the best means one in my position possesses, I beg to call the attention of the Governors of St. Thomas's Hospital in particular, and of other hospitals similarly circumstanced, to the absolute necessity there is to make some alteration in the disposal of their medical beds, so as to provide for the admission of urgent cases of disease at other times than on the regular "taking-in day."

My attention has been especially directed to this matter by the following occurrence, which took place at St. Thomas's, on the evening of Tuesday, the 23rd inst:—

A young man, a foreigner, was brought to the hospital in a cab, by a policeman, who had found him in Sun-street, Bishopsgate; he was blue in the face, and gasping for breath; he was evidently labouring under very urgent laryngeal obstruction, the lips congested and face pale, hands and arms livid and cold, pulse and heart's action feeble and rapid. He was totally unable to speak English, and so no account could be gleaned from him. The case was one evidently calling for the immediate performance of tracheotomy; but because no rule exists that a certain number of medical beds should be reserved for urgent cases, and another rule that no medical case shall be admitted into a surgical ward under any circumstances, there was no vacant bed into which the poor fellow could be received, and consequently, he was obliged to be conveyed to Guy's. It may be stated, that he almost expired on his way thither, and was quite pulseless on admission. He, however, rallied in a short time, and the operation was performed soon afterwards by Mr. Birkett; but it was necessary that artificial respiration should be set up before he was considered viable.

Now, Sir, I ask, should not a few beds be preserved for the sake of the admission of such cases as these, rather than they should be filled up with such patients as do not positively require hospital diet, and constant nursing, but would do equally well as out-patients? Three beds for males and the same number for females might easily be spared, by each Physician giving up one bed in each ward for the admission of urgent cases.

At the same time, I would ask, whether those in authority consider six beds sufficient to set aside for male accidents during a week? I have seen sufficient ill from the effects of this rule to be able to tell them that they are not. Many a poor fellow with a severely sprained ankle, or fractured ribs, have I seen going away without our having been able to admit him on account of the paucity of beds; while there are numbers of patients who gain their admission on "taking-in days" with ulcerated legs of a quarter of a century's duration, infinitely more able to go away than those to whom we are obliged to refuse admission.

It must be evident to any one, that the rules I have alluded to completely annihilate much of the good which might be effected in a charitable institution; and, although the relief of the suffering is the prime object of the establishment of hospitals. Yet, the benefit and advantage of those studying their Profession should not be entirely overlooked.

I am, &c. A Student.

Wednesday, August 24, 1853.

Small-pox is on the increase in Honolulu, Sandwich Islands. 15 new cases were reported on June 10, making thus far 68 in all, out of which there were 17 deaths. The difficulty in the way of arresting the progress of the disease, seems to be a habit on the part of the natives of concealing those who are attacked with it, that they may not be removed to the hospital. It is gratifying to know, that not an individual who has been properly vaccinated has been attacked with the disease.

Small-pox, Crediton, Devon.—On Sunday, three children belonging to one family, aged five years, four years, and three months, who had died of small-pox, which has been prevalent in this town of late, were buried. The three children died in one week. There were four children belonging to the family,—all of them had the disease, but one recovered. Neither of these children had been vaccinated.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Copland, President, in the Chair.

OBSERVATIONS ON CYSTIC DISEASE OF THE TESTICLE.

By T. B. CURLING, F.R.S.,
Surgeon to the London Hospital.

The author found the cysts communicating with the tubular structure of the testicle, and believes them to be dilatations of the vessels of the rete. He describes the characters of the intra-cystic growths, and considers that, in some cases, the disease may be malignant. He concludes—

1st. Cystic disease of the testicle occurs in two forms—innocent and malignant.

2nd. Both forms are the result of morbid changes in the ducts of the rete testis, this part of the organ being the sole seat of the disease.

3rd. The innocent form is characterised by the presence of tesselated epithelium.

4th. The malignant form is characterised by the presence of nucleated cancer cells.

5th. Enchondroma occurs in both forms of the cystic disease.

AN ACCOUNT OF AN INSTANCE OF REMARKABLE DEFORMITY OF LOWER LIMBS.

By GEORGE VINER ELLIS, Professor of Anatomy in University College, London.

The subject of the present communication was an individual well known on the stage, where he appeared in the form of imps, and was exhibited a few years before his death as a newly-discovered animal, announced in the public handbills as "What is it?". The lower extremities were withered, though in an unequal degree, the right being much shorter and more malformed than the left. An accurate account of the dissection was given by the author. The femur existed in the right limb, but was nearly completely absent in the left; there were no patellæ; there was deformity in the bones of the leg; there was no acetabulum, and consequently no hip-joint, the bones of the lower extremities and the pelvis being united by muscle and ligament, though not being in contact. The femoral artery was represented by a very small vessel, while a large artery was developed in the posterior part of the thigh, and accompanied the sciatic nerve.

CASE OF HYPERTROPHY OF THE TONGUE.

By T. P. TEALE, Esq.
(Communicated by JOSEPH HODGSON, Esq., F.R.S.)

A child, aged 1 year, suffered, after an attack of thrush, from swelling and protrusion of the tongue, forming, eventually, a protruding tumour, the size of a walnut, deeply ulcerated on the under surface. The tongue continued to enlarge until the child reached the age of three years, when the protrusion was as large as a pullet's egg. Treatment by pressure was adopted, which has been so far successful that the organ is retained within the mouth.

ON SMALL-POX AND VACCINATION:

AN ANALYTICAL EXAMINATION OF ALL THE CASES ADMITTED, DURING SIXTEEN YEARS, AT THE SMALL-POX AND VACCINATION HOSPITAL, LONDON; WITH A VIEW TO ILLUSTRATE THE PATHOLOGY OF SMALL-POX, AND THE PROTECTIVE INFLUENCE OF VACCINATION, IN DEGREES VARYING ACCORDING AS THE VACCINATION HAS BEEN PERFECTLY OR IMPERFECTLY PERFORMED.

By J. F. MARSON.
Resident Surgeon to the Small-Pox and Vaccination Hospital, London.
[Communicated by Dr. CHOWNE.]

During the period comprised within this analysis small-pox had been epidemic four times—in 1838, 1834, 1848, 1851; and rather more than half of the patients admitted into the hospital had been previously vaccinated. Much anxiety about the degree of security afforded by vaccination had begun to be felt, and the author thought the Profession would be interested; and much useful information perhaps might be elicited by classifying and arranging the patients admitted during the above-named period. The analysis referred principally to the following points:—

I. Natural small-pox.
II. Small-pox after small-pox.
  a. After natural small-pox.
  b. After inoculation.

III. Small-pox after vaccination.
a. Number of cicatrices.
b. Character of cicatrices.
c. Vaccinated, but without cicatrices.
IV. Febrile eruptive diseases mistaken for small-pox.

A remarkable difference was observed between the vaccinated and unvaccinated patients, and also between the vaccinated cases themselves,—some patients having the small-pox in a mild form, wholly devoid of danger, while others had it in great severity, scarcely, if at all, lessened by the previous vaccination. Under these circumstances, the author thought that the causes of this remarkable difference might be sought for among the antecedents in respect to the vaccination of each individual admitted, with a view to explain the extreme mildness of some cases—the danger, unmitigated course, and even death of others. Small-pox in the unprotected remains to this day as virulent as it ever was. Vaccination, when performed in infancy, affords almost complete security against the fatality of small-pox up to the period of puberty; and the general experience of the Small-pox Hospital shows, that small-pox did not usually occur after vaccination until several years had elapsed. The most trustworthy evidence of the perfection of vaccination was to be obtained from the cicatrices, and this evidence he would be able to show was a very good guide to the general amount of protection conferred by vaccination. The analytical series consisted of six tables. The first table showed the number of patients admitted at the hospital in each year, distinguishing males from females, whether vaccinated or otherwise, and gave the outline of the disease under which each was suffering; it included 185 cases of febrile diseases, principally eruptive but not variolous, and it furnished the result of the whole, with the rate per cent. of the mortality. The second table gave an analysis of all the cases of small-pox, 5797, classed under nine different headings, the form of the disease in each case, and the result, with the rate per cent. of mortality under each division. He there gave the ages of the unprotected patients, and the rate per cent. of mortality calculated at different periods of life, for every five years up to thirty, and even ten years afterwards. The fourth table exhibited, separately, the leading particulars of 3094 cases of small-pox after vaccination, showing from a careful examination of each patient, the number and character of the vaccine cicatrices, the form of the variolous disease and the result, with the rate per cent. of the mortality from small-pox after deducting the cases of superadded disease. It also showed the rate of mortality from small-pox in patients having one vaccine cicatrix, particularising whether good or indifferent, and the avrage. The fifth table showed, in quinquennial periods, the ages of the vaccinated patients when attacked by small-pox, when they were vaccinated, and the rate of mortality. The sixth table stated, in periods of five years, the ages of the patients at the time they were vaccinated, who had subsequently been admitted with small-pox into the Small-pox Hospital. Observations on the results accompanied each table; and, in relation to Table IV., it appeared that 3094 patients with small-pox reported themselves to have been vaccinated at some period of their lives. 1357 had one vaccine cicatrix; and of these four and a-quarter per cent. died with a good cicatrix, and twelve per cent. with an indifierent cicatrix; mean, seven and a-half per cent. 888 had two cicatrices; two and a-half per cent. died with good cicatrices, seven and a-quarter with indifferent cicatrices: mean mortality, four per cent. and a fraction. 274 patients had three cicatrices: average mortality, one and three quarters. 268 patients had four cicatrices; and there died with good cicatrices, under one per cent.; with indifferent cicatrices, none, the average being only three-fourths of one per cent. The author described a good vaccine cicatrix as distinct, foveated, dotted, or indented, in some instances radiated, and having a well, or tolerably well, defined edge. An indifferent cicatrix as indistinct, smooth, without indentation, and with an irregular and well-defined edge. The author's opportunities of examining, with regard to previous vaccination, the foreigners admitted with small-pox at the hospital, and comparing them with each other, and with the same class of persons in this country, had led him to the conclusion, that vaccination was performed in the best manner generally by the Danes, Swedes, Norwegians, and Germans, judging them by the standard shown in Table IV., to afford the most efficient security. Then came the Italians; and from the few he had seen, the Spaniards; then the Scotch; then the Irish, and, lastly, the English and French. He was most anxious to draw the attention of his professional brethren to the above fact. There must exist some grave and lamentable evils (more especially affecting the humbler classes) connected with the circumstances under which vaccination in country districts was performed. The details recorded in this paper should urge our provincial brethren, whose position and ability gave them influence, to lend their aid to trace the evil to its root; for there could be no justifiable reason why the rural inhabitants of England and Wales should be far less well vaccinated than were the rural inhabitants of Denmark, Sweden, and Prussia. The mortality, severe as it was between the indifferently and the well vaccinated, was not the only evil result to be regretted of bad vaccination. Proportionate to the mortality was the severity of the disease, and to those who escaped death there was damaged health, disfigurement for life perhaps, and the discredit brought on vaccination, which was in no degree due to it intrinsically, but was owing solely to the want of proper knowledge of the subject, and of the necessary care with which the operation should be performed. Great judgment and caution should be exercised in the selection of vaccine lymph, for in this lay one of the principal causes of failure in vaccination. Lymph for use was in its best state on the seventh day of the progress of the vesicle, the day week from the vaccination; and the author described the character of the vesicle and the indications of the stage when it was most favourable for the collection of the lymph; and some very valuable and instructive observations followed on the mode of conveying lymph, the mode of vaccinating, the mode of preserving lymph, and on re-vaccination.

The author's conclusions from the foregoing facts and statements were.—

1st. That natural small-pox destroyed about one-third of all whom it attacked.

2nd. That small-pox after small-pox was of comparatively rare occurrence; that a second attack of natural small-pox was rare, but not often fatal, and that protection seemed to be the law. That after inoculated small-pox, an attack of small-pox had more frequently led to fatal results; but there is reason to presume that the virus used for inoculation, like a great deal of the lymph used at the present day for vaccination, was often taken at too advanced a period of the disease, and thus did not afford the full measure of protection it was capable of affording if taken at a proper time.

3rd. That vaccination performed in infancy afforded almost complete protection against the fatality of small-pox to the period of puberty; that a variety of circumstances conspired to make it almost impossible to ascertain exactly in what proportion to the vaccinated cases of small-pox subsequently occurred, or might occur, if all persons lived to an advanced age.

4th. That, as a matter of safety, it would be well for all persons who were vaccinated in infancy to be re-vaccinated at puberty; this measure being more especially requisite for those who were either indifferently or doubtfully vaccinated in infancy, and still more necessary for those who, though vaccinated, had no cicatrix remaining. Finally, as a matter of precaution, it would be desirable that all persons should be re-vaccinated on small-pox existing in the house where they were residing,—a precaution, however, that will cease to be necessary to advise when all persons have the benefit of proper and efficient vaccination.

The President hoped, that, if any gentlemen wished to offer any observations on the paper, they would make them at once, as the time of the Society was precious, and there were many more papers to be read. The author had brought forward a large amount of information respecting the characters and progress of small-pox, and the proper method of employing vaccination. He (the President) thought, that much might be learned by close observation of the disease in other countries, and he should like to obtain information respecting its destructive influence in the island of Jamaica.

Mr. Streeter considered that, before the performance of vaccination, attention should be paid to the state of the skin, which ought to be in as healthy a condition as possible. The lax state of skin which a residence in tropical regions produced, was, he believed, a great cause of the frequent failure of vaccination in those parts. He thought Mr. Marson deserved the thanks of the Society for the paper which he had communicated, and especially for demonstrating clearly in what proper and effectual vaccination consisted. Many years ago, seventy individuals were vaccinated by a practitioner with whom he was residing, while he (Mr. Streeter) vaccinated personally forty. Of all these persons, about half did not return to show the state of their arms; and thus a source of error was established, for it was impossible to know whether the vaccination pustules became properly formed in those individuals. This was an example of one of the difficulties with which the practitioner had to contend in endeavouring to compute the results of vaccination. In his own practice, he (Mr. Streeter) had never seen small-pox terminate fatally when it attacked individuals who had been previously vaccinated. He had heard of such an occurrence in the practice of another medical man; but, in that case, there was grave reason to doubt whether vaccination had been effectually performed. With reference to the destructive influence of the dis-

ease, it was, he thought, a very unfavourable complication in women, that they should be attacked with small-pox during the performance of menstruation.

Dr. Webster considered the paper just read as of great value, whether in respect of the numerous facts it contained, or the deductions enunciated by the author. Besides which, the various tables compiled would enable others further to investigate the question, and so disabuse the public regarding some fallacies recently disseminated. He (Dr. Webster) entirely concurred with the opinion stated respecting the great fatality of small-pox among young people, compared with those in more advanced life. For instance, during 1847, when upwards of 4200 persons died by variola throughout England and Wales, more than three-fourths were under five years of age,—the sexes being equally divided, while very few had passed their 45th year. Again, the fact mentioned by Mr. Marson, that death very rarely occurred in cases where the individual had been properly vaccinated in three or four places at the same time, was likewise most important, and showed, if the system was once properly imbued with true vaccine virus, little danger of subsequent small-pox need be apprehended. In his (Dr. Webster's) opinion, many of the deaths reported from variola, after cow-pox, occurred where the party never had been correctly vaccinated, especially throughout rural districts and country towns; in which localities numbers even remain altogether unprotected, owing to the prejudices frequently prevailing in ignorant minds against vaccination, who obstinately object, it is reported, to the operation, "as an impious attempt to arrest the will of the Almighty." The Society's time being very limited, as announced from the chair, prevented any allusion to several points adverted to by the author; nevertheless, before sitting down, Dr. Webster remarked, that the statements now brought forward more than ever confirmed the protective efficacy of cow-pox, when vaccination was carefully and judiciously performed.

Dr. Chowne could confirm the views of Mr. Marson respecting the number of vesicles necessary for the effectual performance of vaccination. He thought vaccination in the country was far more imperfectly performed than in large towns such as London; but he did not at all mean to say, that this imperfection should be attributed to any negligence or incapacity on the part of the medical men in the country; but rather to the faulty system under which vaccination was at present pursued.

Mr. Marson said, that he had very few observations to offer, as he thought it better to rest on the statistics furnished by the tables which he had laid before the Society, many of which, on account of the length of the communication, had not been read. He maintained, that it was essentially requisite for the effectual performance of vaccination that several pustules should be raised. It was stated, that this practice was opposed to the doctrines inculcated by Jenner; but he would observe, that Jenner himself, in this particular, departed from the rules he had laid down; for he (Mr. Marson) had lately seen, at the Small-pox Hospital, a woman who had been vaccinated by Jenner in 1806, and whose arm exhibited cicatrices of four pustules—a circumstance which proved beyond dispute, that Jenner did not always consider one vaccine pustule a sufficient safeguard against small-pox.

MEDICAL NEWS.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Aug. 18, 1853:—

Altham, William, Bentham, Yorkshire.
Banks, William Roger, Birmingham.
Longton, Edward John, Southport, Lancashire.
Newman, William John, Sydney.
Pittock, George Mayris, Deal, Kent.
Rolston, Peter Williams, Devonport.
Taylor, George Stopford, Sheffield.
Williams, Thomas M., Wellow, near Oberton, Notts.

APPOINTMENTS.

Medical.—Dr. William J. Gruggen, late R.N., has been appointed, by Her Majesty's Commissioners for Emigration, a Government Medical Inspector of Emigrants at the port of Liverpool.

Militia.—Warwickshire Militia, Patrick Brown, Esq., M.D., to be Surgeon. Devon Militia Artillery.—John Beavis Bignell, to be Surgeon.

Bequests.—Mr. John Simmitt, late of Lower Norwood, has bequeathed 2000*l.* to be equally divided among the following medical charities:—St. Mary's Hospital, the Royal Sea Bathing Infirmary, Margate, East London Consumption Hospital, and the Royal Free Hospital. The executors appointed to carry out the benevolent intentions of the donor are John Gay, Esq., Surgeon to the last-mentioned Institution; John Combe, Esq., of Staple's-inn; and Mr. Bagner, of Bishopsgate-street.

Mr. Bransby Cooper.—The funeral of this gentleman took place at an unusually early hour on Thursday morning, in a most unostentatious manner, in strict accordance with the wishes of the lamented deceased, at St. Martin-in-the-fields, the Right Hon. the Secretary of State having permitted the family-vault to be opened for that purpose; this church being one of those in which interments are prohibited. The procession left the late residence of Mr. Cooper, at half-past eight o'clock, headed by the Medical and Surgical Staff of Guy's Hospital, and followed by the immediate relatives and friends of the deceased, including the few students of the hospital remaining in town. It may not be generally known, that John Hunter is buried in the same vaults. Mr. Cooper delivered the annual oration in memory of the founder of the Hunterian College of Surgeons, in February last.

Sir James Bardsley.—At a meeting of the Committee of the Manchester Medico-Ethical Association, held on Thursday, Aug. 17, 1853, it was moved by R. Allen, Esq., seconded by J. Mellor, Esq., and unanimously resolved, "That the following congratulatory Address be presented to Sir James L. Bardsley, M.D., President of the Association:—'Manchester, Aug. 18, 1853. Sir,—Her Majesty having been graciously pleased to confer upon you the honour of Knighthood, the members of the Medico-Ethical Association of this city beg to offer you, the President of this Society, their most cordial congratulations on this distinguished recognition of your high professional character and your individual worth. While the Association regards this well-merited honour as one done to the entire Profession, they cannot fail to applaud the selection of yourself as the person through whom the tribute has been paid,—a selection that recognises your eminence as a physician in the largest provincial city in England, and the inheritor of a name that will long be remembered in the Profession with respect and admiration. That you may long live to enjoy the honour which Her Majesty has so appropriately conferred upon you; and thus be a living testimony to your junior professional brethren, of the practical advantages that attend the possession of intellectual superiority and moral excellence, is the earnest wish of the members of the Manchester Medico-Ethical Association. Signed on behalf of the Association.

"'W. J. Wilson, J. Roberton, } Vice-Presidents.
D. Noble, Treasurer.
J. Aikenhead, M.D., W. C. Williamson, } Hon. Secs.

"To Sir James L. Bardsley, M.D., etc. etc.'"

Naval Medical Officers.—From the last number of the "Votes and Proceedings of the House of Commons," we find the following notice of motion, by Mr. Montague Chambers, stands the fourth on the list, viz.:—"Should no Motion be submitted to Parliament during the present Session with reference to the Medical Department of the Royal Navy, and no improved system be proposed by the Lords Commissioners of the Admiralty, he should call the attention of the House, early in the ensuing Session, to the state of that important branch of the national service, with the view of placing the officers employed therein in a more satisfactory position, and upon an equality with the Medical Officers of Her Majesty's Military Service."

King's College University, Aberdeen, Aug. 12.—The Degree of M.D. was conferred on the following gentlemen, who, after examination on the various branches of medical Science, were found duly qualified:—

Callaway, H., London.
Campbell, J., E.I.C.S., Bengal.
Dicken, P., Ashby-de-la-Zouche.
Greenhow, E. H., Tynemouth.
Hancorn, J. R., London.
Hawkins, J. S., London.
Hayman, C. C., West Malling.
Hewson, C. C., Devonshire.
Kidd, J., London.
Nash, J., Box, Wilts.
Payne, C. H., London.
Richardson, A., London.
Smart, W. R. E., R.N.
Smith, W., Weyhill, Hants.
Taylor, J. S., Liverpool.

On the same day, the Degree of M.B. was conferred on—

Polson, H., Old Aberdeen.
Ross, J. H., Aberdeen.

Rotherham Dispensary.—On Wednesday week, a special meeting of the Governors of the Dispensary was held to elect a Surgeon in place of Mr. Drew, resigned. There were three candidates. The votes were declared as follow:—Mr. Wm. Savile, Wakefield, 31; Mr. Joseph H. Stone, Wentworth, 27; and Mr. Garrard, Plymouth, 18. Mr. Savile was declared duly elected. A vote of thanks was unanimously awarded to Mr. Drew, the retiring Surgeon, for the attention he has paid to his duties since his appointment, for having effected great economy in the management of the Institution, and for having introduced several improvements in its management. It was also determined to present Mr. Drew with some tangible proof of their approval of his services, and the Committee were empowered to select the most suitable memento.

CHATHAM-STREET SCHOOL OF MEDICINE, MANCHESTER.—The Examinations of the Students for the Session 1852 and 53, were concluded on the 4th instant when the following Scholarship Prizes and Certificates of Merit were awarded to the under-mentioned students:—

MEDICINE AND PATHOLOGY.—Lecturer, Dr. Thos. H. Watts.

Senior Prize..... Mr. J. Ashburner, Manchester.
Junior ,, ... Mr. J. K. Cheetham, Rochdale.

SURGERY.—Lecturer, Mr. Southam.

Senior Prize..... Mr. J. Ashburner, Manchester.
Junior ,, ... Mr. J. K. Cheetham.

ANATOMY AND PHYSIOLOGY.—Lecturers, Mr. Dumville, Messrs. J. S. and J. O. Fletcher, and Mr. Murphy.

First Prize ..... Mr. Edmund Taylor, Urmston.
Second ,, ... Mr. Wm. Berry, Manchester.
Third ,, ... Mr. W. Sellers, Bury. } Merit
Mr. T. Platt, Romiley, } equal.
Cheshire .....
Certificates of Merit..... Mr. T. Perkins, Manchester.
,, ,, ,, ... Mr. H. Quarmby, Oldham.
Certificates of Merit for Dissections Mr. William Sellers, Bury.
,, ,, ,, ,, Mr. T. Platt, Romiley, Cheshire.
,, ,, ,, ,, Mr. T. B. Bott, Bury.
,, ,, ,, ,, Mr. E. Taylor, Urmston.
,, ,, ,, ,, Mr. T. Perkins, Manchester.
,, ,, ,, ,, Mr. Wm. Berry, Manchester.
,, ,, ,, ,, Mr. G. T. Savile, Nafferton, Yorkshire.
,, ,, ,, ,, Mr. H. Quarmby, Oldham.
,, ,, ,, ,, Mr. J. Steele, Manchester.

CHEMISTRY.—Lecturer, Mr. Stone.

Prize ..... Mr. E. H. Pitman, Eastbourne, Sussex.
Certificate of Merit ..... Mr. T. B. Bott, Bury.
,, ,, ,, ... Mr. J. Kershaw, Manchester.

PRACTICAL CHEMISTRY.—Lecturer, Mr. Stone.

Prize..... Mr. James K Cheetham } Merit
,, ... Mr. Thomas B. Bott ..... } equal.

OBSTETRIC MEDICINE AND DISEASES OF CHILDREN.—Lecturers Dr. Whitehead and Dr. Merei.

Senior Prize..... Mr. James K. Cheetham.
Junior ,, ... Mr. D. M'Nulty, Manchester.
Certificates of Merit ..... Mr. T. Platt, Romiley, Cheshire.
,, ,, ,, ... Mr. G. T. Savile.
,, ,, ,, ... Mr. Wm. Sellers.

MATERIA MEDICA.—Lecturer, Mr. Somers.

Prize ..... Mr. E. H. Pitman } Merit
,, ... Mr. Wm. Sellers } equal.
Certificates of Merit..... Mr. T. Platt, Romiley, Cheshire.
,, ,, ,, ... Mr. T. B. Bott.
,, ,, ,, ... Mr. J. Pritchard, Manchester.

FORENSIC MEDICINE.—Lecturer, Dr. Aikenhead.

Prize..... Mr. James K. Cheetham.

BOTANY.—Lecturer, Dr. Jepson.

Prize..... Mr. Alfred Gallemore } Merit
,, ... Mr. E. H. Pitman..... } equal.
Senior Scholarship..... Not awarded.
Junior ,, ... Mr. William Sellers, Bury.
,, Certificate of Merit ..... Mr. E. H. Pitman, Eastbourne, Sussex.

The distribution of the Prizes will take place in October.

NORFOLK COUNTY HOSPITAL FOR THE INSANE.—We have received the following Circular, which has been sent by Dr. Foote to a number of the members of our Profession in his neighbourhood, he having succeeded in getting the above asylum thrown open to them:—"Norfolk County Hospital for the Insane, August 23, 1853. Sir,—I have the pleasure to inform you, that the Visiting Justices have agreed to a proposition which I brought before them at their last meeting,—viz., 'To throw open the wards of this hospital, on fixed days specially, to the members of the Medical Profession, under certain regulations;' I have, therefore, fixed Wednesday and Saturday, from eleven until two o'clock, for this purpose, when I shall be happy to give you every opportunity in my power of becoming acquainted with the internal arrangements and treatment of patients in this Institution.—I am, Sir, your obedient servant, R. F. FOOTE, M.D., Resident Physician."

WEST RIDING LUNATIC ASYLUM.—A meeting of the Committee of Visiters of this Institution was held at the Asylum, Wakefield, on the 19th inst., for the purpose of taking into consideration the resignations of Dr. and Mrs. Corsellis, the esteemed Director and Matron of the Asylum. After mature consideration of the circumstances which had led Dr. and Mrs. Corsellis to take this step, their resignatious were received by the Committee. The deep regret felt by all who took an interest in the Institution, of which Dr. and Mrs. Corsellis have had the management for nearly twenty-three years, will be increased when we state, that we understand they are compelled to take this course from ill-health.

NORTH DEVON INFIRMARY.—The annual meeting of this charitable Institution took place on Wednesday, the 17th inst., the Right Hon. Viscount Ebrington in the chair. The business consisted in some trifling alteration in the rules, and the passing the accounts for the past year, as well as the selection of officers for the year to come. After the usual vote of thanks to the retiring officers the meeting separated, highly gratified with the increasing usefulness and prosperity of the Institution.

THE BRITISH ASSOCIATION.—The twenty-third meeting of the British Association for the Advancement of Science, commences its sittings at Hull on Wednesday, the 7th of September.

DEATH FROM CHOLERA.—Yesterday an inquiry was opened before Mr. Baker, Coroner, at the Birdcage Tavern, Birdcage-walk, Bethnal-green, touching the death of Caroline Lloyd, aged 15, a domestic servant, lately in the service of Mr. Gough, of No. 31, Princes-square, St. George's-in-the-East, who died from cholera. The family had had mutton, potatoes, and greens on Sunday for dinner, but deceased only ate a small quantity, as she was much troubled with diarrhœa. In the afternoon she was seen by a surgeon, who prescribed for, but she was taken home by her own request to her mother. In reply to the Coroner, who asked what drainage the house had, her master said, "None at all. There is a cesspool in the yard, which contains all the filthy water, etc., from the house, and when it is full a pump is used, and the water is forced through a pipe into the gutter in front of the house, where the muck lies in pools all day long." Mr. Robert Scott, surgeon, of 5, New-road, St. George's-in-the-East, stated, that he was called to the deceased on the day in question, and found her vomiting violently; but only a white fluid, of a rice colour, passed from her. She had been much purged. The deceased was suffering from coma or asphyxia. Witness administered a chalk mixture and other medicine, but did not expect she would be removed. She was in a weak and exhausted state, with her lips and finger-nails quite blue. Witness recommended her to be placed in a horizontal position, and left her. Witness did not see her again alive, as she was afterwards taken home. She was very cold, and in a state of collapse. The Coroner: What do you attribute the death to? Witness: I am of opinion that it was a decided case of Asiatic cholera, as she was attacked with cramp in the bowels and limbs. The whole of the symptoms were certainly characteristic of that fearful malady. I have seen great practice abroad, and have attended numbers of cases in India, and the peculiar features of Asiatic cholera were exhibited in the present case. The jury said, they could not complete the case without a *post-mortem* examination; and an order was given to Mr. Scott to open the body, in conjunction with Dr. Letheby. The proceedings were then adjourned.

CHOLERA PANIC IN LANCASHIRE.—In a case of death from constriction and inflammation of the intestines, occurring at Atherton, the verdict of the village was, that it was a case of Asiatic cholera; and, notwithstanding the nature of the symptoms and the verdict of a jury, the people of Atherton firmly believe, that the cholera has come among them.

CHOLERA.—The official returns at Copenhagen, to the 14th of August inclusive, announce 6937 cases of cholera since the appearance of the epidemic, 3756 of which have been fatal. In Stockholm the *Gazette* daily announces additional ports, the vessels arriving from which are to be subjected to quarantine on suspicion of cholera. The last places on the list are Danzig and all Prussian and Mecklenburg harbours, and Archangel and all Russian ports on the White Sea. Reports from St. Petersburg represent the disease raging there as presenting symptoms peculiar to cholera blended with those characteristic of yellow fever. In consequence of the cholera, the opening of the University in Copenhagen has been put off for a month; 600 families are living under tents and in wooden booths hastily knocked up. The troops in the camp at Powonski, near Warsaw, are much troubled with ophthalmia, and the cholera has again begun to show itself in the capital of Russian Poland. Though this has not yet been officially made known, the correctness of the information may be depended on.

THE YELLOW FEVER continues to rage fearfully at New Orleans, and has also appeared in Mobile.

QUARANTINE (CARTHAGENA).—In a communication, dated "Carthagena, Feb. 8," respecting the working of the new quarantine regulations at Carthagena, from a Parliamentary return just issued, the writer (Mr. Charles E. K. Kortright) says:—"The cases of yellow fever at this port have been exclusively confined to persons landed from the Royal Mail Steam-packet Company's ships, and have in no way affected the health of the town. On a late occasion, at the urgent request of Captain Wilson, ten men and two officers of the Royal Mail Steam-packet Dee were landed here, suffering severely from yellow fever; and, as the quarantine regulations formerly in force at this port had been rescinded, owing to the Report of the Board of Health of Great Britain, which, under instructions from Viscount Palmerston, I handed in to the authorities of Carthagena, there was no obstacle to their being landed and placed in the general hospital; and I have the satisfaction to report to your Lordship, that, with the exception of two, already in the last stage of black vomit, I sent the whole, including the two officers, on board of their ship convalescent, and without the disease

in any way affecting the general health of the town. From the result of this case, and several others that have come under my notice, I should not hesitate to say, that instant removal from the contaminated ship to an elevated and airy situation is the only safe means to insure the lives of all on board, when this disease once takes possession of a ship. It is the opinion of the Medical man in attendance on board the Dee, and concurred in by the Captain and the men themselves, that had they not been landed at Carthagena, it is probable, that few, if any, of the ship's company, would have been saved."

Potato Disease, Devon.—The disease is still progressing in the potato stalk; those who used dung for manure have the greater number of bad potatoes; those who used lime and ashes, or guano, have very good crops, and tolerably free from disease.

Dr. Baly (Milbank Penitentiary) is one of the Commissioners appointed to inquire into the truth of charges of cruelty preferred against the Governor of the Birmingham Borough Gaol and other subordinate officials. Some extraordinary disclosures are expected. The Governor, who has hitherto been supported, and his conduct approved by the Visiting Justices, resigned his situation on Thursday.

General Board of Health.—On Saturday a return, obtained by Mr. A. Pellatt, M.P., was printed, showing the operations of the General Board of Health. Since the formation of the Board, in 1848, the amounts received to the end of last year were 55,161*l.* 10s. 8d., out of which sums amounting to 51,492*l.* 17s. have been paid, leaving a balance of 3668*l.* 13s. 8d. The amount repayable by local Boards is stated at 19,575*l.* The amounts voted for the annual expenditure during the operations of the Act were 53,879*l.* 15s., exclusive of nearly 3000*l.*, a further sum to be received, and the total expenditure was 51,492*l.* 17s. as already stated, out of which 40,031*l.* 9s. 5d. was expended under the Public Health Act, and 11,461*l.* 7s. 7d. under the Nuisances Removal Act. The total amount voted last year was 10,745*l.*, and three-fourths were included in the amount stated. The liabilities for expenses incurred to the end of last year were 1250*l.* The excess in the amount voted over the amount expended for the whole period is 1136*l.* 18s. The average annual expenditure under the Public Health Act, after deducting the amount repayable, is stated to be 4813*l.*

Poisoning.—It is stated, on the authority of several pharmaceutists in Manchester, that the red chromate of potassa is, in all probability, extensively resorted to for secret poisoning since the sale of arsenic was placed under legal restrictions.

Dr. Tinsley, of Cuba, is said to have discovered, that "vaccine virus, after passing through a negro's system, is valueless for the white race."

A Bright Comet.—For some evenings past a conspicuous comet has been visible a little above the N.W. horizon at dusk, and will continue so during the present week. On Saturday, at nine o'clock, the nucleus was brighter than the well-known star Cor Caroli, which is of the second magnitude; a short tail could be distinguished with the naked eye, but was traced to a much greater distance with an ordinary nightglass. The tail streams off directly from the head, without any appearance of division, and the comet is altogether a very pretty object when viewed with a low magnifying power.

Mortality Notabilia.—The total number of deaths registered in London, which in the preceding week was 984, rose in the week that ended on Saturday to 1053. Excluding from the comparison the corresponding week of 1849, in which cholera raised the mortality from all causes to 2456, it appears that the result of last week does not differ materially from the average as corrected for increase of population. Summer cholera and diarrhœa exhibit a small decrease in the present as compared with the previous Return. The deaths ascribed to diarrhœa are 126, of which 115 occurred among children. The tender age of nearly all the sufferers, 97 of them not having completed their first year, is sufficient to dispel the popular error, that the use of fruit is the exciting cause. Small-pox was fatal in only 5 cases, measles in 13, scarlatina in 27, hooping-cough in 28, ague in 1, typhus in 48. 10 cases of cholera were registered in the week.

Diarrhœa and Nuisance.—In Waterloo sub-district (1st part), Lambeth, at 6, Isabella-place, on 12th August, the daughter of a labourer, aged 2 months, died of "diarrhœa (7 days.)" Mr. Mears, the Registrar, writes as follows:—"This filthy hole (Isabella-place, Broadwall) is at all times rife with disease and death. My only surprise is that any human beings can exist in such an atmosphere; yet every one of the seven or eight hovels it contains, some of two, others of four rooms, has a family in each room. There is neither air, light, nor ventilation of any kind. I do not register probably one-fifth of the fatal cases originating in this place, as many persons are removed to the Workhouse or Fever Hospital, and are registered there. My return of this week is the largest in my sub-district since the period of cholera. Fever and diarrhœa are increasing."

Births.—Last week the births of 775 boys and 743 girls—in all 1518 children—were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1348.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·736 in. The mean temperature of the week was 60·4°, which is slightly below the average of the same week in 38 years. It was below the average on the first five days of the week, but on Friday and Saturday rose about 4° above it. The highest temperature of the week was 77·5°, and occurred on Friday; the lowest was 45·8°, and occurred on Thursday. The wind blew from the north and south-west.

Premonitory Symptoms.—The following note has been addressed by Dr. Macloughlin to the Registrar-General:—"34, Bruton-street, Berkeley-square, 19th August.—It was reported in last Return that a child died at No. 9, New Rochester-row, St. John sub-district of Westminster, after seven hours' illness, and without any premonitory symptoms of cholera. I have called at the house, and seen the child's parents. She had been ill about twenty-four hours before she was seized with violent purging, vomiting, and cramps, and she died in seven hours after. The morning of the day previous to that of her death, when the parents found that she was unwell, they were not alarmed about her, and, as their occupations took both of them from home, they left the child in charge of her sister, and returned home only at about twelve o'clock at night, when they found the child very uneasy, and much worse than when they had left her in the morning; she had vomited several times during the day, and her bowels had been acted on. It is evident, therefore, that this child was not struck down at once by the disease, but that there had been evidently some of the premonitory symptoms of cholera present, not so decided possibly as to fix the attention of persons unacquainted with the insidious advance of the disease, but much more than sufficient to satisfy those accustomed to it, that an attack of spasm, etc., etc., was coming on. Would it not be rendering the public an essential service to inform them, that there is, at this moment, a tendency to bowel complaints, which leads to cholera, and that the slightest derangement of the functions of the stomach and bowels ought to be attended to? The parents of this child told me that had they been aware that derangements of the functions of the stomach and bowels were dangerous at this moment, they would not have left their child, but would have called in medical aid at once, and, in all human probability, had they done so, they would have saved their child; as all who know anything of cholera are aware, that in the first stage the disease can be arrested, but not so certainly when spasms have come on."

Mortality in Public Institutions for the week ending August 20:—

	Males.	Females.	Total.
Workhouses	49	68	117
Military and Naval Asylums..	1	...	1
General Hospitals	14	15	29
Hospitals for Special Diseases	2	2	4
Lying in Hospitals	...	...	...
Lunatic Asylums	4	4	8
Military and Naval Hospitals	3	..	3
Hospitals for Foreigners, &c.	...	...	...
Prisons	...	..	...
	73	89	162

DEATHS *in the Metropolis for the week ending Saturday, August* 20, 1853.

Causes of Death.	Aug. 20. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	530	319	204	1053	10933
Specified Causes	517	316	199	1032	10896
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	240	39	14	293	4299
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	3	18	30	51	456
3. Tubercular Diseases	69	118	7	194	1778
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses	49	33	28	110	1030
5. Diseases of the Heart and Blood-vessels	3	21	17	41	289
6. Diseases of the Lungs and of the other Organs of Respiration	46	24	23	93	734
7. Diseases of the Stomach, Liver, and other Organs of Digestion	25	31	13	69	766
8. Diseases of the Kidneys, etc.	1	5	1	10	89
9. Childbirth, Diseases of the Uterus	...	8	1	9	93
10. Rheumatism, Diseases of the Bones, Joints, etc.	1	5	...	6	69
11. Diseases of the Skin, Cellular Tissue, etc.	2	1	3	6	9
12. Malformations	6	...	...	6	26
13. Premature Birth and Debility	24	2	...	26	255
14. Atrophy	34	2	11	47	297
15. Age	...	...	45	45	418
16. Sudden	...	3	1	4	76
17. Violence, Privation, Cold, and Intemperance	14	6	2	22	272
Causes not Specified	13	3	5	21	37

BOOKS RECEIVED.

Results of Quarantine in British Ports. By G. Milroy, M.D. London: Richards. 1853.

The Gymnastic Free Exercises of P. H. Ling. Translated by M. Roth. London: Groombridge. 1853.

An Address to the Governors of the Norfolk and Norwich Hospital. Norwich. 1853.

A Manual of Materia Medica and Therapeutics. By J. Forbes Royle, M.D., F.R.S. Second Edition. London: Churchill. 1853.

On the Prevalent Treatment of Disease. By F. C. Skey, Esq. London: Chapman and Hall. 1853.

A Reply to the Charges Made by Dr. E. Smith, upon his Dismissal from the Offices of Lecturer and Demonstrator at Charing-cross Hospital Medical School. By A Governor of the Hospital. London: Scott. 1353.

The Invalid's Own Book. By the Hon. Lady Cust. London: Longmans. 1853.

Annual Report of the Grant Medical College, Bombay. 1852-53.

The Medical and Surgical Guide for Emigrants, Families, &c. By Jabez Hogg, M.R.C.S. London: Ingram, Cooke, and Co. 1853.

Lepage's French Prompter. London: Effingham Wilson. 1853.

An Account of the System of Clinical Instruction and Examination followed in the Grant Medical College at Bombay. By C. Morehead, M.D.

Journal of the Statistical Society of London. September. Parker and Son.

Observations on the Dwellings of the Poor, &c. By Francis Cooper, Surgeon. London: Churchill. 1853.

Gli Spedali e Gli Ospizj di Parigi e di Londra Visitati Nella Primavera dell' Anno 1852. Del Dott. Pasquale Landi.

Sulla Struttura Intima del Organo Elettrico del Gimnato e di Altri Pesci Elettrici. Del Dott. Filipo Pacini.

Woman's Medical Guide. By J. H. Pulte, M.D. Cincinnati.

Burton and its Bitter Beer. By J. S. Bushnan, M.D. London: Orr. 1853.

TO CORRESPONDENTS.

A Physician.—The final amendments of the Charter are not yet agreed upon.

J. H. Aveling, Esq.—The paper has been received, and shall be inserted as soon as our space will permit.

M.D. has heard that Drs. Bennett and Goodsir were candidates for the chair of Physiology at King's College, and wishes to know if it were really so.

Mr. Spence Bate.—The paper shall soon be published.

M.D.—Replied to privately.

Dr. Deville has sent us a very long letter respecting rude behaviour he says he has met with in the Museum of Guy's Hospital, and contrasting this with the kindness he has received at St. Bartholomew's and St. George's. It appears from his letter that he was introduced by Mr. Birkett, attended some time, but that, at length, he was told by the Steward that "the Museum was not made for foreigners." Knowing from experience the great attention Englishmen meet with in all the medical establishments on the Continent, we should be glad to have the alleged incivility at Guy's Hospital explained. Dr. Deville says he was accused of making drawings in the Museum, and that this is not permitted. But he adds that he cannot draw. Had he done so we can see no crime in it. After an application to the Treasurer he was promised a temporary ticket of admission. We can say no more in the matter on an *ex parte* statement.

We can only insert a few extracts from a very long reply of *Dr. E. Smith* to Mr. Hancock's letter. He says, of the parties who made the charges against him, that "they affirm nothing on their own knowledge, neither could they, since not one of them ever heard a lecture or demonstration, or was ever present during any part of my teaching. They may, therefore, be passed over. Then, lastly, there are the students, the only parties who have ever heard my lectures or known my teaching, and, therefore, the only parties who could prefer, and substantiate or repudiate, such charges. What do they state? Mr. Woolcott affirms that he heard one student; Dr. Hassall, of Richmond, that he heard two; and Mr. Hird that he heard three or four students, express some dissatisfaction; and the names of some of them are given—viz., Messrs. Barnes, McLean, Price, and Thomas, and to this list we may append Mr. Carr,—that is, five students in a class of fifty-four, of whom fourteen or sixteen are free students! Mr. McLean makes his statement in writing to the Committee, and why do we not have the direct evidence of the complainants? Was it given *in articulo mortis*, and thus, although 'hearsay,' is yet entitled to rank as 'direct' evidence? We want to hear what the students themselves say, not what others say that they heard them say. But, as Mr. Hancock writes, that, 'finding the complaints of so serious a character, so general, and so widely disseminated,' etc., these cannot be the only complaining students. Surely, the whole or the greater part of the school participate in the feeling! Let us hear what the others say. The students collectively, at their third meeting, convened in reference to the conduct of the Committee towards myself, addressed a memorial to me, in which they state,—'We wish you distinctly to understand that we had no part in bringing about these changes, and feel no sympathy with them now that they are effected;' and the chairman of the meeting having been directed to request, from the Committee, a copy of the letter of complaint, writes to that body thus:—'In the opinion of many of the students, the accusations brought against Dr. Smith by one or more of our number, were presumptuous and impertinent; even stronger language has been used in reference to this act, and it is but fair to men innocent of the transaction that those who conducted themselves in a manner which the majority condemn should be the only ones to bear the odium of their act.' This is the language of their students taken collectively at a meeting held in the theatre of their hospital: how does it correspond with the statements of Mr. Hancock and his friends, that, as they understood, general dissatisfaction existed—a dissatisfaction of five students in a class of fifty-four? Where is the teacher on any subject, and in any school, who would not find so small a minority opposed to him?"—and concludes that "the Committee, or Mr. Hancock and Mr. Canton alone, were the centre of the whole movement." With regard to his demonstration, Dr. Smith says:—"Neither did Mr. Canton pay for any parts for demonstration. He obtained some from St. Martin's Workhouse, and demonstrated others from the students' parts, and so did I. It would have been wrong to have done otherwise, since we could not obtain a sufficient supply for the students, and the students themselves were only too pleased to have their parts demonstrated. I never lost a lecture or any part of a lecture for want of a subject. Can my predecessor say the same for himself? It is untrue to state that I was usually too late. During the first half of the session I was, I believe, on no occasion too late; but I could not enter the theatre on two days in the week until a quarter past the hour, because the chemical apparatus had to be removed, and my own extensive series of diagrams placed in position."

W.M.—The account of the Aberdeen examination shall be inserted next week.

Perhaps Mr. Vawdrey will send us some local paper containing an account of the case he alludes to.

Mr. Hadwen, Lincoln.—The papers shall appear shortly. The account of the other five cases will be received with pleasure.

Dr. Ransom's (Nottingham) Cases of Chronic Diseases of the Stomach, with Sarcinæ in the vomited matters, shall appear very soon.

Dr. Cotton.—C. C. Hayman, Esq., Dr. Nourse.

The continuation of Dr. Burrows and Kirkes' Illustrations of Clinical Medicine and Pathology shall appear next week.

R.N., Portsmouth, etc.—The paragraph respecting the claims of the Naval Medical Officers, appeared originally in this Journal, from which it was copied, without any acknowledgment, into the "Woolwich Gazette," as a leader, and therefrom into the Journal in question.

Queen Charlotte's Hospital, Lisson-grove.—Dr. Maxwell informs us that a healthy young woman, age 26, was safely delivered on August 25, of three fine children, two girls and one boy; all of whom, together with the mother, are doing well.

Medical College at Epsom.

[To the Editor of the Medical Times and Gazette.]

Sir,—There are few who more sincerely rejoice at the successful progress of the above Institution than I do; but I regret exceedingly to find that it is tabooed with the motto, "*No Irish need apply nor subscribe.*" I am aware that an application was made at the period when this College was first brought under the notice of the Profession, to permit a participation on the part of Irish practitioners in its benefits, provided a sum sufficiently large to warrant that participation was furnished by the medical men of the Sister (United!!) Kingdom, but the promoters distinctly refused to have anything to do with Ireland. You say, Sir, that there are 12,000 medical men in England, who, supposing they may subscribe half a-guinea each, will insure £6000 a-year. I cannot just now say what number of practitioners there are in Ireland, but I feel assured, that, had the Profession of this country been privileged to join in this great and good work, a very large amount of donations for the building, and a very large amount of subscriptions for the supporting the establishment would have been afforded. It is not too late to relax the determination of the projectors and conductors of the Medical Benevolent College not to permit their Irish brethren to participate on the conditions before alluded to, as I feel convinced the College will be a great boon to the Profession.

I am, &c. Crito.

[The writer should remember, that the natives of any country are eligible for the College if they have practised legitimately in England and Wales. We may state our belief, that, if friends in Scotland and Ireland would come forward with an adequate subscription, the Council would be inclined to entertain their application.—Ed.]

COMMUNICATIONS have been received from—

W. E. Smart, Esq., R.N.; C. J. Gibb, Esq.; C. Brown, Esq., Newcastle-on-Tyne; Mr. Dorrington; Jabez Hogg, Esq.; Spence Bate, Esq.; H. H. W. G.; R. Marley, Esq.; Dr. R. N. Willis; Dr. Deville; John Propert, Esq.; Dr. Rowland; A. Walker, Esq.; A Physician; J. H. Aveling, Esq.; M.D.; Dr. E. Smith; Crito; etc., etc.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES
ON THE
RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE
The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture IV.

In my last lecture, I spoke of the *causes* of mental anxiety. I purpose now to describe some of the *consequences* of that condition of mind which originates in over-work, anxiety, or terror. I have already intimated, that the effects of mental anxiety vary much in different cases, the difference depending partly upon the original constitution of the mind and body of the patient, partly upon education, position in society, and habits of life, and, lastly, in a great degree, upon the nature of the treatment to which the anxious patient is subjected. But amid all the variety of circumstances to which I have alluded, there are certain general features which characterise nearly every case of mental anxiety. These general characters I now proceed to describe.

Among the effects of anxiety of mind, whatever may have been its originating cause, there is not one which is more frequent or more important than that which manifests itself either by sleeplessness or by disturbed and unrefreshing sleep. It is very interesting to note the various descriptions which different patients give of what ought to be their sleeping hours. One of the most frequent complaints is, that the sleep is often disturbed by distressing and frightful dreams, which assume a great variety of forms in different cases. The sleeper often fancies that he is falling down a precipice, or into water, or that he is pursued by some fierce animal, or that he is in some situation of difficulty or danger, from which he cannot escape; these are, perhaps, the mildest forms of unpleasant dreaming. At other times, the dreamer has visions of dead relations and friends, or he is haunted by spectres of every form which a disordered imagination can conceive. The distress of the dreamer is often manifested to those who are watching his slumbers, by a pained or terrified expression of countenance, sometimes by profuse perspiration, by violent action of the heart, and laborious or hurried breathing; sometimes, too, by suppressed moans, or by frequent talking, and not uncommonly by the loudest and wildest screams of terror. In other cases, the dreamer starts out of bed, and walks about the room; and he may awake in doing this, or he may be aroused by his own cries; but, in other instances, it is very difficult to bring him back to a state of consciousness. On awaking, he sometimes has a vivid recollection of all the circumstances of his dream; but, in other cases, he is quite unconscious that he has been either dreaming, or talking, or making a noise; he has only a vague sense of something terrible, and he finds his skin bathed in perspiration, and his heart beating violently. The last condition—the violent palpitation—is sometimes a source of fresh alarm. I was once called up to one of our medical students, whom I found in a complete paroxysm of hysteria, with *globus* in his throat, and a dread of instant death. His habits had been very regular; but he was of a somewhat nervous temperament, and he was anxious about an approaching examination. It appeared that he had been dreaming, and that, when he awoke, he found his heart beating violently; he was alarmed by this, and, as he continued to direct his attention to the heart, the palpitation increased in violence, and this, again, added to his fears, thus affording a good illustration of the reciprocal influence upon each other of mind and body. I ascertained that he had no symptom of structural disease, either of the heart or of any other organ; and, after some time, but not without considerable difficulty, I succeeded in convincing him that his fears were groundless.

When a patient awakes after a night of disturbed sleep, such as I have described, he usually complains of exhaustion, and will often say that he is more tired in the morning than when he went to bed,—a feeling which we can readily understand, if we consider that, not only has he had no rest, but that he has been in a state of terror during great part of the night. This sense of languor and unrest is in most cases combined with loss of appetite, inability for exertion, depression of spirits, a sensation of pain or weight in the head, and sometimes with an oppressive feeling of drowsiness during the daytime. When the restless condition has become habitual, it is almost invariably associated with a peculiar, anxious expression of countenance, and particularly with a striking appearance of the eyes, the observation of which will often enable the physician at once to detect the general character of the case with which he has to deal, and so will suggest such further inquiries as may be necessary for its complete elucidation. The appearance of the eyes to which I refer is difficult to describe, but it is immediately and easily recognised when once it has been clearly perceived. The eye loses that brilliancy and liveliness, upon which so much of its natural beauty depends, and it assumes a dull and inanimate appearance. The iris often appears to be in a fixed and inactive condition, so that the size of the pupil varies but little and slowly under the influence of light. In cases of long standing the pupil is often unnaturally small; and in some of the worst cases which I have seen both pupils have been contracted to the size of a pin's point. It is seldom that, even in these extreme cases, there is any intolerance of light; but there is often a greater or less degree of dimness, or defect of sight, without any appearance of structural change in the eye.

I have already intimated, that the expression of the patient's face will often give a clue to the general character of the case, and will guide us to the true source of the symptoms. I may add, too, that the information which we thus obtain will sometimes induce us to persevere with our inquiries when the answers to our first questions are not such as we had expected to receive. For instance, I have frequently been told by patients who exhibit the anxious expression of face which I have described, that they sleep very well, "indeed, too well," they sometimes add; but we must not allow ourselves to be misled by this statement, for it will generally be found on inquiry, that although they sleep so heavily that they can with difficulty be aroused in the morning, yet that their sleep is disturbed by frightful dreams; they awake unrefreshed, and they are languid and drowsy during the day. The cure, the almost infallible cure, for this mode of sleeping too heavily, or, as the patient says, "too well," is a dose of opium at bed time, repeated for a few nights, until the habit of dreaming is broken; the result will be refreshing sleep at night, and, as a consequence of this, the cessation of the languor and drowsiness which had before continued during the day-time.

I have sometimes received in reply to the question, whether the patient is disturbed by dreams, an answer to the effect, that for a long time he has not had sleep enough to render dreaming possible; he declares that he can get no sleep at all. I believe, however, that a patient is very rarely so wakeful as this would imply; and that often, when he supposes that he has not once closed his eyes with sleep, he has really slept, but his slumbers have been so frequently broken and disturbed by dreams, that he cannot distinguish between his sleeping and his waking hours.(a) It scarcely need be added, that sleep of this imperfect character is almost as unrefreshing as complete wakefulness.

I have yet one remark to make with reference to the character or the subject of the dreams. When the exciting cause of the anxiety and restlessness has been some sudden shock of terror or great grief, it will often be found that this continually recurs to the dreamer. Thus the mother not only dreams of her dead child, but the image of the lost one often appears vividly before her in her dreams; the alarm of fire will be repeated every night for many months; and the poor man whose case I related in my last lecture (Case 4) appears to have been terrified during a period of seven years by the almost nightly recurrence of the vision of the child whose violent death he had witnessed. In many cases, however, it is impossible to trace any connexion between the character of the dreams and the past history of the dreamer. I need not repeat what I said in my last lecture, with reference to the essential identity of the effects of overwork and

(a) While I was engaged in the composition of these Lectures, one of my patients, a man of a very nervous temperament, complained, that after a day of unusual anxiety he had had an entirely sleepless night; but his wife assured me, that he had appeared to her to be sleeping quite heavily during a great part of the night.

anxiety upon some persons of temperate habits with many symptoms of the delirium tremens of drunkards.

One of the consequences of mental anxiety which is as often as any other associated with the disturbed sleep to which I have already referred, is a more or less complete loss of the appetite for food. In only a very small proportion of the cases which have come under my observation have I been told by an anxious, restless, dreaming patient, that he could take his food as usual. In many instances, too, the digestive powers are much impaired; there is pain or a sense of fulness with flatulence after eating. In some cases severe gastrodynia with waterbrash and occasional vomiting are complained of. I am careful not to confound with the cases to which I now refer others of a different kind, cases of dyspepsia, which are the result of intemperance, or other cases in which the dyspeptic symptoms have been excited or, at any rate, perpetuated and aggravated by a too liberal administration of stimulants to some weak and nervous patient, who has been exhausted by an attack of illness. It is very important that the physician should clearly perceive the nature of the last-mentioned cases of dyspepsia, and that he should be alive to the danger incurred by a weak and anxious patient who takes wine and beer frequently and freely, because, as he says, he has no appetite for food. Such a patient should be warned that the first step towards the recovery of his appetite and his strength must be an entire suspension or a greatly reduced supply of alcoholic stimulants as an article of diet.

Returning now to the more immediate effects of mental anxiety, it is perhaps difficult to determine whether the loss of appetite is a consequence of the patient's sleepless condition, or whether the restlessness is a result of the diminished supply of food; or whether, as is probable, the two conditions exert a mutual influence upon each other. There are facts which seem to favour each of the explanations which I have suggested. Probably most persons have experienced, in some degree, the power of mental emotion to take away the appetite for food and to disturb the process of digestion. On the other hand, the influence of an empty stomach or of a sense of hunger in preventing sleep, and of a moderate fulness of that organ in promoting drowsiness is well known. One fact which I have very frequently observed, tends to show, that the disturbance of the nervous system, and the restlessness, are first in the order of time and importance, and that the derangements of the digestive organs are consequent upon these. I allude to the manner in which opium exerts its beneficial influence. A man who has been restless for many months, and who, during the same time, has not enjoyed a single meal, after taking a grain of opium at bed-time for a few nights, sleeps soundly for several hours, and then awakes with an appetite for food; refreshing sleep returns each night, at first with, and soon without, the help of opium, and the appetite often becomes voracious, like that of a patient recovering from a fever, or from some other exhausting illness. Now, it is contrary to all experience to suppose, that opium would, by any immediate influence upon the stomach, increase the appetite, or assist digestion. The tendency which it has to disturb the stomach, and to produce sickness, or nausea, is one of the difficulties which we sometimes have to contend with when we are most desirous to give the medicine. This well-known action of opium upon the stomach, and the fact, which I have observed in numberless instances, that the appetite returns only after the opium has procured sleep, tends to prove, as I have said, that the derangements of the nervous system, in the cases referred to, are first in the order of time and importance.

That the combined effect of loss of sound, refreshing sleep, and loss of appetite, with impaired digestion, should be to affect, in a very marked manner, the nutrition, and the strength of the entire body, is no more than we should have anticipated, and is what we actually observe. Emaciation and debility, in a greater or less degree, are present in almost every case where the primary symptoms have been of long duration. One man, who had suffered much from restlessness and frightful dreams, in consequence of anxieties in his business, assured me, that, during a period of two years, his weight had diminished by four stone,—it had fallen from fifteen stone to eleven,—and this statement appeared quite consistent with the loose fit of his clothes. Another man, who had suffered in a similar way, in consequence of misfortunes, had lost, as he informed me, from two to three stone weight during a period of two years. This was one of the cases in which, after a long period of nearly total inability to eat or to digest food, a voracious appetite became almost a matter of complaint, after refreshing sleep had been procured by the temporary use of opium. Another patient, a woman, who had suffered from anxiety, restlessness, and loss of appetite for several months, had diminished in measure round the waist from 24 inches to 19. After taking five grains of pil. saponis co. for a few nights, she began to sleep well, and to eat so voraciously, that, as she told me, she felt ashamed to eat so much, and her husband was quite anxious about her great appetite. The result was, that within a month she had gained three inches in measure round the waist. These measurements were her own, but the rapid improvement in her appearance was quite confirmatory of her statement. It is obvious, that so considerable a defect of nutrition as I have indicated must react injuriously upon the mental disturbance in which it originated; for there can be little doubt, that the depressing and disturbing influence of mental emotion is, *cetæris paribus*, in proportion to the feebleness of the body; and this is a point of pathology which it is of great practical importance to remember. A pretty certain recipe for the production of delirium or some serious form of nervous disease, would be to take an anxious man, and to bleed, or purge, or starve him, or by any other means to reduce rapidly his bodily powers. It is painful to think in how many instances this mode of practice has been adopted by those who have been taught to believe, that furious delirium is a symptom of what is called phrenitis, and that the cure is to be attempted by the fearless use of antiphlogistic measures.

Not only does the enfeebled condition of the body react injuriously upon a disturbed and anxious mind, but the combined action of depressing mental emotion and of the bodily weakness which it induces, through the agency of sleeplessness and loss of appetite, tends to diminish the power of resisting injurious influences to which the body may be exposed, and to develope any germs of disease which may have been latent in the system. The origin of structural disease in various organs may, with reason, be classed among the consequences of mental anxiety. Nor is it surprising that this should be so, when we reflect upon the exhausting influence of long-continued abstinence and watchfulness. In one case which came under my observation, a poor woman, 34 years of age, actually died from anxiety and exhaustion, without the occurrence of any organic disease to account for the fatal result. I first saw her about a month before her death, when she presented every indication of great grief and anxiety. She had been unkindly treated and deserted by her husband, about five months before; and from this time she had suffered from sleepless nights, with spectral visions, and an almost total loss of appetite. She complained of shortness of breath and palpitation, and she had a cough, with mucous expectoration. The impulse of the heart was increased, and there was some large crepitation at the bases of the lungs. I gave her tonics and opiates, and encouraged her to walk out while she was able to do so, but all without benefit; she could neither sleep nor eat; she daily grew weaker, and died on the 28th of April, about a month after I first saw her. I examined the body on the 2nd May, and found congestion of the lower lobes of the lungs, some dilatation and hypertrophy of the left ventricle of the heart, without disease of the valves or aorta; and a remarkably liquid state of the blood, scarcely one coagulum being found in the heart or in the vessels. Both the liver and the kidneys were somewhat congested, and their secreting cells presented, on a microscopical examination, some slight deviations from the normal appearance. All the appearances observed might, as I think, be attributed to the altered condition of the blood, and this to the want of sleep and food. The anatomical changes were certainly insufficient to account for the poor woman's death. It is a question which does not admit of a very precise answer, how far the hypertrophy and dilatation of the ventricle had been occasioned by the irregular and violent contractions of the heart which were excited by mental emotion, and in what degree they were dependent on any impediment of the circulation which may have resulted from an impoverished and abnormal condition of the blood.

The influence of mental anxiety in predisposing to attacks of disease in various organs, in diminishing the curative powers of nature, and in counteracting the effects of remedial measures, constitutes a subject of wide extent and of great importance. My present design is limited to a passing

allusion, first, to some of the commonest forms of functional disturbance of the abdominal and thoracic organs, which are a frequent source of groundless alarm to the patient, and which may sometimes mislead the physician; and, secondly, I shall speak of those more formidable diseases of the nervous system, which often originate in, or are associated with, mental anxiety.

I have already adverted to those derangements of the digestive organs which are very commonly associated with mental anxiety. There is, however, one consequence of those derangements which I have frequently observed, but of which I have not yet spoken. I allude to the occurrence of symptoms referable to the urinary organs, and which sometimes occasion an unfounded dread of serious disease. Frequent micturition, and pain in the back, are the symptoms complained of, and these are often supposed, by an anxious patient, to depend on a diseased state of the kidneys or bladder. On examination, it is commonly found, that the urine is unusually acid, and deposits an abundant sediment of the lithates on cooling. The acid urine irritates the kidneys and bladder, and thus occasions the pain, and the frequent micturition. In other cases, the urine is alkaline, with a copious phosphatic sediment. These states of the urine are, of course, not peculiar to nervous or anxious patients, but, since any pain is a source of alarm to this class of patients, it is important that the practitioner should be prepared to give a correct explanation of the symptoms, and to apply the appropriate remedies. In some instances, the pain in the back is very severe, and its seat appears to be in the lumbar muscles; but I have met with more than one case of the kind which has been mistaken for inflammation of the kidneys, and treated as such. One of my hospital patients, a carpenter, had severe pain in the back, which he thought was caused by inflammation of the kidney, for he had a similar pain some months before, which was called inflammation of the kidney, and for which he was treated by cupping and other active measures. On that occasion, he was ill several weeks. He had a very anxious countenance, he was restless at night, and he had been for some time out of work. I gave him an opiate pill for a few nights; he slept well, and quickly lost the pain. He told me, that the first attack of pain, like the last, had come on when he was anxious on account of being out of work; I therefore concluded, as he did, that both attacks were of the same nature. He agreed with me, too, in the opinion, that the opiate treatment had been much more successful than the antiphlogistic measures which were adopted on the first occasion. It scarcely need be said, that many pains in the loins are quite unconnected with nephritis, and that, on the other hand, the kidneys may be acutely inflamed without a complaint of severe pain in the back. In all cases of the kind, a microscopical and chemical examination of the urine is essential for accuracy of diagnosis.

An irregular action of the bowels is frequently observed in the class of cases which we have now under consideration. Constipation is often complained of, and this is sometimes followed by a painful diarrhœa. There is little reason to suppose that these symptoms result from a defective secretion of bile, as is very often asserted, or that they are dependent upon the presence of black bile, as is implied in the word *melancholic*. A defective secretion of bile by the liver may be inferred from the simultaneous existence of bile in the urine, and pale, clay-coloured stools. Both these signs are absent in a large proportion of the cases in which an attempt is made to explain dyspeptic symptoms by referring them to a supposed torpor of the liver. In this, as in many other instances, erroneous pathology leads to mischievous practice. There are few cases in which even small doses of mercury exert a more depressing and injurious influence than when given to these so-called melancholic patients, with a view of stimulating or correcting their biliary secretion.

There is, perhaps, no form of functional disturbance which is a more frequent or distressing source of alarm and anxiety to a nervous patient than the palpitation of the heart, which is almost invariably associated with anxiety and restlessness. I have already referred to the occurrence of palpitation in connexion with the frightful dreams by which the patient is harassed at night. The same disturbance of the heart's action is scarcely less distressing in the day-time. Its cause is probably in part physical and partly mental. The nutrition of the heart doubtless suffers, in common with the rest of the body, from the impoverished condition of the blood, which must be induced by long-continued restlessness and abstinence. The tendency to palpitation which is thus induced resembles that which exists in cases of anæmia and chlorosis. The influence of mental emotion, of fear and anxiety, upon the heart's action, is so well known that it is needless to insist upon it. It may be observed that the disturbance of the heart's action is in proportion, first, to the weakness and irritability of the organ itself; and, secondly, to the degree in which the patient's attention is anxiously directed towards the heart. The two objects of treatment, therefore, are to strengthen the muscular tissue of the heart by sleep, food, and tonics, and to divert the patient's attention from his heart by the assurance that there is nothing in the state of that organ about which he need be anxious. The effect of a favourable opinion and of a hopeful prognosis is often very beneficial, by calming the patient's fears and restoring his confidence; while, on the other hand, an erroneous diagnosis or an unguarded expression with reference to the heart, may be a source of great additional suffering to the patient, and may retard or entirely prevent his recovery. A poor woman, whose natural irritability and nervousness had been increased by great domestic troubles, and who, in consequence, suffered much from palpitation, was told by a country practitioner that she had a diseased heart, and the remedy adopted was an issue over the supposed seat of disease. She had endured this addition to her sufferings for several weeks, when she came to the hospital. The impulse of the heart was quick, but feeble, and the sounds sharp and clear; there was evidence of a weak and irritable heart, and of nothing more; but it was long before she lost the dread of sudden death, which had taken complete possession of her mind, and which had, doubtless, been confirmed by the erroneous diagnosis and the injudicious treatment to which she had been subjected. It is seldom that an irregular and excited action of the heart is unassociated with some degree of difficult breathing; and, when this is combined with cough, an anxious patient will often be tormented by a dread of consumption. I make frequent allusion to the *fears* of this class of patients, because they constitute so very important a feature of their history, and because it should be one of the first objects of the physician's care to convince the anxious patient that his fears are groundless, and that the disease which he dreads has no existence except in his own terrified imagination. If, after a careful examination of the chest, we can give our patient a confident assurance that his lungs and his heart are sound, we shall remove a weight of anxiety from his mind which will greatly contribute to the recovery of equanimity and bodily strength. The science of auscultation and percussion is of great value as a means of distinguishing the various forms and stages of disease within the chest; but, when considered with reference to the assistance which they afford in determining the *absence* of organic disease in cases whose nature must, without such aid, remain for a long time doubtful, the importance of these methods of investigation can scarcely be overestimated.

Having thus alluded to the most frequent functional disturbances of various organs, I propose now to consider some of the more important disorders of the nervous system which may have their origin in mental influences. These are, epilepsy, delirium, and mental derangement, some forms of paralysis, chorea, and hysteria.

There are few forms of nervous disease which are attended with more terrible consequences, few which by almost universal consent are admitted to be so little under the influence of remedies, as many cases of confirmed epilepsy. Whatever may be the proximate cause of epilepsy, its origin may often be traced to the operation of various remote causes, of a nature entirely different from each other.

Before I proceed to the consideration of those cases of epilepsy to which I am most desirous to direct attention—cases which have their origin in mental influences—it may be well to advert briefly to those forms of the disease which obviously originate in disordered states of the body. It will be sufficient merely to enumerate these, for examples of each must have occurred to nearly every practitioner. The most common cases are those which arise from the irritation of teething, from worms in the intestines, from an overloaded state of the stomach and bowels, from the excessive use of alcoholic liquors, from disease of the cranial bones, whether syphilitic or otherwise, from some original malformation or defect of the brain, which is often accompanied by paralysis, from the pain which attends the passage of calculi through

the ureter,(a) from the presence in the blood of some of the specific fever poisons—the small-pox poison before the appearance of the eruption being a more frequent cause of convulsions than any other of the fever poisons; and, lastly, cases of epileptic convulsions, arising from suppressed secretion, and the consequent accumulation in the blood of urine or bile.

Some of the causes which I have mentioned may give rise to permanent and incurable epilepsy. The convulsions which arise from the irritation of teething sometimes recur at variable intervals in after life, and the danger of this is probably in proportion to the number and the severity of the primary attacks. Each paroxysm of convulsions is attended with risk of serious and permanent injury to the brain; hence the importance of a prompt removal of the exciting cause. On the whole, the proportion of those patients who become permanently epileptic after having had convulsions during the period of teething is so small, that such a result is not much to be dreaded in any single case. Syphilitic disease of the cranial bones may often be cured in its early stage; but, when it has proceeded to the extent of involving the membranes and the surface of the brain, it may excite convulsive attacks, which will recur during the patient's lifetime. Those attacks of convulsion which occur in connexion with acute disease of the kidney, never continue after the cure of the renal disease; at least I have never seen or heard of a case which forms an exception to this rule. When chronic renal disease has proceeded so far as to cause convulsions, it is seldom that a fatal termination is long deferred; but, until that period arrives, the convulsive attacks may be repeated with greater or less frequency. Convulsions are among the rarest, but most formidable consequences of an accumulation of bile in the blood. Two cases of this kind are reported in Dr. Graves's "Clinical Medicine."(b) Both were quickly fatal. Dr. Graves also refers to another case of convulsions with jaundice; the only instance of the kind in which he had seen a cure effected.(c) It appears, therefore, that a large proportion of those attacks of epilepsy which have their origin in bodily disease are transient and curable, and that most of those cases, having a similar origin, which are permanent, are rendered so by the persistent and incurable nature of the organic disease on which they depend.

Passing on now to the consideration of those cases of epilepsy which owe their origin to influences acting primarily upon the mind, we find that they naturally divide themselves into two classes:—1st. Those which result from great terror, or excessive and sudden grief, and in which the first paroxysm usual comes on suddenly without being preceded by warning symptoms; and 2nd. Those which arise from the influence of continued anxiety, and which are preceded for a variable period by premonitory symptoms.

With reference to the first class of cases, I mentioned, in my last Lecture, the chief causes of sudden shock or terror, which I have known to excite epilepsy. The most frequent have been the vision of a supposed ghost, witnessing a fit of epilepsy in another, or the sudden and violent death of another. One woman became epileptic from hearing of the sudden death of an acquaintance; she immediately felt, as she said, a sudden "turn and agitation," and within an hour she had a convulsive fit. One girl attributed her fits to the fright of hearing a knocking, which she imagined to be supernatural; and a delicate, nervous boy, who is now under my care, actually became epileptic from the shock of seeing a horse fall and break his leg. When epilepsy results from a sudden shock of terror, the first fit usually comes on immediately, or within a few hours after the shock has been received. The only exception to this rule which I have met with occurred in the case of a man whose history I have already given (*Case* 4), who, after seeing the violent death of a child, continued to dream of the accident, and, at the end of two years, became epileptic. In this case there can, I think, be no question, that the shock of terror was the exciting cause of the disease, and that this influence was perpetuated and increased by means of the continual restlessness and the frightful visions by which the poor man was nightly harassed.

In the great majority of cases, when an attack of epilepsy has been excited by fright, the fits return and constitute a permanent disease. In only one out of eleven cases which originated in this way, and of which I have either notes or a distinct recollection, has there been a single paroxysm without a return. In one other case the fits continued to recur for a period of five years, then ceased, without any obvious cause, for a period of fifteen years, and after this were again induced by great anxiety. A comparison of a great number of observations would be necessary to ascertain in what proportion of cases epileptic convulsions which have resulted from fright have a permanent tendency to recur after the first paroxysm; it is certain that the proportion is a very large one. It is an interesting but a very difficult inquiry what, in this respect, constitutes the difference between epileptic convulsions which result from sudden and violent mental emotion, and those attacks which are excited by the irritation of teething, and more especially by some specific fever poison, or by suppression of urine. The last case of renal epilepsy which I saw, occurred in a boy who had about twelve violent fits of convulsion in twenty-four hours; he was relieved by cupping on the loins; he recovered from the renal disease, and has had no return of the convulsions, nor is it at all likely that he will. It is evident, from the history of such cases, as well as from cases of puerperal convulsions, that the occurrence of one, or of several, attacks of epilepsy is not in itself a sufficient explanation of the persistent tendency to a recurrence of the disease, which is often left when the first paroxysm has been excited by great and sudden fear. It appears probable that, in such cases, the original shock of terror leaves a permanent morbid condition of the brain, although the precise nature of the change escapes our observation. No one who has carefully examined the structure of the brain, can deny or doubt, that an organisation so wonderfully complex and delicate may undergo numerous changes which entirely escape our most refined means of investigation. One of the chief obstacles to the progress of mental and cerebral pathology has been, the tendency to attribute to the coarse morbid appearances in the brain and its membranes all the symptoms which may have existed during the patient's lifetime. It would not be difficult to extract, from published reports on the pathology of the brain, descriptions of precisely the same morbid appearances in connexion with a history of symptoms essentially different in different cases. The cautious pathologist, while he notes every abnormal appearance in the brain, will admit that changes more important still may entirely escape his observation. It is probable, that every thought, every sensation, and every movement of the body, is attended with some change in the texture and composition of the brain. No one expects to find the traces of these living actions in the dead brain, yet such an expectation would appear scarcely less reasonable than the attempt to find, in any *post-mortem* appearance which we can recognise, the essential cause of mental derangement, delirium, or convulsions. "There are cases," to use the words of Dr. Gooch (a) in reference to some disorders of the mind in lying-in women, "in which observation of the disease throws more light on its morbid anatomy than its morbid anatomy on the nature of the disease; the living symptoms illustrate the dead morbid appearances better than the dead morbid appearances do the living symptoms."

It cannot be doubted, that many of the morbid changes which have been detected in the brains of epileptics are the consequences rather than the essential causes of the disease. We often have demonstrative evidence of the extreme vascular engorgement occasioned by the epileptic paroxysm; and it is not difficult to perceive that such a condition must be attended with serious risk of yet greater mischief. A short time since, I saw a footman, whose appearance, when he arose one morning, had excited great surprise among his fellow-servants. The conjunctivæ, eyelids, and other parts of the face, presented numerous spots and patches of ecchymosed blood. He told me, that, when he awoke, he found himself struggling violently, his mouth was bleeding, and, on examination, I found that the edges of his tongue had been injured by his teeth. He evidently had been seized with an epileptic fit, and the appearance of his face was sufficient proof of the degree of vascular congestion which that fit had occasioned. If the vessels within the skull had been ruptured to the same extent as

(a) My authority for this cause of epilepsy is the late Dr. Prout, who observed it "in one or two instances."—"On Stomach and Renal Diseases," 5th ed., p. 322, note.

(b) Vol. II., p. 255.

(c) Vol. II., p. 524.

(a) "An Account of Some of the Most Important Diseases Peculiar to Women."

those on the exterior, the result might have been a fatal apoplexy; yet this would have been no less a *consequence* of the epilepsy than was the subcutaneous ecchymosis. It is surprising that the epileptic paroxysms do not more frequently and speedily produce great and obvious structural changes in the brain than they ordinarily do. In one case which came under my observation, it is probable that the brain was seriously injured during the very first fit. A boy, five years of age, was terrified by a policeman, who threatened to take him to the station for making a noise. He ran a few yards, and fell in a fit at the door of his home. After he came out of the fit, the left hand remained numb and weak, and he occasionally complained of pain in the left foot. These symptoms continued and increased; the hand become so insensible, that a blow from his schoolmaster's cane gave him no pain; and the leg became weak, so that he slightly dragged it in walking. About six months after the first attack, he came home one day with a bruise on the temple, which was probably occasioned by his having fallen in a fit. On about three occasions after this, he was seized with convulsions when at home, and his mother believes that he sometimes had fits when in the street. He often complained of headache, which increased towards the end of May, 1847. This was about two years after the first fit. I first saw him on the 31st of May; he was then insensible, with squinting; the face was flushed, and the scalp hot. He continued in the same state until the 5th of June, when he died.

On opening the head, the lateral ventricles were found to contain a large quantity of clear serum. In the tail of the right corpus striatum, there was a hard swelling, about the size of a small hazel-nut, which projected against the contiguous surface of the optic thalamus. When cut into, it presented a yellow colour, and had somewhat the appearance of firmly contracted fibrin. There can be little doubt that this indurated mass was the cause of the partial paralysis of the left hand and leg. It is not probable that it was in any way the cause of the epileptic fits, but more likely that it was a consequence of these; and the partial palsy which remained after the first fit of epilepsy renders it probable that the corpus striatum was injured during that convulsive paroxysm.

In my next lecture, with your permission, Sir, I shall consider those cases of epilepsy which arise from the comparatively slow operation of mental anxiety, and in which the commencement of the epileptic disease is preceded for a variable period by premonitory symptoms.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. V.

EXTRACTS FROM A REPORT ON THE ADVANTAGES, IN A MEDICAL AND MILITARY POINT OF VIEW, OF ASCERTAINING THE BODILY WEIGHT OF SOLDIERS ON THEIR ADMISSION AND DISCHARGE FROM HOSPITAL.

By ARTHUR S. THOMSON, M.D.,
Surgeon to the 58th Regiment.

During the last four years and a half, every soldier admitted into, and discharged from the 58th Regimental Hospital, has been carefully weighed.

It will be found that private soldiers of the infantry of the British army, as they are now managed, increase in bodily weight from 17 years of age up to about 31, and that no soldier between these periods of life can suffer for any length of time from any severe disease without the malady producing a decrease of bodily weight.(a) There may be occasionally instances of men suffering under a severe external disease, such as popliteal aneurism, with the digestive organs in good order, increasing in bodily weight; but here the malady is too obvious to the senses to be mistaken. Let me be clearly understood: I do not wish to treat with indifference the usual and orthodox signs and symptoms by which we know that disease affects the human body. I only wish, in addition to them, to have the bodily weight of sick soldiers taken into consideration and brought to bear on the diagnosis and prognosis of their diseases.

A simple beam with a pair of scales answers best for ascertaining the bodily weight, because the accuracy of the results can be easily proved and corrected. All other modes of weighing may go wrong without being observed; besides the simple beam brings the weight more clearly home to the comprehension of the soldiers, one of the objects of the system.

Weighing soldiers on their admission into hospital tends to render medical officers less likely to imagine that a really sick soldier is not sick.

As it is better that a thousand rogues should escape punishment, than that an innocent man should be hung, so it is better that a medical officer should be successfully imposed on by many scheming villains, than that he should treat one sick soldier as a malingerer. It is in cases of obscure disease and tedious illness that this misfortune most generally occurs. I admit the evil is rare in the army now to what it was twenty years ago; but still there are cases now-a-days where such things occur, and it is painful to contemplate the mental and bodily suffering which the sick man has to encounter on such occasions. As example is better than precept, I insert the outlines of a case, in which ascertaining the bodily weight of a man prevented me taking up the general impression that he was a malingerer.

Private G. S., 58th Regiment, aged 30. Height, 5 feet 6 inches; bodily weight, deducting clothes, 140lbs., or 10 stone; twelve years' service, of which in New South Wales and New Zealand seven years, the rest at home. Previous to March, 1849, he had been twice in hospital with slight complaints, but in this month he was admitted in consequence of spitting blood. As this soon ceased, and no disease could be detected in the chest, he was discharged in twenty-one days from hospital. In November, 1849, he was admitted with acute rheumatism, which affected the left tibia; he was then thirteen days in hospital, and lost weight at the rate of nearly half a pound daily. In December, 1849, he was again admitted into hospital with pains in the left leg. There was no swelling or constitutional disturbance, and his appetite was good. As he never used his leg, it emaciated. On this occasion, there were doubts whether the man was not malingering; but every such idea was removed from my mind by finding that during the last twelve months he had lost 21 lbs. in bodily weight. The proper weight for a healthy soldier five feet six inches in stature is 136 lbs. avoirdupois, without clothes; whereas this man's present weight was only 119 lbs. Under the use of a liberal diet, tonics, and frictions, the leg began to grow stout, and he became able to walk. He was discharged from hospital and put on light duty.

In September, 1850, he complained of pain in the right shoulder-joint, and inability to elevate the arm; the circulation was not excited; functions regular. In a short time, the deltoid and the muscles of the right arm began to emaciate. It was now more strongly suspected that the man was malingering; but, as his bodily weight still kept below nine stone, I could not give in to this idea. By degrees he gradually recovered the use and the size of the arm, but now complained much of pain in the lower part of the left side of the chest. I often examined him carefully with the stethoscope, and percussion, and so did other medical men, but we could detect no disease; at other times he complained of severe pain in the right side of the chest, and sometimes in the abdomen. Almost every day there was some change in the situation of the pain. He gradually got better of all these symptoms, and solicited to be discharged from hospital and put on light duty. This request was granted.

On the 3rd of October, 1851, he was again admitted into hospital, and his complaints were chiefly dyspeptic. I was much surprised to find that he had increased several pounds in bodily weight since his last discharge; and I pointed this out to him; and he said he had eaten well, had slept well, and had been much in the open air; but he said he could not do his duty from debility and occasional dyspnœa. I believed what he said, because his weight was still a stone under what

(a) In another paper, I endeavoured to show that infantry soldiers increase in weight up to the age of about 30, and that after this they decrease. As men in civil life increase in bodily weight up to the age of about 40, I endeavoured to explain why this law of nature should not hold good with soldiers. Among the probable causes of this early decay of soldiers, I placed, first, loss of sleep consequent on night duty; secondly, the impure air they respire in barrack-rooms; thirdly, the want of some healthy mental excitement; and, lastly, that the quantity, the variety, or the quality of the food furnished to soldiers may not be sufficient for them.

it was in 1849, and if he had not been suffering from disease it ought to have increased much from the easy life he had been leading.

On the 6th of November, 1851, he had a slight cough, and expectorated a little blood; pulse 76; no morbid sound in the chest.

On the 7th, he suddenly sat up in bed, gave a shrill scream, which was heard over the whole hospital, and fell back on the pillow dead.

At the *post-mortem* examination of the body, the lungs and heart were found sound, but the left cavity of the pleura contained all the blood in the body. It had escaped from a ruptured aneurism, which extended from about the fifth to the seventh dorsal vertebra, and had produced absorption, to a certain extent, of the external substances of these vertebræ.

Remarks.—I shall never forget the feelings of thankfulness I experienced on finding the cause of this man's death, that, during the long time he had been under my care, I had never, either by word or deed, led him to think I thought he was a malingerer. It will be said, that, if I had been more proficient with the stethoscope, the nature of the disease might have been detected. I cannot deny the force of this; yet there is to be found some extenuation in the obscurity which always hangs over such diseases. Dr. Gregory observes: "Notwithstanding the aid of auscultation, aneurism of the thoracic aorta can never be distinguished with certainty, until it has attained to such a size, that a tumour begins to be formed externally, accompanied with strong pulsations;" and Professor Walshe confesses "that small sacs behind the heart, unless some accidental circumstance throw light on their existence, are exceedingly difficult of positive detection." I have read of cases of thoracic aneurism where the patients were said not to have lost flesh. The appearance of the above soldier was not that of emaciation. The eye could not have detected what the actual weighing clearly proved; and probably in those cases of aortic aneurism where the patients are described in good condition, the bodily weight had been ascertained by the eye, not by weighing, and the weight of the body previous to the onset of the disease was unknown.

I could quote other cases, showing the assistance I received in the elucidation of doubtful disease from a careful attention to the loss or gain of bodily weight; but the insertion of more cases would extend this paper to a greater length than I wish. The above appears to me sufficient to indicate the mode of drawing conclusions from the bodily weight as to the existence of disease.

Ascertaining the bodily weight of sick soldiers assists prognosis, and tends to elucidate the nature of disease.

There are medical men who have such confidence in the use of the stethoscope, that they think they can determine without difficulty the extent to which tubercular disease has gone in the lungs, and they will speak with certainty as to the termination of the disease. When this fatal malady is fully developed, I admit there is no great difficulty in this; but, in the early stages, it appears to me almost impossible to speak with certainty. I have heard of and seen persons in good health whose lungs had been pronounced unsound, and a fatal result prognosticated years before, by physicians who particularly, devoted their attention to such classes of disease. During my own experience among soldiers, although I have thought I have detected tubercles in the lungs in their yearly stages, yet I never put this down as a certainty until loss of bodily weight begins to take place. This result has been forced on my attention by looking over the medical history of soldiers contained in medical registers. There I have seen men put down as consumptive by excellent auscultators, and a fatal result insinuated, and yet these men are now in perfect health. It is unnecessary to give examples of such cases; every person has met with them in his own practice. The following case is inserted, because the loss of bodily weight, which resulted from a short detention in hospital, clearly developed the nature of the disease.

Sergeant C—— was admitted into hospital with obscure complaints. His liver was found enlarged, and numerous tubercles were diagnosed to exist in the lungs. He remained under treatment for twenty-eight days, at the end of which time he said he was fit for duty. I had him weighed, and now came the proof of his serious indisposition, when coupled with other symptoms. He had lost flesh at the rate of half a pound daily during his residence in hospital. He now had the cod-liver oil freely given to him, but a fatal result soon followed. On examination of the body the whole lungs were found filled with tubercles in different stages, and his liver was much enlarged.

When a man is discharged from hospital who has been seriously ill, or affected with a doubtful disease, I have him weighed now and then, so as to detect the progress he makes towards perfect health or otherwise.

Ascertaining the bodily weight of soldiers, on their admission into hospital, is a strong barrier against anything like malingering.—Soldiers, from various motives, often fly to hospital either with no disease, or with some very frivolous indisposition. It is the duty of the medical officer to prevent this, and, if properly gone about, the evil is soon checked, more by tact than severity; indeed, the prevention of this system in a regiment depends very much on the opinion the men have formed of their medical officers. Too much harshness prevents the men applying early in disease for relief—a great misfortune in a regiment—and too much attention to slight complaints tends to generate them. It is not requisite, in the treatment of such cases, to deny, at first, that the soldier is not ill; by a little tact you can soon convince of this, and, by this means, you acquire over his mind a mastery. I have found the most efficient aid in the prevention of the few cases of this evil, I have met with, by the weighing machine. I am aware that no men in the world are more quick than soldiers in perceiving the peculiarities of those whom it is their object to deceive; and if they find their Medical Officers always looking to loss of bodily weight, as one of the tests of sickness, it may be supposed malingerers will soon gratify them in this respect, by starving themselves; but it is a hard and painful task, one requiring great fortitude and endurance, to reduce, and keep up reduction, of bodily weight, by starvation *alone*. Let any man in good health try it, and he will soon acknowledge the truth of my words. A man who suffers from no disease, or from some slight affection which does not prevent sleep, if kept in bed, even on a reduced diet, will often keep up, if he does not increase in weight. I could quote many examples of this; men confined in the cells for a few days, on the reduced scale of diet there given, often come out heavier than they went in. The following table is compiled from the admission register; none of the men were suffering from any disease which excited the circulation or prevented sleep, and no medicine was given of a reducing nature. They all increased in weight during their residence in hospital.

Name.	Age.	Disease.	Number of Days in Hospital.	Diets when in Hospital. Number of Days on each.	Increase of Bodily Weight on Discharge.
P. C.	30	Chronic Rheumatism.	3	2 low, 1 spoon.	3½ lbs.
J. C.....	26	Contusion of Face.	5	2 low, 3 half.	6 ,,
M. D....	29	Boil on Leg.	15	3 low, 12 half.	4 ,,
W. M....	32	Chronic Catarrh.	13	1 spoon, 7 low, 5 half.	4 ,,
F. T.....	27	Gleet.	20	4 spoon, 14 low, 2 half.	4 ,,
F. M. ...	24	Lumbago.	25	2 spoon, 23 low.	4 ,,
P. C.....	27	Rheumatism.	6	1 spoon, 1 low, 4 half.	4 ,,
P. H. ...	22	Slight Gonorrhœa.	8	8 spoon.	1 ,,
T. T. ...	24	Hæmorrhoids.	7	3 low, 4 half.	2 ,,

The tongue may be easily made brown, to simulate fever, and the pulse made to beat quick, but it is no easy task to simulate emaciation of the body, when that is tested by actual weighing.

When I find a man complaining of a disease I cannot detect, and, after a short treatment, still insisting he is not fit for duty, I weigh him; if he is making the most of a slight malady, or has no malady at all, he is in general heavier than on admission into hospital. This fact I bring to his notice, and ask him the reason of it. In a few days he generally reports that he is fit for duty. I take an early opportunity of weighing him again, to see how he is, and I have always found such men are up to their usual weight, and they admit they are in perfect health.

Let me here remark, that I have often been struck in reading over cases of malingering,—I mean those cases which were so frequent in the army, during the days of unlimited enlistment, and when flogging was the punishment given for

almost every crime,—to find, that patients who represented themselves to be afflicted with such deadly diseases as paralysis, disease of the liver, dysentery, etc. etc., were often in good bodily condition. How such a circumstance as this should not open the eyes of the Medical officers to deception, is more than I can divine.

Ascertaining the bodily weight of soldiers on their admission into hospital, assists in convincing a man, who imagines himself ill, that he is not ill.—Among soldiers, imaginary diseases are met with; and this is not to be wondered at, seeing they often drink to intemperance, and have much time to ponder over their imaginary maladies when on sentry. It is often difficult to distinguish a hypochondriac from a malingerer; but, as a general rule, a hypochondriac will readily perform his duty, if told it may do him good; whereas a malingerer will protest he is unable to follow this mode of treatment. To treat a hypochondriae soldier as a malingerer, or to treat him with severity, is adding fuel to the fire. Hypochondriacs, in civil life, derive the greatest pleasure and satisfaction in going about from one physician to another for advice. The military hypochondriac is cut off in a great measure from this source of comfort; they are, therefore, driven into despair if their own Medical Officers treat their complaints with neglect, or put them down as malingerers. Surgeons who look with suspicion on all men who report themselves sick without some very obvious disease, and Military Surgeons who allow themselves, unintentionally, to get into the habit of speaking harshly to such men, will seldom meet with hypochondriac soldiers; if they do, they will perhaps class them as malingerers; but surgeons are not to think they either prevent imaginary diseases, or cure them, by such conduct. If they take the trouble to inquire among the dispensaries for the poor, or at shops where drugs are sold, they will find that soldiers often apply at these places for remedies and advice, for obscure diseases.

Considerable tact is required to treat the imaginary maladies of soldiers properly,—they are indeed a most difficult set of cases to deal with. From the authority the Military Surgeon has over his patients, he can easily get them to return to their duty; but this is only getting them out of the hospital; it is not curing them. Such men go about the barracks with the idea on their minds that their diseases are neglected by the person whose duty it is to cure them. From the weighing machine I have received assistance in the treatment of such maladies. A recruit, a few months from England, presented himself at hospital, and stated that he was ill. I could detect no disease about him, and I told him so. I said I would take him into the hospital, if he were unable to do his duty. He said he was able to perform his duty, but at the same time stated, he was "falling into sickness." As I thought, in his case, occupation was better than idleness, I allowed him to go to his duty. Here he continued for several months, but he always looked unhappy. I inquired how he conducted himself in the barrack-room, and I found he was always telling his comrades, that he was sure he was very ill. I immediately saw that the case had not been successfully treated. I sent for him, weighed him, made a most careful and tedious examination of every organ in the body, more to satisfy him that nothing was overlooked, than myself, and I told him he was perfectly sound. In six days I ordered him to put his name on the sick-list, and I found, on this occasion, he had increased in flesh. He appeared very happy at this. In a month after, I examined him again, and the expression of despair had left his face; he was soon afterwards promoted, and is now, according to his own statement, in perfect health. At my first examination of this man, I performed only one-half of my duty. I convinced myself, that the patient was in good health, but not the patient himself.

There are men in civil life who imagine themselves on the verge of the grave, although every person can perceive they are in good condition. The weighing-machine is a specific for such cases, unless the patients are not sufficiently sane to draw a simple conclusion from an obvious fact.

Ascertaining the bodily weight of every man in the regiment once a-year furnishes highly useful information to the Medical officer.

There are soldiers, just as there are men in civil life, who, when in health, have no faith in medicine. These men will continue at their duty until they are almost dead. If, on any occasion, you observe a man looking ill, and the man says he is well, you have only to ascertain his present weight, and refer to the last general weighing of the regiment to find if he has increased or decreased. This unfolds an insight into the state of his health, which, assisted by other means, renders it impossible to overlook disease.

Ascertaining the weight of every man in the regiment in health is a standard to measure the health of men who report themselves sick for the first time. These annual examinations furnish certain data for detecting any general deterioration in the health of the men, which may be insidiously progressing, unobservable by the eye. Had a test of health like this been in force, the fatal disease which broke out in the Milbank Penitentiary in 1823 and 1824 might have been prevented.

When a man is to be tried by court-martial, before granting a certificate of his health, the military surgeon can refer to his bodily weight at the last time he was weighed, as if to a barometer, to ascertain whether he is increasing or decreasing in health. Soldiers on such occasions are always anxious to get the court-martial over, and it is their game to conceal any disease they may suffer from; because they can bring it forward during their punishment, and thus get into hospital, and escape part of the punishment awarded for their crimes.

A commanding officer sends a soldier to the surgeon for inspection, previous to his being incarcerated in the cells. The man complains he is sick, and the surgeon admits him into hospital. This takes him out of the power of the commanding officer for a time. In such cases nothing is so satisfactory as a short statement, that the man has lost so much in weight during the last two or three months. It is a kind of proof that the surgeon is not a dupe, and that he is not screening the man. Such explanation is not required, but mystery or a simple statement that the man is ill, otherwise he would not have been admitted into hospital, does not always convince such men as commanding officers, adjutants, or serjeant-majors.

Concluding Remarks.—Should this paper chance to be perused by any civil practitioners, I beg them to understand, that Medical officers in the army are very differently situated in relation to the treatment of their patients to what they are. A military Medical officer has a duty to perform to the public, and also to the soldier. He must prevent soldiers shrinking from duties for which they are paid; and he must not allow the lazy, malingering, and idle soldiers to impose their duty on the willing. On the other hand, the army surgeon must see that soldiers are not obliged to perform duties for which they are unable, or have punishments inflicted on them, which would either originate, aggravate, or reproduce disease. A military Medical officer, it will be seen, in addition to his professional duties, is often called upon to play a most difficult card, by being placed in the situation of an umpire or judge,—a character, I may observe, if justly and discreetly acted up to, which always obtains for the army surgeon the good-will of the commanding officer, and the respect and gratitude of the soldiers under his Medical charge.

Auckland, New Zealand, March 10, 1853.

ILLUSTRATIONS OF CLINICAL MEDICINE AND PATHOLOGY.

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(Continued from page 645, Vol. VI.)

AFFECTION OF SEROUS MEMBRANES IN CHRONIC RENAL DISEASE.

In further illustration of the several peculiarities mentioned in the last paper, as belonging to the serous inflammations in renal disease, the following cases seem to offer instructive information. In the case last quoted (case 14), the fluid in the several serous sacs, after death from dropsy following scarlet fever, was found pale and opaline, although unconnected with any manifest inflammation of the serous mem-

brane. It seemed to illustrate the view previously stated, that the fluid exuded into the serous cavities, and probably into other parts, in renal disease, is of a peculiar kind, differing from that exhaled in cardiac dropsy, probably more or less charged with urea, and, therefore, peculiarly irritating to the delicate structures with which it is kept in contact. The signs of inflammation which ensue in the serous membranes, and other parts, in renal disease, may, therefore, it was suggested, be ascribed directly to the local irritation induced by the prolonged contact of this acrid fluid with the inflaming parts. The following case is given to show, among other points, the pale tubid character of the fluid in the several serous sacs, combined with more or less evidence of commencing inflammation.

Case 15.—Elizabeth Snowsill, aged 22, was admitted with slight general anasarca, into the front ward of Mary, under Dr. Roupell, May 19, 1853. The anasarca, which was very trivial, and chiefly manifested about the ankles, was of only a few days' duration, and had ensued after an ordinary attack of scarlet fever, the rash of which had disappeared about ten days previously. There was a little hurry in her breathing, and some cough, but the case appeared slight, and was at first simply treated with haust. ammon. acet. c. vin. ant. pot. tart. mxx. et. magn. sulph. ʒj. 6tis. horis. Her urine was albuminous: examined microscopically, it exhibited a large quantity of tessellated epithelium, with a few delicate casts of urinary tubules. On the 21st, two days after admission, she complained of tightness in the chest, and increased hurry in her breathing. A few leeches were applied over the sternum, with relief, and on the following day she appeared tolerably comfortable. Towards evening, however, her breathing became more oppressed, and at 9 p.m., after taking some supper, she was very sick, threw up her food, and afterwards, with straining and coughing at the same time, she brought up about half-an-ounce of frothy blood. Her breathing now became very short, and continued so through the night, which was passed in great distress, in consequence of the urgent dyspnœa and mental alarm at the prospect of death. She lay panting for breath, with a pale agitated face, and dilating nostrils, quite conscious, and free from drowsiness, until 11 a.m., when she suddenly died.

The body was examined twenty-five hours after death. There was œdema of the ankles, and slight dropsical infiltration of the subcutaneous cellular tissue generally; the face and neck were dusky, the veins of the neck distended. There was about half a pint of opaline fluid in each pleural sac, with soft flakes of recent curdy lymph adhering to the lower margin of the right lung; the costal surface of each pleura was opaque, and presented in various parts distinct evidence of undue vascularity. The upper lobes of both lungs were very heavy, and infiltrated with a large quantity of reddish frothy serum, which streamed down from the cut surfaces; the lower lobes were tolerably healthy. The mucous membrane of the larger bronchial tubes of both lungs was very red, and the tubes themselves were filled with frothy fluid. The pericardium contained about ʒij. of rather opaline fluid, but there was no undue vascularity noticed. The heart was natural, the blood properly coagulated and separated. In the peritoneal cavity, there was about a pint of pale turbid fluid. The liver and spleen were pale and soft; the stomach and intestinal canal to all appearance healthy. The kidneys were rather larger and thicker than natural; the surface, after the removal of the capsule, which separated imperfectly, presented a pale, mottled or freckled appearance, variegated by numerous star-like blood-vessels. On section, the cortex appeared thick, and swollen, and succulent, and of a pale dull yellowish-white colour, streaked with blood-vessels. On close inspection, numerous minute yellowish-white specks were seen, both on the cut surface and the exterior of the gland, giving the peculiar dotted freckled character possessed by the cortical tissue. On scraping the cut surface, many of these specks or dots were removed and distinctly seen floating in the fluid simultaneously removed. The cortex besides being thicker than natural, was soft and spongy, and infiltrated with a thin turbid fluid, much of which oozed out on pressure. The medullary part was free from obvious deposit, but much congested, and of a deep mulberry-red colour. Portions of the cortex, examined microscopically, were found very soft, readily tearing into shreds, as if they had been long soaked in water. Many of the urinary tubules were found stuffed full of granular cells of various sizes, some very large. The contents of several of the tubules were of a reddish colour, apparently from containing blood.

This was an ordinary case of anasarca after scarlet fever in an adult, fatal in what may be regarded, perhaps, as the second stage of the renal disease, namely, where the congestion was passing by, and being replaced by exudation. The amount of general anasarca was slight; but all the serous cavities contained an excess of fluid, which was of the pale, opaline character already mentioned; while in the pleuræ there was evidence of inflammatory action, furnished by increased vascularity and deposits of curdy lymph. The rapid death was probably in great measure due to the sudden onset of acute œdema of the lungs, which would be the more formidable because occurring in the upper lobes, and because, too, the repiratory process was, doubtless, previously impeded by pleural effusion and bronchitis.

In the following case, which was one of more advanced renal disease, the inflammatory affection of the several serous membranes, especially the pleuræ and peritoneum, was more extensive.

Case 16.—Jane Ford, aged 26, was admitted into Mary Ward, under Dr. Roupell, Dec. 27, 1849, affected with general anasarca, ascites, and albuminuria. The dropsy was of three weeks' duration, having commenced in the legs about a week after suffering from a severe cold and sore throat, which, however, was not accompanied by any perceptible rash, or followed by desquamation of the cuticle. Her urine was very dark-coloured at the commencement of the dropsy, and she suffered from pain across the loins, which, on her admission, was very severe, but was relieved by cupping. Examined about a month after her entrance into the hospital, the urine was turbid, dark, and sooty. Copious flocculent masses of albumen were thrown down by nitric acid, and under the microscope were observed a few blood-corpuscles, much epithelium, numerous crystals of the ammonio-magnesian phosphate, and a few elongated, granular masses which had probably been moulded in the urinary tubules.

In spite of treatment the dropsy gradually increased, and the patient's strength began to fail, the abdomen became more distended, the bowels relaxed, and the tongue aphthous, while her condition was rendered more distressing by frequent sickness after food, cough, and gradually increasing dyspnœa; in this way she sank.

The body was examined six hours after death. There was extreme anasarca of the lower part; the abdomen was greatly distended, the face dusky, and the veins of the neck turgid. The contents of the cranium appeared healthy, except that there was considerable excess of arachnoidal fluid. The pericardium contained about half an ounce of rather turbid fluid, and presented a few spots of increased vascularity about the base; there were, also, a few old deposits of lymph on various parts. The left ventricle of the heart was much hypertrophied; the left valves slightly thickened, while several wart-like tufts of old fibrin were firmly adherent to the auricular surface of the free border of the mitral; the right valves were healthy; the muscular tissue of the heart was pale and soft, but not obviously degenerated. The right pleural sac contained about a pint, the left about half a pint, of turbid fluid, in which white flakes of lymph were floating, while numerous curdy masses of soft lymph adhered to the surface of the lungs, especially at the lower and posterior parts. The lower lobes of the lungs were compressed by the fluid in the pleural cavities; the upper were infiltrated with watery fluid, and very pale. The peritoneal cavity contained about a pint and a-half of pale turbid fluid, with large masses of soft curdy lymph floating in it; considerable quantities of such lymph were also accumulated in the lower parts of the abdominal and pelvic cavities; the intestinal coils were united together by recent soft lymph, and their serous covering was opaque and apparently thickened. The kidneys were very large, thick, and heavy; the left, which was rather less than the right, measured five inches in length, two and three quarters in breadth, and one and a quarter in thickness. The capsule separated readily, leaving the surface smooth and freckled by whitish dots, thickly set together in the midst of a greyish red tissue, and intermingled with numerous pink lines of vascularity. The white dots, which were evidently deposits, varied in size from mere points to that of a pin head. The cortex was firm on section, about six lines in thickness, and presented on its cut surface a yellowish-white aspect, variegated with streaks of redness. The medullary portion

was tolerably healthy, though of a deep flesh-red colour, from congestion. There was nothing notable in the condition of other organs.

In the two cases just related, as well as in *Case* 14, the affection of the several serous membranes ensued at a comparatively early period of the renal disease. It may, however, as already observed, ensue at any stage of the disease, being, perhaps, more common at the end of long-standing degeneration of the kidneys, than in the early stages of febrile dropsy induced by, or independent of, the scarlet fever poison. Instances might readily be adduced in illustration of the occurrence of inflammatory affections of one or more of the several serous membranes at all stages of renal disease, but, at present, the mere statement of the fact may be sufficient. *Case* 17, however, affords an example of serous inflammation in a very advanced stage of degenerated kidney, although it is here offered in illustration of the insidious manner in which, as before remarked, the secondary inflammations are apt to arise in chronic renal disease.

Case 17.—Robert Evans, aged 24, was admitted, October, 1848, in a state of great debility, and apparently near the close of ailments which had affected him, more or less, for the past five years, during which he had been several times in the hospital on account of dropsy. During the five weeks following his admission, he gradually sank, without any particular symptoms beyond those of increasing exhaustion. He died, Dec. 8, and was examined ten hours after death. There was no anasarca, and nothing notable externally about the body. The heart and pericardium were healthy; the left pleural cavity was distended with fluid, in which were abundant flakes of recent soft lymph, while large masses of similar lymph had gravitated to the most depending parts, and were, more or less, thickly smeared over the whole costal surface of the membrane, which was generally vascular. There were old adhesions, but no recent inflammation of the right pleura. The left lung was compressed into the form of a thin cake, devoid of air, lying against the pericardium and vertebral column, and covered with recent lymph; the right lung was healthy. The abdominal viscera were healthy, excepting the kidneys, which were small, hard, roughened, and tuberculated on the surface, and studded, in the cortical part, with numerous small, yellowish deposits; the cortex was thin and obscurely separated from the medullary portion. Many of the urinary tubules, examined microscopically, were found small, shrivelled, and destitute of epithelium.

Here was a case of advanced degeneration of the kidney in which acute inflammation of one pleura had arisen, and become the immediate cause of death, without any direct symptoms pointing to its existence. Secondary inflammation of the pericardium often comes on equally insidiously in this disease, and, more frequently than pleurisy, brings the disease to a fatal termination. Examples of this will be given on another occasion.

Respecting the relative frequency with which the different serous membranes are secondarily inflamed in the course of chronic renal disease, it is only by the results of inspections after death that we can obtain any certain information; for, since any one of these membranes may be inflamed without manifest symptoms during life, and, on the alleviation or removal of the original renal disease, the inflammation may subside, and the effused materials be organised or absorbed, we have no means of determining the point in living examples of this disease. So far as one may judge from the results of *post-mortem* examinations, however, it would seem that, of the pleura, peritoneum, and pericardium, the former is the most, the latter the least frequent seat of secondary inflammation. Thus, out of 292 fatal cases of Bright's disease, collected from various quarters, Frerichs(a) found the pleura inflamed in 35, the peritoneum in 33, the pericardium in 13 cases. Although inflammation of the pericardium is thus the least frequent, yet it is probably the most dangerous; for out of 241 fatal cases in which the immediate cause of death seemed to be clearly ascertained, Frerichs found it due in 9 cases to pericarditis, in 11 peritonitis, and in 7 only to pleuritis,—the latter, therefore, although the most common, being the least serious. And this is what might have been expected when we remember how much more serious, as a rule, inflammation of the pericardium, on whatever cause depending, is, than inflammation of the pleura.

(a Die Brightsche nieren Krankheit, 1851.

From the tendency which we have seen to exist in chronic disease of the kidney to give rise to inflammation of serous membranes generally, two important hints are derived; one is, to be ever on the alert for the manifestation of such secondary complications in cases of fully-developed renal disease, and from time to time to examine carefully into the condition of the pleuræ and pericardium, even although no distress of breathing, cough, or palpitation should direct particular attention to these parts; the other is, to examine the urine for albumen in all cases of protracted pleurisy or pericarditis, for the detection of this abnormal constituent of the urinary secretion may direct attention to the true pathology of the serous inflammation, and save the patient from unnecessarily active treatment, and from mercurialisation.

As to the treatment most adapted for the serous inflammations ensuing as secondary to degeneration of the kidneys, little that is satisfactory can be said. It must be remembered, that the inflammation is of a low form, uncharacterised by great vascularity, and the exudation of plastic lymph; and that, therefore, depletion and mercury are not usually called for, especially, too, since the disease of the kidney has already impoverished the blood, and debilitated the system. Viewing the secondary serous inflammation as consequent on a morbid secretion poured out by blood surcharged with retained elements of urinary excretion, the indications seem to be, to diminish the quantity of fluid exuded into the serous cavity, and to deprive the blood, as far as possible, of the excrementitious materials it contains. This latter object cannot properly be effected by the kidneys, unless their proper structure and functions be restored to them, which it ought to be our first endeavour to accomplish; and, therefore, as a substitute for the imperfect discharge of the urinary secretion, attempts must be made to purify the blood through the intestines and the skin. The former object, namely, the diminution of the quantity of irritating fluid exuded into the serous cavities, may also occasionally be effected by the free action of the intestines and the skin, and also, perhaps, by the repeated application of blisters over the affected serous cavity. The fluid discharged by the blistered surfaces probably helps, also, in some measure, to purify the blood, by withdrawing, in the serum, some of the urea which this fluid contains.

A CASE OF SCROFULOUS OVARIAN ABSCESS.

By A. H. MARKS, M.D., F.R.C.S.

Mary L., aged 49, a dressmaker, of respectable family, with brothers and sisters living; is of a highly nervous temperament; spirits good, but changeable; figure plump; complexion fair and ruddy; catamenia, which commenced at 11 years of age, irregular and scanty, often absent for months, natural in appearance, unaccompanied with pain; not subject to leucorrhœa; bowels constitutionally obstinate. She was seduced about sixteen years since. Has one daughter fifteen and a-half years of age. She has enjoyed fair health up to this attack of illness, which may be traced back to to about June, 1850, when, while lying on the carpet playing with some children, the nurse tossed one of them over, who struck her on the abdomen, causing, for a few minutes, very severe lancinating pain in the right ovarian region. The disproportion between the strength of the blow and pain so surprised her, that she had the child tossed again, in the same way, with a similar effect. No further, or particular, notice was taken of this circumstance at the time; the pain, however, recurred at irregular intervals, not to interfere with her ordinary occupation, save being much increased by exertion, or lifting weights. Thus matters continued until August, 1851, when she visited friends in L——, had much gaiety, met her former seducer, who, stupefying her with wine, again violated her. After this, she became stouter, the breasts and abdomen especially enlarged, in the latter she felt a sense of fluttering, and the dread of pregnancy caused great mental distress. She dosed herself freely with Widow Welshs' pills, and cathartics. The catamenia returned copiously, for two periods, after seven months' absence, (viz., two before and five after the above visit), and the abdominal enlargement partially subsided; from this period she lost flesh, and her appetite became variable. In August, 1852, she had, for some weeks, a severe attack of dysentery, with intense pain, brought on, it is said, by medicine from a

chemist to allay toothache. She was able, however, in October, 1852, again to visit her friends in L——, where she mixed very freely in society, danced much, kept late hours, and one day she was confined to bed from pure exhaustion. On her return, in November, she looked well, and spoke with delight of the gay time she had spent. In two or three weeks she became very ill; the old pain much increased and extended, and now a tumour was felt, which led to my first visit on 16th December ult. I found her pale, with a countenance of anxious suffering; tongue clean, rather dry; appetite bad; much thirst; bowels confined; pulse 100, small and weak; no swelling of limbs. On examining the abdomen, found an even tumour, in the median line, larger than an ostrich's egg; elastic in parts, solid in others; dull on percussion; very sensitive; movable over subjacent structures; unaltered by position; great pain in iliac, epigastric, and lumbar regions; shooting pains through tumour, vagina, and down the thighs; catamenia absent since March last; no vaginal discharge; tumour first observed over the pubes; some pain in passing water, which is slightly clouded; os and cervix uteri normal and high up; no uterine or ovarian enlargement traceable per vaginam; catheterism objected to, having suffered much from it after her confinement; sleeps badly from pain and starting; can lie on back or sides; no increase of superficial abdominal vessels; diagnosis was doubtful, prognosis very unfavourable; the treatment, tonic and alterative, an occasional aperient, an opiate at bedtime, constant sedative stupes, and generous diet. Under this treatment her strength, appetite, and spirits, improved a little; the tumour was unaffected, no local application controlling the incessant pain in it. She was given iodid. potassium gr. v. ter die, and the local application of ung. iod. potass. co. c. pulv. opii, in the proportion of ʒj. to ʒj.; the opiate at night still indispensable. This plan steadily pursued to the end of January produced no benefit. In consultation, Drs. Duke and Steavenson, after most careful examination, agreed in the obscurity of the affection, and its fatal tendency. Painting the abdomen with tinct. iod. co. bis die was employed as long as the skin admitted, and then alternated with the ointment as before. By the 1st March the symptoms rather increased; pulse 120, feeble; the pain and swelling greater; spasms, like severe electric shocks, in sleep, causing her to scream loudly; slight temporary relief was obtained by opiate plaisters to the loins, and two dozen leeches applied to the tumour, as suggested in consultation. The topical application of iodine was now given up, and stuping perseveringly continued. On 25th March, twelve leeches more were applied, with like transient benefit. The pain increasing and incessant, one-sixth gr. hyd. chlor. morphiæ given every third hour, to procure ease and rest; the third dose, however, so affected the head, that the opium pill was resumed *ad libitum*. At this period micturition became painful, the urine scanty and loaded; the deposit, on examination, proved oxalate of lime; this was speedily corrected by ten-drop doses of aqua regia in a bitter infusion. Early in April gastric irritation came on, the tongue assuming the beefsteak appearance, followed by slight aphthous ulceration, which yielded to the application of mell. boracis. Her appetite, long very bad, now failed altogether, as did her strength, confining her to bed, her vital power evidently sinking. All medicine, save opium, was now abandoned, Despite of every effort she sank on 17th April, conscious, and suffering much to within an hour of her death.

INSPECTION OF THE BODY TWENTY-SIX HOURS AFTER DEATH, AND SUBSEQUENT EXAMINATION.

Assisted by Dr. STEAVENSON and Mr. GABB.

General Appearance.—Body well formed, much emaciated; the lividity of gravitation on back and sides; cicatrices on neck; skin sallow, freckled, with the characteristic tint of malignant disease; umbilicus even with the surface. *Natural Appearance of Superficial Vessels.*—A sphacelus, 3½ inches diameter over left trochanter; abdomen presenting an enlargement, as of pregnancy advanced seven months. Superficial examination of the tumour gave distinct sense of fluctuation, with a large consistent substance in the fluid. The abdominal cavity being laid open, the stomach and intestines were found compressed and deeply congested, the latter containing much scybalæ; the other abdominal and pelvic viscera healthy. The uterus, normal in size, contained two or three drops of pus, its inner surface presenting a reticulated congested appearance. The Fallopian tubes impervious a quarter of an inch from its cavity. The right ovary, with its tube and fimbriated extremity, normal. The left, with its ligament, etc., forming a neck which twisted on itself, was lost in the diseased mass. A small puncture being made in the prominent part of the tumour, thin purulent fluid, with flakes of cheesy matter, spouted to the height of two inches. On laying open the sac, five to six pints of this curd and whey-like liquid escaped, leaving a mass of cheesy substance, in shape and size resembling the inverted bowl of a soup plate, weighing more than 2 lbs. and thickly permeated with hair resembling that on the pubes. This mass had floated in the fluid. The walls of the cyst were the eighth of an inch thick, universally attached, and requiring considerable force to break through the adhesions. The inner surface was densely coated with the peculiar deposit; and on being scraped presented an irregular honey-combed appearance. At a point within the sac opposite the anterior superior spinous process of the right ilium was firmly attached a small portion of this matter and hair, corresponding in situation with the right ovary. Within and forming in part the wall of the cyst (which was here very easily broken through), was found a pulpy, semi-organised mass, the size of a flattened cricket-ball, representing the left ovary, with a slight admixture of hair, and a partial appearance of blood-vessels. Mr. Quekett, who did me the favour to examine the morbid growth, finds the hair resembling that usually seen in ovarian cysts. I shall not trespass on your space with any observation, as I think the case sufficiently suggestive.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CASE OF AGGRAVATED HYSTERIA OCCURRING IN A MAN.—RECOVERY.

[Under the care of Dr. TODD.]

When a young and unmarried woman, remarkable rather for the appearance of *embonpoint* than for that of ill-health, begins to complain of the well-known symptoms of some severe organic disease, whether an affection of the nervous system, or even an acute visceral inflammation, the experienced physician is generally competent to the task of demonstrating the non-existence of the complaint simulated, and of proving that the indications present are, to a great extent, fictitious, having their rise in what is termed hysteria. In a vast majority of such cases as that supposed, this diagnosis may be pronounced without difficulty, and with great confidence; nor are the circumstances which may be alleged as explanatory of the reasons why young females of a certain temperament should be prone to become the subjects of this class of maladies altogether unsatisfactory. The feminine organism is by nature endowed with susceptibilities peculiarly its own, and its different parts are remarkably apt to sympathise with and to reflect morbid impressions upon each other; the sexual function is in full vigour, but of necessity idle, and therefore very liable to originate disease; the moral emotions are not unfrequently subject to much disturbance and excitement. If, then, we remember that the artificial habits of society, more especially of the middle and upper classes, are such in regard to young females as vastly to intensify the effect of these several influences, by requiring a comparatively inactive and objectless life, we shall be at no loss to understand the frequency of nervous diseases. In all these particulars, the condition of the male sex is most strikingly different; and hence, probably, its almost entire immunity from hysteria. The exceptions to that immunity which do occur are of a nature to confirm the remark, since their subjects are almost constantly susceptible, ill-balanced, and *effeminate* men. Illustrations of "male hysteria" in such patients must have been brought under the notice of most practitioners, the disease not usually amounting to more than a liability to hysteric paroxysms of sobbing, laughing, etc., and seldom passing into any of its graver forms. The case we are about to relate is of great interest, as being an exception to this observation, and an example of the hysteric simulation of severe diseases by a man of middle age, and under circumstances very likely to have deceived less cautious observers than the physician under whose care he was placed. It excited great interest while in the hospital, and elicited from Dr. Todd much instructive clinical comment. We have extracted the particulars concerning

it from the notes made by Mr. Macnamara, the clinical clerk under whom it occurred.

William S., aged 49, a porter in a stationer's shop, residing at Windsor, and of temperate habits, was admitted April 26th, 1853. He stated, that he was of a healthy family, and had himself, until the commencement of his present illness about two years ago, always enjoyed excellent health, but that since that time he had been constantly under medical care. The illness had commenced suddenly by an attack of diarrhœa and sickness, which, however, were soon subdued by proper remedies, leaving behind a constant and acute pain in the abdomen, attended also with great shortness of breath. For the latter, he continued under the treatment of a surgeon in Windsor for nearly a year, but received no benefit. After this, he attended one of the London Hospitals as an out-patient, and was treated by purgatives and blisters, with the effect of greatly reducing his strength, but in no wise relieving his pain. Having continued these measures for about a month, he accordingly returned to Windsor, took to his bed, and again placed himself under the charge of his former medical attendant. From that time to the date of admission he had considered himself a complete invalid, and had only left his bed for about an hour every evening; but in spite of the confinement, and of the severe pain complained of, he during this period rather gained flesh than lost it.

Present Condition.—The respiration is very rapid, and performed in a peculiarly laboured manner; on laying bare the trunk it is seen to be almost exclusively diaphragmatic, the walls of the thorax not moving to any appreciable extent. Nothing abnormal can be detected by auscultation or percussion. The heart's sounds are feeble, and the pulse weak; the frequency of the latter is about 68 per minute, that of the respiration nearly 40. Great pain is complained of over the region of the stomach, and the whole abdomen is tender to the slightest touch. The patient states, that he cannot even turn in bed without producing the most extreme pain. There is tenderness down the whole course of the spine, but especially over the fifth and sixth dorsal vertebræ, and the second and third lumbar; when the soles of the feet are struck, he complains of a jarring sensation in the loins. He is disturbed every night, two or three times, to pass water, but does not in the whole twenty four hours void more than from two to three pints; the secretion has a specific gravity of 1005, does not contain albumen, is of a light colour, and faintly acid reaction; nothing peculiar is detected in it by the aid of the microscope. On careful examination, it appeared that the tenderness of the abdomen was very superficially, and not at all proportionably increased by deep pressure; there was no tenderness over the chest, or in any other part, but the man stated that his right hand had occasionally felt numb.

Dr. Todd pointed out to the students present, that the question of diagnosis lay between disease of the cord, its investing membranes or bony case, and a mere hysterical hyperæsthetic condition. From the history of the case, its long duration, the non-existence of severe constitutional disturbance, and the absence of any account of injury to the part, he was much inclined to suspect that an affection of the latter class was really present, and had hitherto been treated as an organic and severe disease. He ordered middle diet, with half-pint of porter. Haust. morph. muriat. ʒiss. om. noct. ℞ Potassii iodidi gr. ij., aq. ʒj. ter die.

May 1.—It having been observed by the house-physician, while going his night rounds, that, during sleep, the man's respiration was almost natural in character, Dr. Todd to-day directed the full administration of chloroform, in order to ascertain, by the suspension of voluntary power, whether abdominal breathing was the result of organic lesion or of perverted nervous function only. No sooner was consciousness lost, than the respiration was at once observed to become thoracic, and the intercostal muscles assumed their free play. The rate of breathing efforts which just previously had been 30 in the minute, immediately fell to about 14. The result of this experiment seemed thus to set the question completely at rest, and the treatment of hysteria was at once commenced. ℞ Ferri citratis gr. v., aq. pur. ʒiss. ter die.

A tepid shower-bath every morning.

5th.—The man states, that he feels much better; the breathing has somewhat more of thoracic character, and the tenderness over the abdomen is slightly diminished. Pt. The shower-bath is to be given cold.

10th.—The pain caused by the slightest pressure over the belly is still very great; but, on previously securing the patient's attention to another subject, it is not complained of. Pulse 80. Respirations 24. Pt.

17th.—Much improvement. He can sit up in bed for a short time every day; the pain in the abdomen is diminished, and the breathing is accomplished much more by the thorax than it was formerly. The appetite, as it has been throughout, is good, and the bowels regular; sleep quiet and good. Pt.

28th.—With the assistance of a stick, the man is now able to walk about the wards. Pt.

June 15.—The improvement has been steadily progressive, and with the exception of some remaining debility, the patient may now be considered well. The pain in the belly has quite disappeared, and he is able to walk up and down stairs.

18th.—Discharged convalescent.

We need not expend space in pointing out how closely similar was the condition of the patient whose case we have just described to that of very severe examples of hysteria in the female. The symptom of numbness in the hand and arm is perhaps one of unusual occurrence in the latter, but it is nevertheless mentioned by authors as sometimes present. Many examples have fallen under our notice in hospital practice, in which the exhibition of anæsthetics for the purposes of diagnosis has afforded most valuable service. Hysteric contortions and spasms of all kinds, hysterical wry-neck, and croupy respiration dependent on hysteria, are all brought to a speedy close by the full inhalation of chloroform. By close observation of the patient during sleep, it is true that with regard to these diseases, the same conclusion might be arrived at; but there is yet another affection in which this could not be done. In hysteric simulation of diseased and contracted joints, the habit generally becomes sufficiently formed to enable the patient to retain the limb in very nearly its distorted position during sleep, and any attempts at forcible extensions have, of course, the immediate effect of re-arousing consciousness. Here chloroform is extremely useful. Having by its means annihilated voluntary power, the surgeon is at once able to bend without difficulty a limb which previously appeared immoveably fixed. We are not aware of any exceptions to this statement, care being always taken not to mistake for hysteric contractions a case in which recent inflammation has made motion extremely painful. A case some months ago, under the care of Mr. Erichsen, in University College Hospital, affords a good illustration of it. The patient, a young woman, had been sent down from the country, reputed to be suffering from old standing disease of the knee-joint with anchylosis. She was of a nervous temperament, and had a buxom, well-to-do aspect, which induced Mr. Erichsen to suspect hysteria, more especially as there were no local evidences of either past or present inflammatory mischief. Chloroform having been given to insensibility, it was found that the joint could be flexed with the greatest ease, and, acting on the information thus obtained, a treatment consisting of nervine tonics combined with the frequent use of the cold shower bath was ordered, and with complete success.

While on this subject, we would just allude to several confirmations of a remark made by Dr. Romberg which have recently come under our notice. In speaking of the complications of hysteria, Dr. Romberg observes, "Diseases of other organs may also combine with hysteria and, a point not to be overlooked, may be for a long time masked by the symptoms of the latter. This occurs most frequently in pulmonary phthisis and disease of the heart; less so in phthisis intestinalis." In two cases lately under our observation of young women bedridden on account of confirmed and very aggravated hysteria has phthisis crept on so insidiously, that its existence for a considerable time was not suspected. In each there had been an habitual nervous cough, and dyspnœa, with thoracic pains, etc., had been among the prominent symptoms of the hysteric malady.

ST. BARTHOLOMEW'S HOSPITAL.

LARGE BURSA CONTAINING SOLID BODIES BENEATH THE DELTOID MUSCLE.—TREATMENT BY FREE INCISION.—RECOVERY.

[Under the care of Mr. STANLEY.]

We have of late more than once had to record cases of enlarged bursæ, situated in localities in which usually their cure involves much difficulty and risk, and have had to show the very satisfactory results which followed the practice of laying them freely open. In the *Medical Times and Gazette*, for September, 1852, page 262, the reader will find the particulars of one beneath the palmar ligament, bulging above and below, in the palm and wrist, in which Mr. Stanley had made free incisions into each half of the swelling, without dividing the ligament itself. At the time we mentioned the case, the patient, who, in her vocation as a teacher of music, etc., required the very perfect use of her fingers, had not long recovered. We have had subsequently several opportunities of examining the state of the parts, and are glad to be able to state, that what thickening and agglutination remained in the palm, has long since entirely disappeared; that there has been no return of the swelling, and that the hand is now fully competent

to the most delicate movements. An allusion to the treatment of the common housemaid's knee, especially when inflamed, by free incisions, may be found in the number of the *Medical Times and Gazette* for May 14, page 497; and in that for July 9, 1853, page 39, are the details of a case in which a large exostosis was removed from behind the neck of the femur, and a large bursa, which, in a state of much inflammation, had existed over it, was necessarily laid freely open. The patient recovered well, and no disagreeble symptoms ensued. The practice of introducing setons into these swellings, and its occasional ill-consequences, is also illustrated by some cases in point, in the number of the same Journal, for September 11, 1852, page 263. The case to which we have now to invite attention, teaches the same lesson as the former ones, and shows that even when situated in the most critical localities, these swellings may be laid open with impunity.

Elizabeth Gardener, aged 11, a healthy looking girl, was admitted in June, 1853, on account of a large bursal tumour beneath the upper part of the right deltoid muscle. It could be felt on each side of the muscle, but was most prominent in front of its inner margin, from under which it projected as a fluctuating bag, in which some small solid bodies could be easily felt. The fluid could be very readily pressed from one side to the other, and also appeared to pass up under the acromion, and in close proximity to the shoulder-joint. The patient stated, that she had been accustomed to carry very frequently a heavy basket on the affected arm, and knew of no other cause for the appearance of the disease; she had been induced to apply for advice, on account of the pain and inconvenience which had attended it. It had existed, without material alteration, for nearly six months. There was no doubt as to the diagnosis; but the question of treatment involved much difficulty, from the danger of setting up inflammation, which might extend itself to the joint. Mr. Stanley preferred to keep the child under observation for a time, and to make a trial, however unhopeful, of the milder remedies in vogue before resorting to operative procedures; he therefore directed the application of blisters to the part, and, subsequently, of a strong solution of iodine. Probably on account of the solid bodies which it contained, and which kept up irritation, no improvement resulted from the use of these, although during their trial the arm was regularly kept at rest in a sling.

On June 16, therefore, Mr. Stanley made a small incision into the front and most prominent part of the swelling, and, having allowed a considerable quantity of glairy fluid to escape, and thus confirmed the diagnosis, he freely enlarged the opening with a bistoury, until the wound was at least two inches long. About a dozen melon-seed-like bodies were removed. A piece of wet lint was laid over the part, and the patient confined to bed, with the shoulder resting on a pillow. No undue constitutional disturbance followed the measure; and, in the course of a few days, healthy and profuse suppuration was established from the cavity, which continued for several weeks. The whole afterwards filled up by granulation. There was no affection whatever of the shoulder-joint; and, in the beginning of August, the patient was discharged, quite well, and with the bursal sac permanently obliterated.

LARGE ANASTOMOTIC ANEURISM ON THE SCALP.—TREATMENT BY LIGATURE, ETC.—RECOVERY.

[Under the care of Mr. STANLEY.]

James Casey, aged 15, a stout, and very robust lad, was admitted April 11, 1853. Nearly in the centre of the vertex of the head, but inclining a little to the right side was a pulsating vascular swelling of an oval shape, and measuring about three inches in length by one and three quarters in breadth. Its borders, however, were not well defined, but irregular and terminating in various parts in the large dilated trunks by which it was fed. These vessels, which entered the mass from several points, but in greater number on the right side than elsewhere, usually consisted of a large artery, and by its side a much larger and varicose vein. They could be traced from the tumour to considerable distances, often as far as several inches, their distribution coinciding with that of the various branches of the occipital, supra-orbital, and temporal arteries. The tumour itself was in its centre half an in inch or more in thickness, and felt to the touch as if made up of a congeries of inosculating vessels of very various sizes, and some of them quite large. It appeared to involve only the scalp, and was slightly moveable on the subjacent bone. The hair grew freely over almost its entire surface, excepting in one or two small portions, where the cuticle itself was vascular and discoloured as in cutaneous nævus. The pulsations were of considerable power, but by pressure they might be overcome, and the tumour emptied, to refill, however, on the removal of the hand. This process of redistension was accomplished, not by a sudden gush, but a progressive swelling out from different quarters of the tumour. The history given by the patient, a not very intelligent lad, was, that it began to form six years ago, and was still gradually increasing in size. His mother was not aware that there had been anything of the kind in the scalp during infancy. It had not produced any inconvenience until quite latterly, when, on two occasions, from a slight scratch while combing the hair, it had bled profusely.

There appeared little doubt but that this tumour was an example of the anastomotic or branching aneurism, consisting of a congeries of enlarged arteries, veins, and capillaries, the two former being probably freely connected by anastomosis. The question of treatment was, however, one involving some difficulty, and respecting it, a consultation was held, in which most of the surgical staff of the Hospital took part. Among the measures proposed were, first, the excision of the tumour and ligature of the surrounding vessels; but opposed to this, was the risk of extremely profuse hæmorrhage during the operation. Secondly, the ligature of the various trunks by which the supply of blood was kept up, or the ligature of some of them, and the obliterative compression of others,—a suggestion which was negatived, on account of the great and indefinite number of the vessels involved, taken in conjunction with the consideration, that they had probably dilated only in order to supply the demands of the diseased structure, and that, consequently, if cut off, they would be soon replaced by others. In like manner, being in doubt as to the probability of a successful result, from compression of the whole mass, and in fear of the effects of injecting it with any irritating fluid, Mr. Stanley declined the adoption of those plans. After much consideration, it was ultimately decided to operate as if for nævus, by placing a ligature round the base of the whole tumour.

On April 25, accordingly, the patient's head having been previously shaved, he was brought into the operating theatre, and placed under the influence of chloroform. A strong needle, armed with double whipcord, was then passed through the short or transverse diameter of the tumour; a tolerably free incision through the scalp was next carried round it, and its two halves separately tied. On account of the thickness of the structures included in each ligature, it was necessary to use great force in drawing them tight. During the application, they were prevented from slipping out of the line of the incisions previously made by means of needles, which had been introduced so that their projecting ends might serve to direct the cord into the wound. To the mouths of two vessels which had been wounded by the incision, and seemed inclined to bleed freely, separate ligatures were applied. Compresses of wet lint were laid over the part, and the patient sent back to bed. On recovering from the effects of chloroform, he complained of some, but not very severe, pain; it was sufficient, however, to cause him to sleep badly on the following night. No notable amount of constitutional disturbance followed; and, as the sloughing advanced, the pain became relieved; the patient had throughout no head symptoms. About the tenth day, the ligatures came away, and the destruction of the posterior segment of the tumour then appeared to be complete. A small portion, however, in the centre of the anterior half, had escaped the influence of the ligature; and, as the sloughing parts around became removed, was found to retain its vascular and pulsatile characters. It afterwards somewhat increased in size; and, about six weeks subsequent to the first operation, the greater part of the surface having in the mean time scarred over, Mr. Stanley injected this remaining portion with about half a drachm of the acid solution of the perchloride of iron. Instead of simply coagulating the blood, this measure caused sloughing of the part immediately concerned, and severe erysipelatous inflammation of the scalp surrounding it. Abscesses formed over the forehead; and, on account of the sinuses left in various directions by these, the patient has been kept under treatment in the hospital until within the last few weeks. When discharged, however, he had quite recovered his health, and the cure of the original disease was perfect, a healthy cicatrix having taken the place of the vascular mass on the scalp. The enlarged trunks, which, before the operation, crossed the scalp on all sides, for the supply of the tumour, had become contracted in size, and were scarcely to be found.

ST. MARY'S HOSPITAL.

NOTICE OF OPERATIONS.—PERINÆAL SECTION.—PUNCTURE OF BLADDER, ETC. ETC.

On Wednesday, Aug. 19, several very interesting cases were submitted to operation at this hospital. The patient first brought into the theatre was a stout, middle-aged woman in robust health. Over the middle of the lower part of her back was a large, solid feeling, and moveable tumour, which, from its position and contour, forcibly suggested to those who had not handled it, the idea

that it was a spina bifida. Chloroform having been administered, Mr. Coulson made a vertical incision on each side of the mass, and connected the two by a transverse one across its middle; he then dissected the flaps upwards and downwards, and the tumour thus exposed was with the greatest facility turned out from its bed. It proved to be a solid, almost globular fibrous growth the size of two fists, circumscribed and enclosed in a tense glistening capsule. Its surface and section were white, and very little vascular; the latter was crossed in various directions by radiating bands of fibrous tissue, and showed one or two small cavities containing serum. As the tumour had possessed almost no connexions with the surrounding parts, very slight bleeding resulted, and the edges of the wound having been carefully brought together by sutures, Mr. Coulson proceeded to make some clinical comments on the case. He stated, that he had never before seen removed so large a tumour of the ordinary hard fibrous kind from the surface of the body. There had been but little difficulty in forming a correct diagnosis before the operation, as the history given, and the entire absence of symptoms referrible to disease of the nervous system, rendered it almost certain that it had no connexion with the spinal canal. The woman had considered it of five years' growth, and referred its origin to an injury she had received. With respect to the H shaped incision which had been practised, Mr. Coulson stated that he was indebted for the suggestion to Mr. Haynes Walton, and had, in many cases of large outgrowths, found the operation much expedited by adopting it in preference to those in common use. In the present case, if he had known how slight were the connexions which the tumour had with the surrounding parts, he should scarcely have deemed it necessary to make such a free exposure of it.

The second case was one of epithelial cancer of the glans and prepuce in a man of middle age. Mr. Coulson amputated the penis in the usual way, about an inch from the pubes. He afterwards stated, that the patient had enlarged glands in each groin; but, in the hope that these might depend on "simple irritation," it had been deemed right to give him the chance of relief afforded by a removal of the primary disease.

The patient next placed on the table, was a man who, for several years, had suffered from obstinate stricture of the urethra, in two different parts of its course; and also from a fistulous opening communicating with the penile portion of the canal just anterior to the scrotum. The most anterior of the two contractions, both of which were long and very gristly, was just in front of the fistula, and had been cut through from without, in another hospital, two months previously. The deeper stricture was in the bulbous urethra, and was so close that a No. 2 sound could but just be introduced, while a No. 4 passed readily through the front one. Mr. Coulson stated his belief, that the want of complete success which had attended the former operation, had been due to the circumstance, that the posterior stricture had not been treated, and that remaining, it had sufficed to keep the whole canal in an unhealthy and irritable condition, unfavourable to recovery. He had, therefore, decided to re-divide from the fistula the front stricture, and also from the perinæum to cut through the one situate in the bulbous urethra. ("Syme's perineal section.") Chloroform having been given, and a small grooved staff passed into the bladder, Mr. Coulson made an incision through the integuments, etc., from the posterior verge of the scrotum in the median line backwards, and then dissected inwards to the staff. Having reached the latter, he entered the membranous urethra behind the stricture, and then turning the edge of the knife forwards, he divided the whole length of the stricture, which was, he stated, of cartilaginous hardness, and nearly an inch long. This done, Mr. Coulson made an incision, in front of the scrotum, into the urethra, and freely divided the stricture there situated. The knife used was exactly similar to that employed by Mr. Syme, a small straight-backed scalpel. A director having been passed through the perineal wound into the bladder, the staff was withdrawn, and a full sized silver catheter introduced without difficulty in its stead. The bleeding had been but trifling. The patient having been removed to bed, Mr. Coulson made some short remarks on his case, alluding, among other things connected with the operation, to a very ingenious suggestion, by Mr. Haynes Walton, by which a flexible catheter, instead of a silver one, might be easily introduced, and the necessity for keeping a director in the membranous urethra, during the change of instruments, done away with. Mr. Walton was afterwards kind enough to show us his modified instrument for this purpose. It consists in an ordinary small staff, such as that used during the operation, the handle of which may be screwed off, and replaced by a slender metal rod, over which a silver-pointed gum-elastic catheter, of any size, open at the end, may be easily passed into the bladder, after which, the metal staff is withdrawn, and re-introduced as often as it may be necessary to change the catheter. This suggestion appears a very valuable one, and, as will be seen, it may be adopted, not only in the difficulty just alluded to, but in any case in which difficulty is apprehended, in effecting the change of an instrument already introduced into the bladder.

The fourth, and last, case brought into the theatre was a puzzling and very unpromising one. The patient, a poor cachectic man, worn down by his disease, had urinary fistulæ in almost all possible directions. They opened in the penis, scrotum, and perinæum, above the pubes, and by the side of the rectum; the surrounding parts were swollen, and much distorted by solid œdema, and the canal of the urethra was so irregular that it had been found impracticable to introduce any instrument into the bladder. Mr. Coulson stated, that it had been suggested to him to lay open the membranous urethra, in which, probably, the original stricture existed; but from a consideration of the difficulties which frequently attended a search for that canal in cases where no staff could be passed as a guide for the knife, especially in the midst of such a mass of disease as that presented by the perinæum in the present instance, he had been induced to decline the attempt, and had decided to puncture the bladder by the rectum. The hopes entertained from the latter measure were, that the urethra being freed from the irritation of the urine, might recover itself to some extent, perhaps sufficiently to permit of the introduction of an instrument into the bladder, and that, meanwhile, some of the sinuses might heal, and the general swelling of the parts have time to subside. The operation was performed in the usual manner, a long curved trocar being used, the canula of which was afterwards left in, and retained in position by means of tapes. Only a very small quantity of urine escaped, the bladder having been probably nearly empty.

Sep. 1.—The patients in the first two cases above alluded to are now nearly convalescent, and the latter two have progressed thus far very favourably.

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THE STUDENT'S NUMBER

for the Session 1853-4 *will be published on the* 17*th. It has been found impossible to obtain the requisite information from the various Schools to enable us to publish it at an earlier period.*

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Medical Times & Gazette.

SATURDAY, SEPTEMBER 3, 1853.

THE *EDINBURGH REVIEW* ON YELLOW FEVER.

We have already made some remarks upon an article which appeared in the last Number of the *Edinburgh Review*, entitled, "Quarantine, Small-pox, and Yellow Fever," (See page 115); and we pointed out, how dangerous and absurd were the conclusions of the Reviewer with regard to small-pox. We have now to continue our examination of the portion of the article which relates to yellow fever.

The great object of the article in question is, to endeavour to show that yellow fever is not contagious; and, as the strongest evidence hitherto recorded of the importation of the disease from a diseased into a healthy community is

afforded by Dr. M'William's account of the epidemic which occurred in H.M.S. Eclair and in the island of Boa Vista in 1845, the Reviewer adopts every possible means of throwing discredit upon that account. We shall therefore take up some of the most remarkable of his arguments and misstatements, premising that both Dr. M'William and Dr. King, who entertain different views of the causes of the fever at Boa Vista,

"Are both agreed that the island of Boa Vista was in a condition of the most perfect health when H.M.S. Eclair arrived there, on the 21st of August, 1845, with a fever-stricken crew; that upon the sick being landed and lodged in a fort, on a small island about half a mile from Boa Vista, the fever increased instead of becoming diminished in intensity; that the sick were re-embarked in the Eclair on the 13th of September; that, during the occupancy of the fort by the sick of the Eclair, there was a small Portuguese guard stationed there, which was several times relieved; that the guard, at the time the Eclair left, consisted of one negro and two European soldiers; that, within three days after the departure of the Eclair, both Europeans were attacked with fever, similar to that from which her crew had suffered, of which they both died in the course of a few days; that the negro, Miguel Barbosa, was also soon afterwards affected with fever, and, on that account, he and another negro soldier, called Pedro Manoel (who had been sent from Boa Vista to nurse the sick Europeans), were removed from the small island to the island of Boa Vista, where, from fear of infecting their comrades, they were not received into the barracks, but lodged for some time in a house situated at one end of Porto Sal Rey; and, further, that a convict woman (Degrādādo), called Anna Gallinhā, who lived next door to that very house, was the first person who was attacked with, and died from, fever in the town."—Dr. M'William's Remarks on Dr. King's Report, page 1.

Now, in the first place, in order to explain the occurrence of fever independently of the arrival of the Eclair, it is urged by the reviewer, as a strong point, that Boa Vista is in the "yellow-fever zone." But the ten other islands lying close around it are in the same zone, and yet Boa Vista was the only one affected. It and all the other islands had been in the same zone since their creation, yet no yellow fever existed until the arrival of the Eclair at Boa Vista with that disease on board. Immediately after her arrival the same form of fever spread in the only island in the zone she touched at.

Continuing his argument, the Reviewer talks, in the usual strain, of bad water, unwholesome meat, and a rainy season. But the water was the same as that used for years before when there was no fever. The story of diseased cattle is a fiction; and there was no reason why the rainy season should affect Boa Vista more than other islands, or in that year more than in other years. The sole difference between Boa Vista and the other islands was the arrival of the Eclair, and the corresponding difference was the development of the fever brought by the ship. Whatever the disease was, the great fact is, that it did not exist before the arrival of the ship, that it did afterwards, and only at the place where the ship touched, and in the same form, a form which had never existed in the island before in the memory of man.

Another argument of the Reviewer is founded on an entirely false statement. He says, that until November 20 free intercourse with the other islands had subsisted without any communication of the disease to them. This is a quibble. The intercourse had been free, but no diseased person had left Boa Vista up to that time. When some infected persons afterwards left, and arrived at other islands, they were put into strict quarantine, and the disease was not communicated, because the regulations of quarantine were most strictly enforced.

Again it is urged, that the Governor-General thought the disease was not contagious. Now it is scarcely credible that the Reviewer, to suit his own purpose, should have quoted the opinion of the Governor in 1846, when one of the Parliamentary papers quoted in the same article, contains proofs that upon a calm review of the case in 1848 His Excellency's opinion had undergone an entire change, and he writes, "I have changed my first opinion; I am quite convinced that the fever was contagious, and that it was introduced into Boa Vista by H.M.S. Eclair." No one who had not read the Quarantine Reports of the Board of Health could believe that any writer pretending to honesty could indulge so far in the *suggestio falsi* and *suppressio veri*, to strengthen an argument.

On attempting to throw discredit on Dr. M'William's Report, because he adopts the common-sense view of the question, the Reviewer says that, as the Doctor arrived seven months after the departure of the Eclair, he was under unfavourable conditions for elucidating the truth. Our candid contemporary should have remembered that his protégé, Dr. King, did not arrive until nine months after Dr. M'William. He also attempts the common legal artifice of throwing discredit on those witnesses whose evidence is inconvenient. The people are styled the most ignorant and degraded of the human race, and the witnesses the "vilest class" of this race; and this entirely without foundation. Many of them were among the most respectable people on the island, and the evidence has been entirely corroborated by our consul, and many others. It is also urged that Dr. M'William was ignorant of the place and people, and collected the loosest possible evidence in the loosest possible way, whereas he had previously visited the islands, and he has been commended for the manner in which he conducted the inquiry by all the leading Medical Journals of Europe.

We have next to notice another statement, namely, that the Eclair was in the island in August, while the disease did not appear until November 20. Now, the first case appeared within three or four days after the Eclair sailed on the 13th September. The misstatement is that of the reviewer alone, for both Dr. M'William, whom he decries, and Dr. King, whom he praises, give the date of the first cases in the fort as September 16 or 17, and the first in Porto Sal Rey as about October 12.

There are numerous other errors almost equally glaring which we should have noticed, but we are tired of an ungrateful and painful task. We are sorry that such an article as that upon which we have commented should have been allowed to appear in what has hitherto been regarded as one of the most respectable organs of public opinion in Great Britain. No one would for a moment suspect the learned Professor who edits the *Edinburgh* of knowingly lending his authority to assist in the propagation of error, but he cannot be considered altogether guiltless of negligence or want of caution, in accepting what is evidently the production of a shallow lawyer on the medical question. We trust the lesson will not be lost, and that he will not receive for the future any statements, either of facts or opinions, proceeding, directly or indirectly, from the Board of Health, without close examination and rigid inquiry.

THE MEDICAL STAFF OF THE METROPOLITAN HOSPITALS.

It is not very long since we had to point out the curious position of the Surgical officers of one of our largest Hospitals. A surgeon of high reputation had been induced to hold his office for years after he had ceased to perform its duties.

Those duties had been performed by others, who, in their turn, had delegated their peculiar labours to a House-Surgeon or senior pupil.

During the few weeks which have elapsed since that article was written, two other cases have been brought prominently before the notice of the medical public. In both the Senior Physician of a London hospital is stated to be incapable of performing his duties. In both his duties are performed by officers who are not allowed to enjoy the titles, reputation, or emoluments legitimately depending on the work they perform. One of these Physicians is said to be rendered physically incapable by paralysis. The other, either from a different species of incapacity, or from some reason we need not stop to inquire into, holds his position, but does not perform its duties, and thus unjustly bars the path of advancement before younger and abler men.

Such abuses as these existing in the present day, acknowledged and permitted by those who are elected to direct the different Charities by the universal suffrage of the Governors, and notwithstanding their exposure by a free press, naturally suggest the necessity of inquiring into the condition of the Medical Staff of our Hospitals in general.

A glance at the following Table will show the composition of the Medical Staff of the Metropolitan Hospitals:—

	Physicians.	Assistant-Physicians.	Surgeons.	Assistant-Surgeons.
Bartholomew's	3	3	3	3
London	3	3	3	3
St. Mary's	3	3	3	3
St. George's	4	2	4	2
Westminster	3	2	3	2
Middlesex	3	2	3	1
St. Thomas's	3	2	5	0
Guy's	3	4	3	2
University College	3	2	2	2
King's College	3	1	2	2
Charing-cross	2	1	2	0

At the first three in this list, the number of each class of officers is 3. At St. George's, there are also six medical and six surgical officers; but the arrangement gives 4 Physicians and Surgeons to 2 Assistant-Physicians and Surgeons. At the Westminster and Middlesex, while the number of Physicians and Surgeons is 3, there are only 2 Assistant-Physicians and 1 Assistant-Surgeon. No rule of number can be applied to any of the establishments lower on the list. Charing-cross and St. Thomas's stand alone in having no Assistant-Surgeon. The consequence is, that, unless the Surgeons do both their own duty and that of Assistants, a most important department of the Charity—that of the out-patients—necessarily falls under the direction of the House-Surgeon or of pupils. It is only in the first three establishments, where the numbers of seniors and juniors are equal, that the great advantage is obtained of having men trained to Hospital duties, and experienced in them, ready to fill up the senior vacancies as they occur.

The amount of duty done by the medical officers of the different Hospitals must vary enormously. At St. Bartholomew's, for instance, each of the Seniors has, on an average, 100 beds under his charge, the Surgeons something more, and the Physicians something less; and each bed is occupied by ten patients annually, so that each Surgeon treats every year about twelve hundred, and each Physician about eight hundred, patients. A hundred patients every day, when the hospital is full, is the average work of each of the senior officers. The work of the juniors is still greater. If the 90,000 out-patients treated by the six Assistant-Physicians and Surgeons were equally divided among them, each of these gentlemen would prescribe for 15,000 patients every year in the out-patient's room. This is about what they do, if the hospital returns be correct; and when it is remembered that each patient pays several visits, the labour appears immense.

At the London, the labour of the seniors, though still very great, is much less than at St. Bartholomew's; for the 600 beds and 6000 in-patients of the latter establishment are reduced to 400 and 4000. The Assistants' labour is still more diminished, as the out-patients only number 16,000 annually.

At Guy's and St. Thomas's, the work must be above that of the London, below that of St. Bartholomew's. The six seniors have respectively to look after 580 and 520 beds, and between 5000 and 6000 in-patients. The six juniors at Guy's treat 40,000 out-patients; the four juniors at St. Thomas's, 55,000. One Assistant-Surgeon alone is supposed to treat between 20,000 and 30,000 out-patients. We say "supposed," because the duty must necessarily devolve upon others, though it can be legitimately fulfilled by the Assistant-Surgeon only.

At the Westminster and Middlesex, two junior officers are entrusted with the care, at the former, of 18,000, and at the latter, of 12,000 out-patients. The seniors are better off, as the beds in neither establishment amount to 300.

Now, we think that any unprejudiced person who will calmly consider these facts, must come to the conclusion that a very considerable modification of the Medical Staff of the Metropolitan Hospitals is imperatively called for. The most diligent of our Surgeons or Physicians never spend more than two hours at the visit to their wards, and very often one hour suffices to see something like a hundred patients. We all know how this is done,—the attention is concentrated upon a few interesting cases, and the others are subjected to the merest routine, or left to the pupils and a pothecary. It is our firm conviction, that no man can treat more than forty patients in one day carefully and properly; and even this can only be done by supposing that a large proportion of these patients do not require a daily visit.

Any one who passes an hour in the out-patients' room of any of our large hospitals will be still more strongly impressed with the evils of the existing system. There can be no time for more than the most superficial examination of the generality of cases; and even if the patient do not suffer from careless treatment, science gains nothing by a record of his case. But very lately we endeavoured to obtain the proportion of out-patients treated at our Hospitals for venereal diseases, and found that this simple piece of information could not be procured for want of proper records. Some important questions might have been settled by it, namely, if venereal diseases are on the increase among us, the loss they occasion to the productive classes, the amount which they absorb from the donations of the charitable; and probably some facts might have been elicited which would have shown the necesssity of Government taking some measures to check the disease and regulate prostitution. But, as we said before, the records were so faulty, that nothing like exact information could be obtained. We do not hesitate to say, that on whatever point of inquiry any one seeks for positive information at any of our Hospitals, with the exception perhaps of St. George's and St. Mary's, he will come away disappointed.

Great changes must soon take place in these Institutions. It cannot be permitted that men should hold important offices long after age, decrepitude, or disease have rendered the performance of their duties physically impossible. Men must not be kept till their hair is grey, their

spirit broken, and their energy gone, in subordinate offices. The patients, whether in or out, must not be treated hurriedly because it suits a few men of influence to monopolize the benefits derivable from Hospital position, and to keep the active and aspiring rising generation of the Profession vainly longing for a field for exertion.

We have not included Consulting Physicians or Surgeons in this list because their offices are purely honorary. To complete the list we should add, that at Guy's, University College, and St. Mary's, there is an Ophthalmic Surgeon; at St. Mary's, an Aural Surgeon; and at St. Bartholomew's, the London, Middlesex, St. Thomas's, University College, and King's College, there is a Physician-Accoucheur.

POST-MORTEM EXAMINATION OF THE BODY OF THE LATE MR. BRANSBY COOPER.

Examination of the remains of B. B. Cooper, Esq., in the presence of Messrs. J. Birkett and Alfred Poland, August 20, 1853, at 8 a.m., about 41 hours after death:—

At the root of the tongue, and most on its right side, was a deep excavation, covered over by the cortex of the organ, which seemed to form flaps to the hollow. Around this excavation, the tissues of the tongue itself, as well as the muscles about the os hyoides, were infiltrated with the elements of carcinoma.

Several enlarged lymphatic glands existed upon the right side of the neck, all infiltrated with carcinoma. From one large gland, and from another smaller, when cut, a yellow, tenacious, muco-purulent fluid came away. The parietes enclosing this fluid was carcinoma.

The trachea and bronchi contained fluid blood, as well as the air-cells of the lungs, and patches of cells infiltrated with blood appeared upon the surfaces of both the lungs. The tissue of the lungs was healthy, and not a single pleural adhesion existed on either side.

The heart was small, and its muscular tissue thin and pale. The valves were healthy.

The stomach contained imperfectly-masticated food, and much blood-coloured fluid.

The tissues of the alimentary canal were healthy.

The liver was rather small, soft, and congested with blood.

The pancreas was not diseased.

The spleen was extremely contracted and corrugated, and of a dark, almost black hue.

Both kidneys were congested with blood, soft, and easily separable from their proper tunics.

In the cavity which existed in the tongue there were a few clots of blood, and as this was the only ulcerated surface, it may be presumed that the hæmorrhage proceeded from a perforation in the right lingual artery, or of one of its branches.

A Tablet has been erected in Trinity churchyard, Woolwich, to the memory of the late Sir J. Webb, director-general of the Ordnance Medical Department.

At the County Court, Dorrington, an action was tried between John N. Hale, surgeon, *v.* W. Mancekwell, farmer, for 14*l.* 6s. 6d., for attendance, during illness, on defendant's son. Mr. Rouse, surgeon, deposed, that the charges were moderate. The Judge (?) said, on looking over the bill, he saw several entries where 12s. a-day were charged for boluses alone. He wished it to be understood, he would not allow bills run up to such an amount for drugs, which were so cheap. Professional men ought to be properly paid for their skill, but not for drenching their patients with physic. Judgment for plaintiff, 2*l.* 15s. The Judge showed his utter ignorance of all things appertaining to such a case, by the remark as to the cheapness of drugs. What would he say to the charge for a lawyer's letter (6s. 8d.)? Pens, ink, and paper, are cheaper than drugs.

REVIEWS.

Lectures on Surgical Pathology. Delivered at the Royal College of Surgeons of England. By James Paget, F.R.S., lately Professor of Anatomy and Surgery to the College. 8vo. 2 Vols. London. 1853.

In 1847, Mr. Paget was appointed Professor of Anatomy and Surgery to the Royal College of Surgeons. At the time of his appointment some were found to insinuate that he owed his high position to personal favour. The whisper died the moment Mr. Paget gave his first lecture in the College theatre. In subsequent years, his course of lectures was anticipated as one of the richest of professional treats, and the expectations formed were never disappointed. As each course was given, the lectures were published in one of our predecessors, (the *Medical Gazette*,) with the exception of the last course, viz., the lectures on Malignant Tumours.

The lectures which have already appeared in print are, however, now made more complete "by the aid of numerous facts ascertained since they were delivered," and the addition of many things "which time, or their inaptness for oral delivery, obliged me," Mr. Paget says, "to omit."

We may add, that every lecture is now illustrated by most accurate and beautifully-executed woodcuts.

As the majority of our readers must already be familiar with the substance of such of these lectures as have been already laid before the Profession in another form, we shall limit our abstract to the section on Malignant Tumours.

Six lectures are devoted to the subject of Cancer—viz., three to the Anatomy and Physiology of Scirrhous Cancer, Medullary Cancer, and Epithelial Cancer; one to Melanoid, Hæmatoid, Osteoid, Villous, and Colloid Cancers; and two to the General Pathology of Cancer. The general or naked-eye characters of hard cancer are first given; its microscopical characters follow.

With reference to the question of the existence of a "cancer-cell," Mr. Paget says—

"The corpuscles of hard cancer are chiefly nucleated cells. In ordinary cases, and where the cancer has not been deflected from its normal course, their characters are constant and peculiar, and may be described for the types of 'cancer-cells.' In shape they are various; usually a large majority are broadly oval or nearly round."

After describing the various other forms they may assume, Mr. Paget continues—

"But, we may observe, as Bruch and others have done, on this multiformity as a feature of malignant structures. I know no innocent tumour except the cartilaginous, in which it is imitated. In size, the hard cancer-cells range from $\frac{1}{1800}$ of an inch to $\frac{1}{700}$ of an inch in diameter."

The smallest cells are usually found in the cancers of quickest growth.

The cancer-cells, when quite fresh, are remarkable for their clear and pellucid appearance. So thin and delicate is their cell-wall, that Mr. Paget expresses his belief, "that the cancer-cells are often only cell-shaped masses of some soft, though tenacious substance, within which are nuclei."

The nuclei are more constant in appearance, and "even more characteristic" than the cells.

"They are always comparatively large, having an average diameter of about $\frac{1}{250}$ of an inch, and varying from this size much less than the cells do from theirs. They are regular, oval, or nearly round, clear, well-defined, scarcely altered by commencing decomposition, or by water, or any moderately-diluted test-substance. A single nucleus is usually contained in each cell; two nuclei in a cell are frequently found, but not in all specimens of hard cancer; more than two are rare."

Free nuclei are usually present in considerable number.

"Each nucleus has one, two, or rarely more, nucleoli, which, like itself, are large in comparison with the ordinary proportion between nucleoli and cells, and are peculiarly bright and well defined."

With reference to the diagnostic value of these microscopical elements, Mr. Paget remarks—

"These characters are so nearly constant and so peculiar, that an experienced microscopist can very rarely hesitate in forming upon them a diagnosis of the cancerous nature of any tumour in which they are observed."

But the cancer-cells are peculiarly liable to degenerate; some wither, and then the only remains of the cell are a few amorphous shreds adhering to the nucleus; others

undergo fatty degeneration, and then the fat globules may be so abundant within the cell-wall as to remove the nucleus from sight.

We may observe, that our own conviction that a cell-wall generally, if not always, bounds the body called a cancer-cell, is chiefly derived from the facility with which it may be seen in cancer-cells undergoing fatty degeneration. With reference to the fibres found in hard cancer, Mr. Paget considers, that, in a large majority of cases, they are the fibres of the structure which is the seat of the malignant growth. At the same time he does not deny, that cancer blastema may be developed into fibrous tissue. But, he observes, "when hard cancer occurs in organs which have little or no fibrous tissue—such as cancellous bone, the brain, the liver, or the lymphatic glands—it presents as little or none of the same tissue; however hard it may be, it is formed almost entirely of corpuscles."

Hard cancers of the breast are divided by Mr. Paget into acute and chronic. The former are softer and more vascular than the latter. The proportion of cancer structure in them is very large in proportion to the quantity of gland in which it has its seat. They may appear as distinct, isolated tumours, rather than an infiltration.

In chronic hard cancers the opposites of these characters are found.

The peculiarities offered by hard cancers, as they occur in various organs, are then described.

The Pathology of Hard Cancer.—"Here," Mr. Paget says, "I will limit myself to the histories of those of the breast, for, concerning the primary hard cancers of other parts, we have too few data for any general history. First, concerning the conditions favourable to the origin of the scirrhous cancers."

a. They exist in great preponderance in women.

b. The age of most frequent occurrence of scirrhous cancer of the breast is between 45 and 50 years.

"I think," Mr. Paget remarks, "we may most safely hold, that the aptness of this time of life for the development of hard cancer, is chiefly due to the general failure of the process of maintenance by nutrition, which usually has, at this time, its beginning, and of which the most obvious natural signs are in the diminution of the powers of the reproductive organs."

c. Hereditary Predisposition.—About one in six patients with hard cancer may be reckoned as having hereditary tendency thereto.

d. The Effects of Injury and Previous Disease.—Of ninety-one patients, only sixteen, *i.e.*, less than one-sixth, ascribed the hard cancer to injury, or any such local cause.

e. As to the general health of women at the time when hard cancer is first formed in them, a remarkable majority present the appearance of good health.

"I find, that in ninety-one cases in which I have notes on this point," Mr. Paget observes, "no less than sixty-six patients presented the general characters of robust, or, at least, good health; nine were of uncertain, or of moderately good health; and only sixteen were sickly or feeble."

Ulceration of hard cancer either commences superficially and extends inwards, or it begins in the substance of the cancer, and thence makes progress outwards.

A most excellent description of the mode in which the ulceration extends follows, and a very interesting case is given in which an ulcerated cancer of the breast regressed and healed coetaneously with the development of tubercles in the lungs.

With reference to the duration of scirrhous cancer of the breast, Mr. Paget has collected sixty-six cases bearing on the point, and finds the duration of life to be something more than forty-nine months. Cases are on record in which the disease terminated in four months, and life has been prolonged for twenty-five years. Mr. Paget says he is not aware of a single case of recovery. The most important condition influencing the duration of the life of a patient affected with hard cancer of the breast, is the age at which the disease commences; the earlier the disease begins the more rapid its course.

As to the influence of an operation in prolonging life:—

"In forty-seven cases, in which the cancer was once or more removed by operation, the average duration of life after the first observation of the disease, was again something more than forty-nine months. I believe, therefore, that the removal of the local disease makes no material difference in the average duration of life."

A table, however, is given, which renders it probable that the course of the more rapid cases is retarded by operation. The constitutional part of the cancerous disease is little, if at all, affected by the removal of the local part.

Neither Mr. Paget nor M. Lebert have met with a case in which recurrence was delayed beyond eight years:—"*It does not appear that recurrence is, on the whole, later after early, than after delayed operations.*"

Recorded evidence does not, according to Mr. Paget, bear out the received opinion, that hard cancer is more likely to recur, and to recur more quickly, when the axillary lymphatic glands are cancerous, when the cancer adheres to the skin, or is even ulcerated, than when it is in a less advanced stage.

As to the circumstances under which a breast affected with hard cancer should be removed:—

1. In cases of acute hard cancer the operation may be rightly performed; in such cases, its performance is justified by the probability, that it will, in some measure, prolong life, and will save the patient from dreadful suffering.

2. The operation seems proper in all cases in which the local disease is that which is causing the death of the patient.

3. It is also right to operate in all cases in which it is not probable that the operation will shorten life.

The operation should be avoided

1. In well-marked cases of chronic cancer, especially in old persons.

2. In cases in which the cachexia is more than proportionate to the local disease.

3. When there is reason to believe in the presence of internal cancer.

4. When the patient is very feeble, very fat, intemperate, or in any of those conditions which make persons unfavourable subjects for surgical operation.

The space at our disposal does not permit us to follow Mr. Paget through the remainder of this part of his course, but the abstract we have given of the "Lectures on Hard Cancer" will enable our readers to understand the value of Mr. Paget's work in a scientific and practical point of view. It is by far the most able treatise on surgical pathology with which we are acquainted.

Ψυχη, a Discourse on the Birth and Pilgrimage of Thought. By Walter Cooper Dendy. Pp. 144. London: Longman and Co. 1853.

Mr. Dendy, in his present performance, has soared from the everyday duties of medical life into the regions of metaphysics; and his extensive general reading and varied learning render him far from incompetent to undertake such an exalted flight. The study of the nature and operations of the human mind has been perhaps rather unduly neglected of late by the members of our Profession, and we are not sorry to find Mr. Dendy bringing it again into prominent notice. To give a complete analysis of this book would lead us into more discussion than our space will allow; and we can only remark that it exhibits throughout the traces of a thoughtful mind and the researches of a scholar. If Mr. Dendy has not thrown much light upon the essence of thought, or upon the connexion between it and organization, he is certainly not to be blamed for failing in an attempt in which all the greatest philosophers of ancient and modern days have fallen short of success. While generally admiring the tone and character of Mr. Dendy's work, we cannot but remark that a judicious revision of its pages might have induced the erasure of some pedantic expressions, and of some tautological errors, which considerably mar the effect of some of the best passages. The word "wondrous" occurs far too often; and the expression, "entire integrity" (p. 142) is a *lapsus* of the pen which ought to have been corrected.

A Medical and Topographical Sketch of the Thermal Springs of Teplitz. By T. L. Richter, M.D. Pp. 52. Leipzig. 1853.

A very interesting little work on the properties of the mineral waters of Teplitz, in Bohemia. Though written by a German, there are hardly any inaccuracies of style or composition. The springs of Teplitz belong to the saline-alkaline class, their chief ingredient being carbonate of soda;

but the proportional quantity of solid ingredients is very small; they also contain a large quantity of nitrogen. As might be inferred from the composition of the springs; they are chiefly beneficial in cases of gout and rheumatism, and they are principally employed in the form of baths, which the author divides into three classes:—

1st. *Tepid Baths*, the temperature of which ranges from 86° to 94° F.

2nd. *Warm Baths*, from 95° to 101° F.; and

3rd. *Hot Baths*, from 102° to 113° F.

The remarks upon the diet and regimen which ought to be adopted in connexion with the use of the waters are practical and judicious.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON THE PIAN OR YAWS, A DISEASE OF TROPICAL CLIMATES.

By M. GUYON.

This eruptive disease, called, from the raspberry-like colour of the spots, frambæsia, appears to be contagious, and transmissible from generation to generation. Its transmissibility by inoculation is proved by the fact, that it has been conveyed from the tropical regions of America to Africa, doubtless by infected Negroes landing from ships trading between the two countries. In Algeria, the native physicians consider it to be a sort of syphilis, and treat it as such. They direct, for forty days, a strict system of diet, under which the disease disappears, but it returns as soon as the patient reverts to his usual habits. From this fact, M. Guyon concludes, that the apparent cure is but a phenomenon connected with the general emaciation and disappearance of the soft parts.

In the Antilles, the treatment of yaws is entrusted to negroes, the same class of men who profess to cure serpent bites. They administer decoction of sarsaparilla and sulphate of ammonia. Some physicians, it is said, have tried with good effect mercurials combined with tisanes of guaiacum and sarsaparilla. The usual duration of the disease is four to five months. We require further investigations respecting it.

SPONTANEOUS GANGRENE IN GLUCOSURIA.

By M. MARCHAL, of Calvi.

[Note addressed to the Académie des Sciences of Paris.]

Two years ago the author observed a case of spontaneous gangrene in a diabetic patient, who first lost the little toe, and, continuing to void sugar in the urine, eventually succumbed with gangrene of nearly the entire foot. Since this observation, made fifteen years ago, Dr. Landouzy, of Rheims, communicated a case of gangrene of both legs in a diabetic patient. A third case has occurred recently.

M. Marchal was called into consultation, near Paris, to see a patient suffering from two gangrenous spots upon the dorsal region. One, very large, and surrounded by phlegmonous redness and œdema, extended along the outer part of the left thigh. The patient, upon inquiry, stated, that, for many years, he had drunk much, and had voided large quantities of urine. The urine examined by M. Duroy, an experienced chemist, yielded much sugar. As, in one of the preceding cases, the patient had suffered frequently from boils in various parts of the body, M. Marchal purposes carrying on his investigations further at a future period, but thought the fact of sufficient importance to lay before the Society.—*L'Union Médicale.*

UPON THE PATHOLOGY AND TREATMENT OF DIABETES MELLITUS.

By CH. FRICK, M.D., Baltimore.

The quantity of urine voided during the twenty-four hours, taken by itself, is no test of the severity of the disease, inasmuch as it varies with the supply of fluid drunk by the patient; the quantity of sugar voided remaining unaltered. Dr. Frick found sugar in the urine of a patient from whom, for periods of two to three days, he vigorously excluded every kind of food from which it could be supposed this material could be formed; and hence he agrees with Bernard, that its source is to be sought in a power unconnected with the impaired assimilation of particular articles of diet. Strychnine, (1-9th to 1-6th gr. three times a-day,) diminished the amount of sugar in the urine. Tinct. ferri hydrochlor., given in doses of 10 drops diminished the sugar one-half, in 20 drops increased it. Liquor ammoniæ, in small doses, (5 drops,) diminished the quantity. Iodide of potassium had no effect. Creosote and naphtha caused general discomfort, and increased the quantity. Calomel and opium carried to salivation had a similar injurious effect.

As, in these cases, sugar is found in the urine and other secretions, even when the patients are nourished on strictly nitrogenous food, and as the liver (from Bernard's discoveries) contains sugar, even in healthy persons, the author concludes, that it may be developed in the organism independent of amylaceous food, and that its chief source is the fatty matter in the portal blood. In healthy persons, this sugar becomes converted by respiration into carbonic acid and water. In diabetes, either too great a quantity is formed for the lungs to manage, or the power of getting rid of it is diminished. Hence, sugar appears in all the secretions, even though amylaceous food be withdrawn; but indulgence in that kind of food produces a marked increase of the excretion. As a proof of the important part taken by the nervous system in this disease, the author mentions the effect of different remedies directly acting upon this system. Those tending to give tone, produced a marked improvement in the patient's condition, the greater the more direct the medicine. The formation of this substance in the organism is a natural process; and our object should be, not merely to prevent its appearance, but also to strengthen those functions which it disturbs or impairs.—*American Journal*, 1852.

UPON THE DIAGNOSIS OF FRACTURES.

By LORINSER.

Lorinser recommends the production of insensibility by ether inhalations, as a means of facilitating the diagnosis of fractures in doubtful cases. Not only is the patient spared the pain of the examination, but those involuntary muscular contractions are avoided which prevent extension and the proper adaptation of the broken bone.

Lorinser especially recommends this plan in cases of fracture of the lower end of the radius, which, though followed by serious consequences as regards movement, if neglected do not cause such an amount of deformity as to render the nature of the accident immediately obvious.

He has succeeded in feeling crepitation in these cases, when the patient has been rendered unconscious and unresisting.

In the diagnosis of fractured ribs, the author trusts to the diminished respiratory movements at the seat of injury, and to the sound obtained by auscultation. The latter is a dull murmur, in which neither the in nor the ex-piratory sound can be distinguished; he imagines this to proceed from the imperfect respiration, and from the irregular movement of the air in the minuter bronchi. The crepitation of the broken bones may be heard through the stethoscope.—*Wien. Med. Wochnschr.* 1852.

INTERMITTENT PUERPERAL MANIA.

By Dr. VOGLER.

A well-formed primipara, aged 21, who, after the normal period of pregnancy, gave birth to twins, became violently excited upon hearing that a second child was to follow the first. The second was imperfectly developed, and could not be brought to life. The after-birth came away easily. The patient soon became calm upon finding herself comfortable; the flow of milk was established without fever; the uterus contracted strongly. She then suffered from constipation to such a degree as to require the administration of an enema; this, however, was no unusual occurrence. Towards evening the enema had had no effect, and the patient became possessed with the idea that she was suffering from a paralysis of the abdomen, and that she must die. From this time one idea came upon the other, the face assumed a worn, anxious look, and she became restless and sleepless. Lactation continued as usual. In the course of twenty-four hours she passed a quantity of fæcal matter, with marked improvement in her symptoms, and the mind became quiet. In the course of three days she experienced a recurrence of her former condition; strange ideas took possession of the mind, and they again yielded to the same treatment. Two days afterwards came a third attack. This yielded to an emetic, followed by sulphate of quinine in two grain doses.

The patient then permanently recovered. Dr. Vogler imagines that these periodical attacks of mania were symptoms of masked intermittent fever.—*Pr. Ver. Ztg.*

THYROIDITIS IN A PATIENT WHOSE LARYNX WAS HYPERTROPHIED.

By Dr. RICKER.

A girl, aged 8, suffered for many years from enlargement of the larynx, with thickening and ossification of the thyroid cartilage. She could not easily swallow even fluids; and was obliged, as she raised the glass to her lips, to stretch out the neck and throw her head into a constrained position.

Jan. 16.—There ensued acute inflammation of the thyroid body and of the parts in front of the neck.

In spite of all treatment, she died on the 22nd. Upon examination, it was found that the muscular structure of the pharynx, in those situations compressed by the enlarged larynx, had entirely disappeared, and that the bag was reduced to a fibrous tube so narrow, that scarce any solid body could pass.—*Schmidt's Jahrbuch*, 1853.

FOREIGN CORRESPONDENCE.

A MEDICAL TRAVEL TO BURMAH, THROUGH RANGOON, PEGUE, AND MARTABAN.

The —— regiment, 1000 strong, and forty-six officers, embarked at —— for Burmah, Sept. 7, 1852. The transit by water occupied about four days, when they landed at Rangoon. During the passage several cases of dysentery, diarrhœa, intermittent fever, and one of cholera, occurred. The river where the vessels anchored, was hard, deep, and very dirty. The banks, except just where the town is built, were covered with most luxuriant vegetation and trees reaching down to the water's edge. At the town, the banks for about twenty or thirty yards from the edge of the water, consisted dark foul mud, which emitted a very offensive odour.

On landing there were bad roads, with every here and there on their sides large patches of putrid stagnant water, or fetid smelling marshes, full of rank grass.

The stockade, inside which the troops were quartered, being by far the best part of Rangoon, and about three quarters of a mile from the river, which flows on its south and west sides; while to the north is jungle, as far as the eye can reach, suddenly bounded by a range of hills to the eastward. At about three miles distance flows the Pegue river, which empties itself into the Rangoon river, below the town.

The barracks for the troops are lofty, comfortable, and well aired, built of teak-wood, and raised about three feet from the ground. Great praise is due to the Governor-General for the liberal manner in which he had them built, and also to General Godwin, for the efficient state in which he has kept the Commissariat, and the lively interest he has always taken in the health of the soldiers; while the heads of the medical departments were indefatigable in their endeavours for the bodily welfare of their fellow-men. Thus, all grades of the army were stimulated to exertion, and this, I think, accounts in a great measure for the comparatively healthy condition of the troops; but, of course, sickness must be everywhere present, and the atmospheric changes are so sudden, that I think they, in a great measure, account for almost all the disease occurring here; the nights being very cold and damp, rendering it necessary to be well covered up with blankets, while the heat during the day was so excessive, that "sun-strokes" were as common there as in any place on the globe,—the difference of temperature between four a.m. and two a.m. being often, or usually, 40°; and the dews in the night-time are so heavy, that clothing, which has been left uncovered, is not safe to wear in the morning before being well aired.

A large and unwholesome species of plantain is very common and very cheap; of this the soldiers freely buy and eat, and it produces great irritation through the whole extent of the viscera.

On entering a hospital, the first thing that excited the attention was the number of cases of boils and dysentery. The skin of some patients was covered with innumerable, small, and very painful boils; others being affected with a few large ones; and men, who had left the hospital recovered from boils, were frequently re-admitted with dysentery. Now we know, that the mucous membrane and the skin are, physiologically, only the internal and external skin, and I think there is a strong analogy between the two diseases.

Ulcers have also a great tendency to spread, and wounds to run into "hospital gangrene."

Intermittent fever is not common, but frequently fatal; remittent fever more rare, but equally dangerous. Small-pox, about December, January, or February, is usually virulent, especially among the Burmese; and cholera, at uncertain intervals, shows itself, but mostly among those who have eaten unwholesome food, slept out in the open air, slept on board ship, or near the river. Conjunctivitis is also common, and said by some to be difficult to cure; but this I attribute to the vigorous measures employed; for, where bleeding and nitrate of silver will not succeed, I have found no difficulty in relieving the cases by following out Tyrrell's simple mode of treatment. Having thus briefly mentioned the most prevalent forms of disease, I now give some of the symptoms and methods of treatment which which were found to succeed best. But first, for the prevention of disease, which is better than cure.

There have been great and, I conceive, most useless discussions (at least for practice, whatever they may do for theory) as to the use of flannel worn round the abdomen in hot climates. Many officers and men complained, more especially after first landing, of experiencing daily attacks of diarrhœa between the hours of 2 a.m. and 6 a.m. In nearly every case of this description, a flannel roller worn round the abdomen effected perfect relief. It prevented the cold acting on the intestines during the cold hours of the morning, as it otherwise would have done. Soldiers going on night-duty in their trowsers were constantly after a day or two admitted into hospital suffering from dysentery. Afterwards cloth trowsers were substituted, and the almost instantaneous diminution in the number of cases, indicated that the vicissitudes of temperature acting on the bowels are common causes of developing dysentery; but much caution is necessary as to diet; all fried articles ought to be eschewed, as the "ghee" is very bad. The question here arises, what is dysentery? Every one that I have met has his own separate theory, though I know not that theories have hitherto tended much to the cure of disease. Dr. James Johnson destroyed those of all that came before him with an unsparing hand. He then raised a new one, which, I think, in its turn, will not stand the test of experience. I will not try another one, but will stick to facts. In not half the cases that die of dysentery is the liver found diseased, but perforations and ulcers in the whole or parts of the large intestines are invariable, and often feculent matter is present in the cavity of the peritoneum, having escaped through one or more of the openings in the bowel. If dysentery resulted from vitiated bile passing into the intestines, and there setting up inflammation, the small intestine would suffer, but they are never the seat of disease in simple dysentery; but around the ileo-cœcal valve, the hepatic, splenic, and sigmoid flexures of the colon are the places where ulceration is most abundant. The first more especially so, and there perforation usually exists. It is obvious to the most superficial observer, that inflammation was from the first present in the mucous membrane of the large intestines, and this is often called into action by apparently trivial causes. A patient was admitted into the hospital who suffered from piles, and with slight irregularity of the bowels. He had some "Ward's paste" at night; the next morning a violent attack of dysentery supervened. Another patient came to the hospital complaining of headache, and was given a drachm of compound jalap powder; the next day he was attacked with dysentery.

All the symptoms of dysentery have been so repeatedly and so well described, that repetition would only waste time and space; but the partial and profuse sweats of various descriptions I consider as only sympathetic between the skin and mucous membrane of the bowels, as we often see in other diseases. The pulse is altered, as it almost always is when inflammation is present. But because disease of the liver being sometimes present, that gland is to be considered as a material agent in the cause of the disease, I venture to deny; and in most of those cases in which it is present, their histories give evidence of previous drunken habits or former disease of that organ. The drunkard should beware of this

climate; it has been the burial-ground of many, both officers and men.

Dysenteric cases may be separated into two large divisions, viz., those of a low typhoid type, and those of an inflammatory type. The minor sub-divisions may be almost infinite, and would be quite useless in the first division,—no two cases are perhaps alike; in the second, all the cases are very similar.

The first thing to do after becoming acquainted with the patient's history, is to make him lie on his back, and make a most thorough and minute examination of the whole surface of the abdomen; and this must be repeated regularly twice a-day, at least. Pain is complained of in the hypogastric region, while pressure causes agony where the inflammation is most intense. This will most usually be about the ilio-cœcal valve, or sigmoid flexure of the colon, though not uncommonly all across the transverse colon. The tormina and tenesmus are excruciating, but usually, by the proper remedies, relief is soon afforded. The first thing to be enjoined is the most perfect rest in the horizontal posture, with farinaceous diet, such as sago and arrowroot. If the patient is low, wine must be added. We now come to the treatment. As inflammation of a severe form is present, and which, if left unchecked, will almost invariably destroy life, it becomes necessary to combat it, and with no unsparing hand; for even if, without taking blood, the patient recover, it is mostly at the sacrifice of irreparable mischief to the bowels. But as in all cases, there is in that climate (except among a few recruits) an inability to lose blood from the arm, leeches are our recourse; and, fortunately, in Burmah they are very common and very good. They should be applied without loss of time in two places, and for two reasons,—around the anus, which affords almost immediate relief to the painful straining, by relieving the hæmorrhoidal vessels; and wherever pain is present on pressure among the bowels,—ten or twenty to either place, according to the patient's condition; afterwards hot fomentations over the surface of the abdomen, and at night a large bran poultice, as well as an anodyne enema. Large injections of warm water afford great relief. The internal treatment that appeared most successful in the first stage was this: Ten grains of calomel, with two of opium, immediately on admission. The calomel soothes the irritated surface of the intestinal canal, especially when combined with the opium, and paves the way for a dose of laxative medicine the next morning, in the form of castor-oil and laudanum. Almost invariably the patient is now very much improved, but the leeches must be continued as long as pain is felt on pressure, or straining is experienced on going to stool; and anodyne enemata nightly, with castor oil and laudanum, every alternate morning, are very serviceable. But the pulse has still to be kept under; inflammation is not yet subdued; and pills composed of 1½ gr. of blue pill, 1½ gr. of Dover's powder, and 1½ gr. of ipecacuanha, given every half hour, mostly have the desired effect. But, though this treatment will succeed in the majority of the inflammatory cases, in some most rapidly, in other cases the inflammation runs on, though this is usually from improper treatment at the first; then we get that form of excretion like beef washings. Here the danger is very considerable. Numerous remedies have been tried, but the success of all has been little; the best appears to be the nitrate of silver, given in doses of 1½ to 2 grs., or the nitro-muriatic acid; but free leeching must be continued. Blisters are quite inapplicable in the early stages of dysentery, though useful in the latter stages. Cases may be pointed out in numbers where they have effected an apparent cure, but numbers may also be noted, in which, from the pain of the blister on the abdomen, we were unable to discover if inflammation was present underneath in the bowels; the symptoms being thus masked, the patient's life has not unfrequently been sacrificed. Calomel and opium are almost safeguards. I have never, that I can call to my recollection, seen a patient under the influence of calomel die in dysentery; but the cases are much more tardy in their recovery, and the patient's strength is much exhausted.

Quinine in the treatment of this disease is as useless as the experiment is foolish. It never succeeds, unless combined with other remedies, which of themselves are enough without its presence. There is only one class of cases in which it can with safety be used in combination, viz., in some of the low typhoid cases, in which intermittent fever also shows itself at times; but as a remedy for dysentery on the march, it is only superfluous lumber. In the low forms of the disease, the same treatment has to be adopted, though not on so severe a scale; and in these cases chalk mixtures are serviceable, and frequent anodyne enemata, and wine given in the food.

If much flatulence is present, a most efficacious remedy is port wine ʒii., brandy ʒii., laudanum, ♏ xx. The relief this affords is very great.

This, in a rough manner, is what I have found the best treatment. I have seen tried, and have tried myself, numerous other methods, but I am convinced, if this were followed out, the average deaths would be most materially decreased.

Giving drastic purges every other morning, according to what I have seen, is irritating the bowels to more inflammation.

Nitrate of silver injections are, by some, much used, and with great success. I have not tried them to any extent.

I shall take you a visit to Pegu and Martaban,—the latter is the place for fever, and also for deaths. A company of European Artillery, 90 strong, were posted there, and, in three months, 18 were buried, and almost every one of the rest had been in and out of the hospital.

My work has been very heavy, never less than twelve hours a-day. I averaged about 40 cases a-day of dysentery and diarrhœa, and, out of those, the average of deaths was 1½ per month. The hospital usually contained from 90 to 120 cases; and deaths from all causes, 2 to 4 a month.

F. Day.

GENERAL CORRESPONDENCE

VACCINATION.—SUPPLY OF LYMPH.

[To the Editor of the Medical Times and Gazette.]

Sir,—As you have taken up the cause of vaccination so warmly, I trust you will pardon me for troubling you with a few remarks on the subject, for I think much might be done to improve the present system, so as to render vaccination universal on the easiest conditions. You will, I think, readily admit, that the first step to be taken is, that of devising some plan by which the Medical Profession should at all times be supplied with efficient vaccine lymph; because, if this main object be not gained, all legislation on the subject would be useless. In my humble opinion, every town numbering 10,000 inhabitants or more, ought to have a branch vaccine establishment carried on, independent of local influences, where vaccination should be performed two days in the week gratuitously. This would insure a sufficient number of patients to propagate good supplies of vaccine. The establishment should be conducted by a person of great experience and discernment; for, however good the vaccine in use may be, there will often occur cases to be avoided in the propagation of lymph, where a practised eye alone would observe the pustule to be irregular in its development, or defective in consequence of some debility of constitution. My own experience, after more than twelve years' close attention to this most important part of the subject convinces me, that, to insure activity in the vaccine lymph, the greatest care and the closest observation are necessary for selecting proper and healthy subjects for the supply of lymph. Every sensible farmer propagates his stock from none but the healthiest animals, and this rule should be strictly attended to in the production of vaccine. For example: if a given number of cottagers' children, plainly but sufficiently fed, be vaccinated from the same source, and at the same time, with the same number of town-bred children, and then examined at the expiration of the same interval afterwards, the robust constitutions of the former will be at once distinguishable by the better development of the disease; consequently, the former will be the best subjects for the selection of lymph. This I have had frequent opportunities of noticing. It is quite clear our system of vaccination is bad; but I do not think the increase of small-pox is so much attributable to the neglect of vaccination, as to the deteriorated vaccine in general use. A great deal of it, I believe, offers no protection against small-pox, and thousands of those vaccinated take the small-pox, and propagate it; and, if no scar happens to be found on the arm, (which is no positive evidence, for many have the small-pox severely without showing any marks,) they are added to the number of those who have neglected vaccination. I have re-vaccinated great numbers exhibiting no scar, but which I have nevertheless found to be perfectly protected. I am at a loss

to know how a correct estimate can be made between the births and the numbers unvaccinated in any of our populous towns. In this town of 60,000 inhabitants there are at least 60 medical men practising vaccination, and, I suppose, about that proportion in other towns of the same size. Now, in this town, I believe, not one-tenth of the medical men make periodical returns of the numbers they vaccinate, as only vaccinators appointed by the Guardians of the Poor are compelled to do so. I have myself vaccinated, during the last twelve years, on the average, 1000 annually, without making a return, so that I am led to believe an immense number (at least 50 per cent.) more are vaccinated than appears by the Government Statistics. I would suggest, when the birth of a child is registered, a notice should be given to the parent of the child of the necessity of vaccination before the age of four months, stating where vaccination is performed, and at what time, and a counterpart of the notice to be sent to the Vaccine Institution, for inquiry if necessary; and every person receiving vaccination gratuitously should be liable to a penalty if the child is not brought on the eighth day for examination, or a certificate of ill-health; those who pay would be insured the attendance of a medical man. All those who practise vaccination ought to be compelled to make a quarterly return of the numbers and names of their patients to the district establishment. The parish surgeons, and the medical officers of all charitable institutions, should be allowed fresh vaccine once a month, gratuitously, for the use of such institutions, from the establishment of the district. The conductor of each branch establishment should be required to send once a month, or oftener, a supply of vaccine in use at his establishment to the parent, or a central board, for the purpose of testing its quality, and supplying deficiencies, wherever they occur. This, I think, very important, as it is not improbable, in cases of emergency, (such as a small-pox epidemic,) when the demand for vaccine is sure to be great in any particular district; and but few patients can be supplied from the vesicles on the arms of those few already drained until the lymph is becoming useless, or else the medical men are compelled to have recourse to old and decomposed lymph, that being the only stock in hand. If some good system were adopted, I think compulsory measures might be mitigated; or, if penalties are to be imposed, they should be for negligence, and put in force only against such as avail themselves of gratuitous vaccination, but omit bringing their children for examination, and thus consequently depriving others of the advantages they have themselves received. If proper vaccinators were appointed to district establishments, with a sufficient remuneration to stimulate them to exertion, (honorary degrees, I believe, are conferred in other countries for meritorious services,) I have no doubt that all children, when reported by the Registrars, and entered in the books of the Vaccine Establishment, would be closely watched until vaccination was performed. Another advantage would be, that, in the event of small-pox occurring, they would have the means of immediately stopping its progress; as, with a sufficient stock of vaccine in hand, they could without delay vaccinate and re-vaccinate every person exposed to the infection, which private practitioners would be unable to do. What little knowledge I have on this subject has been gained by practical experience, and by my own unaided exertions. I have for more than twelve years kept up an abundant supply of vaccine by inoculating the cow with small-pox, and reproducing the vaccine vesicle on children with this lymph exclusively. I have vaccinated more than 12,000 persons, and nearly nine-tenths of that number gratuitously; a great proportion of them being the children of decent mechanics, unable to pay the usual fee, but unwilling to apply as paupers to the parish surgeons. From the time of Jenner, I understand, the medical men of Brighton have given great encouragement to vaccination, both at the public institutions and privately. Nor do I think these advantages have been neglected here to any great extent by the public; for, taking the amount of our population into consideration, very few deaths occur from small-pox, although, from our constant intercourse with other places, few towns are more exposed to the introduction of infectious diseases than that of Brighton. It is well known we have frequent visitations from the small-pox; and, indeed, only last year, it made its appearance in all parts of the town; however, vaccination and re-vaccination were most promptly and successfully carried out. On this occasion, I supplied the medical men of this town with 800 charges of vaccine in one month. I mention this to show the great advantage of having a good supply of vaccine on hand in order to meet such emergencies.

I shall leave it to the Medical Profession to settle the vexed question of the superiority of the old over the new supplies of vaccine lymph; for I commenced my vaccination career under very considerable doubts of the former. But I have now the most ample proofs of the efficiency of my new lymph; and, in short, I use no other. I shall be glad if I have thrown out any suggestion worthy of attention. I am, &c.

Brighton. JOHN BADCOCK.

THE COLLEGE EXAMINATIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—On reading the sensible letter of "A Medical Student," in your last Number, I remembered that, after passing my examination, I noted the heads of it in my "Dublin;" of these I subjoin a copy verbatim:—

"——, 1838.—Examination at the College by Mr. Keate: Femur, processes and muscles attached to it; ligaments of knee-joint. By Mr. Guthrie: Compression of the brain; strictures of the urethra, spasmodic and permanent.

"By Mr. S. Cooper: Thoracic duct; tibia; ligaments of ankle-joint, and its dislocations. By Mr. Andrews: The ribs, and their ligaments; the scapula; chemical composition of bone; rickets and mollities ossium; concussion of the brain."

At that time, the examination was said to occupy an hour; but it must be remembered, that part of that time was spent in tinkling a little bell every fifteen minutes, at which signal the game of "change-all" was played, each candidate being then conducted to a fresh table, to undergo another attack from a fresh battery, till the circle of the "four" was completed, so that, at the most, not more than forty-five or fifty minutes could have been spent in examination, in which short space the subjects above named were "gone into." I need not here dilate upon the depth of the questions, or the profundity of the answers, nor upon the opportunities afforded of collecting one's thoughts, and giving satisfactory utterance to them; but this I will say, that I never felt more disgusted that when I got my diploma, for I had worked hard, and without a "grinder," and had undergone a sharp ordeal a few days previously by one of the surgeons of the hospital to which I belonged, who told me I was "well up." Fancy, then, my chagrin, at having only to answer a few discursive questions on so many various subjects.

One word with Mr. Guthrie. I well remember that he bothered me dreadfully upon some catch-point, which, not having "ground," I was not prepared for. He seemed wondrously amused at my discomfiture, from which the bell released me, for it was his last question; and when I was going from him, he got up, laughed, and gave me a sharp blow on the back with his great fist, and said, "Keep up your spirits, young fellow, you'll do." I firmly believe he meant it all in fun, but he should remember that fun to him is death to a poor nervous candidate. I am, &c.

A SURGEON TO A LARGE PUBLIC CHARITY.

MEDICAL REFORM AND A STATE DIRECTORY.

[To the Editor of the Medical Times and Gazette.]

SIR,—I believe I speak the opinion of every honest man in saying, that, if there is one thing really wanted, it is *less* examinations, and *more* safety for the man after he is examined. We require a Government Registration and Directory, for a Directory without an authorised Parliamentary revision of diplomas must ever tend to attract to it the names of quacks and empirics, and men without diploma at all. But a legalised Directory would prove a direct check on pretenders, and the certainty of fine or imprisonment would at once make the Profession what it ought to be—respectable and respected.

Kingsland. I am, &c. M.D.

UNIVERSITY OF LONDON.

FIRST EXAMINATION FOR THE DEGREE OF BACHELOR OF MEDICINE.—1853.

EXAMINATION FOR HONOURS.

THURSDAY, August 11.—*Morning* 10 *to* 1.

ANATOMY AND PHYSIOLOGY.

Examiners—Mr. KIERNAN and Prof. SHARPEY.

1. Describe the parts, except the bones, situated in the lower half of the leg, in the order in which they appear in dissection. The dissection is to be limited below by the extremities of the tibia and fibula.

2. Describe the several parts which enter into the formation of the index finger, including the bones and joints. The characters presented by the integuments at different points, and the mode of attachment of the nail, are to be included in the description; but

the structure of these and other parts is to be given only so far as it can be seen with the aid of a common magnifying-glass.

THURSDAY, August 11.—*Afternoon, 3 to 6.*

ANATOMY AND PHYSIOLOGY.

Examiners—Mr. KIERNAN and Prof. SHARPEY.

The cartilages, and as much more of the upper six ribs as may be required, having been removed, along with the corresponding part of the sternum, describe, as they appear in dissection, the parts seated in the thorax, except the lungs, the pleura, the pericardium, and its contents. Describe also the parts, except bones and ligaments, which are exposed on dissecting off the costal pleura and the internal intercostal muscles. The description is to be limited above by the first rib, and below by the diaphragm, which is not to be included; the bronchi, pulmonary vessels, etc., are to be traced as far as the lungs, but not into their substance; and the pericardium is not to be opened, but may be removed in the progress of the dissection, to display the parts behind.

FRIDAY, August 12.—*Morning*, 10 *to* 1.

CHEMISTRY.

Examiner—Professor BRANDE.

1. Explain and illustrate the meaning of the term Specific Heat, and state the relation which appears to subsist between the specific heat and the atomic weight of bodies.

2. Describe the general and distinctive chemical characters of the Organic Alkaloids; enumerate those used in medicine, giving the modes of obtaining them and their compounds, and of ascertaining their purity.

3. The mineral called Iolite is a silicate of oxide of iron, magnesia, and alumina, and may be represented by the following formula:—

$$FeO, Si O^2 ; + 3 [MgO, SiO^2] + 2 [2Al^2 O^3, 3 SiO^2].$$

Give the details of its quantitative analysis.

4. Contrast human urine with that of the graminivorous quadrupeds, stating the composition and properties of each of their characteristic ingredients, and the means of obtaining them pure.

FRIDAY, August 12.—*Afternoon, 3 to 6.*

MATERIA MEDICA AND PHARMACEUTICAL CHEMISTRY.

Examiner—Dr. OWEN REES.

1. On what occasions and with what view does the London College direct protochloride of tin, metallic copper, metallic silver, and metallic gold, to be used in testing pharmaceutical preparations?

2. What chemical and physical changes occur in rye during the formation of the ergot?

3. Give the chemical history of salicina, stating the changes effected in it by its passage through the system, and by re-agents out of the body. Mention the various sources from which it may be obtained.

4. How would you detect narcotina in morphia, and cinchonia and quinidina in quina?

5. State shortly the chemical qualities of the undermentioned preparations, giving the specific gravity of each, and the pharmaceutical uses of Nos. 1, 2, 3, and 5. Describe the decomposition which takes place in the formation of No. 6:—

1. Ammoniæ liquor.
2. Spiritus rectificatus.
3. Acidum Aceticum.
4. Liquor Ammoniæ acetatis.
5. Æther.
6. Spiritus Ætheris Nitrici.

SATURDAY, August 13.—*Morning*, 10 *to* 1.

STRUCTURAL AND PHYSIOLOGICAL BOTANY.

Examiner—Rev. Professor HENSLOW.

1. Define the following terms:—Antitropus, Endocarpium, Foramen, Ligula, Plumosus, Syncarpus.

2. Explain the observed phenomena in "free" and "merismatic" cell formation.

3. Trace the introduction, elaboration, and general diffusion of sap in phanerogamous plants.

4. To what modifications is the "insertion" of the stamens subjected? Give an example of each.

5. Strictly confine your description of the plants before you (so far as they readily admit) to the following heads:—

(*a*) STEM. General Character.
(*b*) LEAVES. Arrangement.
(*c*) LEAVES. Stipulation.
(*d*) ——— Composition.
(*e*) ——— Form.
(*f*) ——— Margin and Incision.
(*g*) ——— Venation.
(*h*) INFLORESCENCE. General Character.
(*i*) ——— Bracteal appendages.
(*j*) FLOWER. Peculiarities of Calyx.
(*k*) ——— ——— Corolla.
(*l*) ——— ——— ——— Stamens. (noticing insertion.)
(*m*) ——— Disk.
(*n*) ——— Pistil (as to Ovary, Style, Stigma, Placentation.)
(*o*) FRUIT. General Character.
(*p*) ——— Dehiscence.
(*q*) ——— Placentation.
(*r*) ——— Arrangement of Embryo in Seed.
(*s*) Reasons for referring the specimen to a particular Order to which it may belong, or seem to approximate.
(*t*) The "Regions" and "Stations" usually affected by the species of that Order.

N.B. Reply briefly but sufficiently to the questions, in the order in which they are put, and do not lose time by digressions, for which no marks can be allowed.

MEDICAL NEWS.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Aug. 25, 1853:—

CREED, THOMAS, Ballinstona.
DAVIES, BENJAMIN, Froodvale, Carmarthen.
HUMPHRY, FREDERICK ABELL.

APPOINTMENTS.

MEDICAL.—ROYAL MATERNITY CHARITY.—Dr. W. S. Saunders has been appointed Surgeon-Accoucheur to this Institution.

NAVAL.—Assistant-Surgeon James N. Dick (1853), to the President, 50, at Chatham, for service on the Pacific station.

Memorandum.—Assistant-Surgeon Vesey Agmondisham Brown, of the 23rd Foot, has been permitted to resign his Commission.

MILITIA.—1st West Riding, Thomas Sayle, gentleman, to be Ensign and Assistant-Surgeon.

BEQUEST.

MANCHESTER INFIRMARY.—The late Mr. Salis Schwabe, of Manchester, has left 3000*l.* to this Institution, of which he was a generous patron during his life-time.

LIST OF MEDICAL OFFICERS who have been either killed or wounded, or who have died, or been compelled to leave Burmah since the commencement of the war:—INDIAN NAVY.—Dr. Costello, Dr. J. Welsh, Dr. Keys, S. C. to hills; Dr. Aldridge and Dr. Crawford, S. C. to Madras.——ROYAL NAVY.—Dr. Morgan, Dr. Woods, Dr. Llewellyn, S. C. to Europe.——BENGAL MARINE.—Dr. Lawson, died.—HER MAJESTY'S FIFTY-FIRST KING'S OWN LIGHT INFANTRY.—Dr. Anderson, Dr. Mickleham, S. C. to Europe.——STAFF.—Dr. Christenson, sick, to Europe.——MADRAS ARTILLERY.—Assistant-Surgeon Asten, S. C. to India; Dr. Smith, S. C. to Madras.——MADRAS ENGINEERS.—Dr. Williams, S. C. to hills.——MADRAS FUSILEERS.—Surgeon Goodall, S. C. to hills.——NINTH REGIMENT MADRAS NATIVE INFANTRY.—Dr. Williams, S. C. to hills.——THIRTY-FIFTH REGIMENT MADRAS NATIVE INFANTRY.—Surgeon Cox, S. C. to Madras.

ST. THOMAS'S HOSPITAL.—The Estate Committee of this hospital have recently let on lease for eighty years, a small portion of land belonging to their corporation, at the north-west corner of Finch-lane, of about 400 square yards, to the Australasian Company, at the enormous rent of 1,300*l.* a year, with the condition to build on it a substantial stone building. This letting, if calculated at its freehold value, at the present price of Consols, would represent the extraordinary sum of rather more than 520,000*l.* per acre.

M. RICORD.—An authorization appears in the *Moniteur* permitting M. Ricord to wear foreign orders of knighthood from Russia, Belgium, Spain, Sweden, and Sardinia.

THE NEW ACT ON CHARITABLE TRUSTS.—On Saturday, the Act for the better Administration of Charitable Trusts was issued. There are 68 sections in the Act, and it took effect on the 20th inst., when it received the Royal assent. The Board is to be

called "The Charity Commissioners for England and Wales." The work of the Board is defined by the ninth section, which enacts, that "it shall be lawful for the said Board from time to time, as they in their discretion may see fit, to examine and inquire into all or any charities in England and Wales, and the nature and objects, administration, management, and results thereof; and the value, condition, management, and application of the estates, funds, property, and income belonging thereto; and the said Board may cause examinations and inquiries in relation to the matters aforesaid to be made and prosecuted by their inspectors, acting together or separately, in such cases and at such times as the said Board may think fit, and all such Inspectors shall, from time to time, report their proceedings to the said Board." Powers are given to the Board to require accounts and statements of charities. The Inspectors may examine witnesses on oath, and persons refusing to render accounts, or to give evidence, are to be deemed to be guilty of a contempt of the Court of Chancery, and may be committed by such Court on summary application by the Commissioners to the same, and be ordered to pay the costs, if the Court shall so direct.

CHARING-CROSS HOSPITAL — MEDICAL SCHOOL, West Strand, London. Distribution of Prizes—1853.

GENERAL PROFICIENCY	THE GOVERNORS' SILVER MEDAL	Mr. T. Terry, Bath.
CHEMISTRY	Silver Medal and Certificate	Mr. J. Watts, Gerrard-st.
	Certificate	Mr. J. M. Heward.
MATERIA MEDICA	Silver Medal	Mr. R. Biggs, Bath.
	Certificate	Mr. E. J. Worth.
ANATOMY (Senior)	Silver Medal	Mr. T. Simpson, Bishop's Stfd.
	Certificate	Mr. G. P. Barton, Bartlow.
ANATOMY (Junior)	Bronze Medal	Mr. J. Watts.
	Certificate & Books	Mr. R. Biggs.
	Certificate & Book	Mr. J. M. Heward.
MIDWIFERY (Senior)	Silver Medal	Mr. G. P. Sleigh.
	Certificate	Mr. W. H. Diamond.
MIDWIFERY (Junior)	Bronze Medal	Mr. J. Watts.
	Certificate	Mr. R. Biggs.
PHYSIOLOGY (Senior)	Silver Medal	Mr. T. Simpson.
	Certificate	Mr. G. P. Barton.
PHYSIOLOGY (Junior)	Bronze Medal	Mr. Heward.
	Certificate	Mr. J. Watts.
MEDICINE (Senior)	Silver Medal	Mr. R. Fish, St. John's Wd.
	Certificate & Book	Mr. G. P. Barton.
MEDICINE (Junior)	Bronze Medal	Mr. T. Simpson.
	Certificate & Book	Mr. C. S. Watkins, Chandos-st.
SURGERY (Senior)	Silver Medal	Mr. G. P. Barton.
	Certificate	Mr. Simpson.
SURGERY (Junior)	Bronze Medal	Mr. J. Watts.
	Certificate	Mr. R. Biggs.
BOTANY	Silver Medal	Mr. J. Watts.
	Certificate	Mr. J. M. Heward.
MEDICAL JURISPRUDENCE	Silver Medal	Mr. A. M. Carr, London.
	Certificate	Mr. T. Simpson.

FEVER at New Orleans continued to rage with unabated, if not increased virulence, the number of deaths reaching over 200 daily. The city was in a state of great alarm, and numbers of the inhabitants were leaving to escape the pestilence. The total number of deaths for the week ending the 12th of August was 1518, of which 1277 were from yellow fever; on the 13th, the deaths were 174—153 from yellow fever.

COUP DE SOLEIL.—By the last advices, New York was suffering under a visitation of intense heat, more severe and fatal than that which prevailed throughout the greater portion of the Union some two months ago, the thermometer ranging from 90° to 102° F. Not only was business almost suspended owing to the excessive temperature, but above 200 persons had fallen victims to sun-stroke during three days. The victims were principally Irish.

THE CHOLERA.—STETTIN, August 23.—Last week, the cholera appeared to be on the increase,—170 patients died. Within these few days its ravages are again decreasing, and there appears now no ground for further serious apprehension. KONIGSBERG, August 21.—An official report from physicians to the municipal authorities states that some cases of cholera have appeared in this town. COPENHAGEN, August 22.—Yesterday and to-day the new cases of cholera amount to 28; the deaths to 14. Since the breaking out of the epidemic, 7216 persons have been seized by it, of whom 3902 have died. STOCKHOLM, August 19.—There can be no longer any doubt, that, after an interval of nineteen years, we are visited by the cholera. Great preparations are making to meet this visitation. The King has been to inspect the various cholera hospitals. It is hoped that the disease may be less virulent than in 1834. TURIN, August 17.—Some journals announce the breaking out of cases of cholera at Racconigi. The Government has received no account of any such event; but its organs do not positively contradict the report.

THE SHOCK OF AN EARTHQUAKE was experienced at Oporto Grande on the 11th.

PHYSICAL DETERIORATION OF THE PRUSSIANS.—The Berlin Correspondent of the *Times*, observing upon the tenacity with which the Germans retain in every ethnological work the description of their nation as being warlike (*Kriegerisch*), an idea which may, perhaps, be found in the pages of Tacitus or Suetonius, says that the tradition has long since ceased to be true. "The Germans are very excellent, worthy people, but are no more warlike than any other people, and less so than most. In the muster which was made this year in Berlin, as every year, of the youths of 19 years of age, bound to serve their appointed time in the ranks, out of 1111 young men liable, only 723 were found capable or fit for service. This is not confined to the capital and its enervating habits; the military authorities show that it is still worse in the provinces, and particularly in parts of Pomerania. In Halle, out of 818 who submitted themselves this month as being of the requisite age, only 427 were eligible. This is attributed to their having been born in the cholera years 1832-3, and to many having been deprived of all parental care from their earliest youth. (The same result has lately been noticed at Stockholm, of there being an insufficient number of recruits to be obtained, arising from the impoverished *physique* of the present generation. In Sweden it is attributed to the immoderate consumption of potatoes and distilled liquors!)"

OZONE.—Dr. John Drew, one of the Council of the British Meteorological Society, has been commissioned, by Dr. Schönbein, to introduce to English observers his simple method of ascertaining the amount of ozone in the atmosphere. That gentleman's ozonometer is in general use throughout Germany, and he is naturally anxious that corresponding observations should be taken in this country.

PRACTISING CHEMISTS AND DRUGGISTS.—DEATH.—On Thursday, an inquest was held at Manchester on the body of Charles Hey, of Hulme, a labourer. On the Friday before, he went home unwell, and, as he was very costive, his wife procured a pennyworth of purging pills, eight in number, of Mr. Ker, druggist, of Moss-lane. No questions were asked by the druggist as to whom they were for, and what kind of complaint they were to remedy; nor did he say how many would be a dose, or when they were to be most properly taken. The deceased took four at bedtime, and next morning the rest, and at half-past ten at night was seized with violent purging, which kept him up the whole of the night. Early on Sunday, he went to work, and continued until five in the evening, when he returned home, saying, that he had been very sick and purged the whole day. He died on Tuesday. Mr. Pettinger, the surgeon, stated, that his disease had evidently been of some standing, and was enough to cause death, but he conceived, that that event was undoubtedly accelerated by the use of the drastic medicine he appeared to have taken while ill. The jury returned a verdict of "Died from natural causes, accelerated by the use of drastic medicines."

MORTALITY NOTABILIA.—The deaths of 1021 persons were registered during the last week (August 21-7) in London. The number is below the average of the corresponding week in previous years, even if we strike out of the calculation the week of 1849, in which 2796 persons died from epidemic cholera and other causes. Of the 514 males and 507 females, 517 were children under 15 years of age, 316 were adults of 15 and under 60 years of age, 187 were old people; 2 of the men and 19 of the women had attained the ages of 85, 90, and upwards.

Cholera.—The causes of death present one feature of much interest; 137 of the deaths were referred to diarrhœa, 18 to cholera. Five of the persons who died of cholera were adults, and the shortness of life after attack, 7 hours, 9 hours, and 13 hours in 3 cases, with the other symptoms, appears to have left no doubt on the minds of the medical men in attendance that they had before them cases of epidemic cholera. In the corresponding weeks of 1851 and 1852 the deaths from cholera were 28 and 15, and the deaths from diarrhœa were 174 and 125. But it was shown at that time, from the analogy of the previous epidemics and the general character of the cases, that the disease was not likely then to assume the Asiatic form. Now, our hopes that England may escape are less sanguine; but it is right to mention, that, in the last weeks of August and the first weeks of September, the cholera of the common form is virulent, and sometimes simulates the Asiatic cholera, which has besides never prevailed here to any extent until it has been some months in the country. The following are the details of some of the cases of cholera:—At 9, St. Oswald's-place, Lambeth, on the 20th August, a labourer, aged 41 years, "cholera spasmodica (9 hours)." The informant stated that they have no drainage beyond that into a cesspool, and that in rainy weather there is a most offensive effluvium. The medical man informed them that it was a decided case of Asiatic cholera. In the sub-district of St. John, St. George-in-the-East, at 32, Broad-street, on the 22nd August, a ballast-heaver, aged 46 years, "cholera (7 hours)." The Registrar says:—I am informed by the medical attendant that this was "a very bad case, indeed, of undoubted cholera;" that he saw the deceased at twelve o'clock, who was then in collapse, had severe cramps and no pulse; was scarcely conscious. He could not refer the case to any cause, the house being tolerably free from bad smells, and the man of temperate habits. The patient "had diarrhœa early in the morning, which he did not heed." In the Hackney-road sub-district, at 4, Wellington-row, on the 22nd of August, a servant, aged 15 years, "natural death from

exhaustion from purging caused by effluvia of water from a cesspool." (Inquest.) Mr. Murray, the Registrar, adds, that "the deceased, a servant to Mr. Gough, of 31, Princes-square, St. George's-in-the-East, having previously had good health, was suddenly taken ill with diarrhœa, about four o'clock on Sunday afternoon, and removed the same evening to her mother's, 4, Wellington-row, Bethnal-green, where she died about five o'clock the following morning. The medical attendant having described the case as one of Asiatic cholera, an inquest was held, which resulted in the verdict copied above; and, through the favour of Mr. Baker, the Coroner, I am enabled to add the remarks appended by the jury to their verdict, 'that the death was probably caused by the fetid and noxious effluvia arising from the foul water daily obliged to be pumped from a cesspool in Mr. Gough's house, and which was poured into the surface channel of the street, and stated to be of a most nauseous and offensive character, there appearing to be no other drainage or sewerage in the square.'"

Diarrhœa, Typhus, and Nuisance.—In Haggerstone, West sub-district, at 135, Kingsland-road, on the 24th August, the daughter of a printer, aged 14 years, died of "diarrhœa, typhoid fever, exhaustion (7 days)." Mr. Bowring, the Deputy-Registrar, adds, that—"Adjoining this house there are heaps of raw bones belonging to a marine store-dealer, carrying on a very large business not at all suitable to the neighbourhood. The house is very much confined at the back, but the stench of the bones is very noxious, and they sometimes lie there so long that the steam rises from them as from a dung-heap. This is the second death in the house from the same cause." In the sub-district of Putney, at Lime-grove, on the 33rd August, a footman, aged 20 years, died of "typhus fever." Mr. Miller, the Registrar, observes, that—"There is a very foul and offensive ditch belonging to the Railway Company, which is close to where this death took place. It has frequently been complained of by the inhabitants around."

Births.—Last week the births of 803 boys and 683 girls, in all 1486 children, were registered in London. In the eight corresponding weeks of the years 1845-52 the average number was 1352.

DEATHS *in the Metropolis for the week ending Saturday, August* 27, 1853.

Causes of Death.	Aug. 27. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	518	315	187	1021	11232
Specified Causes	510	311	184	1006	11203
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	216	39	22	277	4676
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	25	24	55	422
3. Tubercular Diseases	60	120	8	189	1689
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	51	32	22	105	1105
5. Diseases of the Heart and Blood-vessels	2	20	12	34	289
6. Diseases of the Lungs and of the other Organs of Respiration ...	46	22	31	99	745
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	27	11	60	684
8. Diseases of the Kidneys, etc. ...	2	7	9	18	89
9. Childbirth, Diseases of the Uterus ...	...	9	1	10	106
10. Rheumatism, Diseases of the Bones, Joints, etc.	1	3	1	5	64
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	...	1	7
12. Malformations	6	...	...	6	18
13. Premature Birth and Debility ...	31	...	...	31	271
14. Atrophy	45	...	4	49	276
15. Age	...	...	38	38	399
16. Sudden	1	...	...	1	66
17. Violence, Privation, Cold, and Intemperance	21	6	1	28	297
Causes not Specified	8	4	3	15	29

BOOK RECEIVED.

Bradshaw's Illustrated Hand-Book for Travellers in Belgium, on the Rhine, and through Portions of Rhenish Prussia. London. 1853. [A very useful companion to our medical friends, in an autumn holiday.]

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your report of the cholera case, removed out of Princes-square East, you mention that Mr. Robert Scott, a Surgeon, of the New road, attended. The "British Medical Directory" has no such name and address. The "London and Provincial" has, in the Black List, a Robert Scott, of Solomon terrace, New-road. I am &c. M. B. G.

August 29, 1853.

J. W. D.—Quain and Sharpey's "Anatomy," or Wilson's "Manual;" Carpenter's "Human Physiology," or Todd and Bowman on "Physiology;" Brande's or Fownes's "Chemistry;" Pereira's "Materia Medica," or Forbes's Royle's "Manual;" Henslow's "Botany;" and Lindley's "Vegetable Kingdom." In recommending these works, we would advise our Correspondent not to trust entirely to books, but to study his anatomy diligently in the dissecting-room, his chemistry in the laboratory, and his botany in summer in the country. It would be advisable, for some reasons, to enter to hospital practice and clinical lectures as early as possible, but the student cannot expect to derive much advantage from them until he has mastered the principal facts in anatomy, physiology, and chemistry.

Mr. Wilde's Paper on "The Recent Epidemic of Infantile Leucorrhœa," shall appear next week.

Mr. Garlike, of Rickmansworth, has sent us a paper on the Treatment of Enlarged Tonsils and Elongated Uvula, by Excision and by Local Applications, from which our space only allows us to make the following extracts:—"I must remark that the locality in which I have been practising for the last thirteen years is most friendly to the development of throat disease, and has given me ample opportunity of adopting every variety of treatment from which I could hope to procure any relief to my patient, and I must admit the fact, that in those cases where the tonsils have become excessively enlarged, and their surfaces describe a honey-comb and reticulated appearance, I have never succeeded in effecting a cure, otherwise than by removing the whole of that portion which protruded beyond the arches of the palate. I have tried caustic and iodine with stoic perseverance, combined with every appropriate constitutional treatment, without any permanent good arising; true, the painting the throat with caustic has in some instances relieved for a time, and the ferruginous forms of medicine, with their associates, bark, nitric acid, and quinine, have done their accustomed good in many cases, and this more particularly where the type of constitution would have dictated such treatment independent of the throat symptoms, or where the throat symptoms were beginning to reflect secondarily on the constitution; but in a short time they all returned, or I heard of their seeking aid from other sources; in such cases then I have unhesitatingly excised a portion of the hypertrophied mass—I believe the whole gland is seldom or never removed by an operation—and with the best results hitherto. In many cases of enlargement of the tonsils where my opinion has been consulted, I have found the patient not only complaining of sore throat with difficulty of deglutition and respiration, but deafness has also constituted a leading feature; indeed, so far as my own observation serves me, there is a certain vacancy of countenance constantly met with, the head being thrust forward and the mouth partially open to admit of more ready respiration through it, as compensation for the inability to breathe through the nose, which leads instantly to the inquiry if the tonsils are enlarged. In many instances where one tonsil only has been enlarged, I have found the person deaf on that side only. Since writing the above I have seen an interesting case of this kind. When conversing with a lady a few mornings since respecting her power of hearing in the left ear when some active symptoms were present, she immediately directed my attention to a young lady in the room, whom she represented as complaining grievously at different periods of deafness. I instantly examined the throat, and found an enlarged tonsil on the left side, and the remains of an enlarged gland on the right, the upper portion having sloughed away and left a large fissure, the base above completely through it. The account she gave of herself was, that she had constantly suffered from sore throat, which had been treated with nitrate of silver, without affording any permanent benefit; the right side was always the worst, and she had very imperfect hearing on this side until lately, when a very severe attack of inflammation, on which occasion the slough alluded to took place, restored to her much more perfect hearing on that side than on the left, where the tonsil remains excessively enlarged."

A Staff Surgeon, 2nd class.—The letter shall be published with one or two verbal alterations. A charge of *suppressing* data is one which ought not to be made lightly by one professional man against another, still less by an officer against one in the same service.

Mr. Nourse's paper on the Climate of Egypt shall appear as soon as our space will permit.

W. M. B.—The letter on Private Lunatic Asylums shall appear next week.

Ignotus.—First try the remedy. If it succeed, it will be time enough to talk of reward.

Mr. Shinkwin's cases shall appear very shortly.

Mr. Mitchell.—A private reply has been sent.

We have been requested to state, that Mr. Gray's Prize Essay on the Spleen is not to be published at the expense of the Council who awarded the prize.

COMMUNICATIONS have been received from—

Dr. Cotton; Dr. Montgomery Johns, Baltimore; Dr. Popham, Cork; Mr. Mitchell, Hull; W. M. B.; Dr. L. Heidelberg; J. Birkeit, Esq.; Dr. G. Johnson.

ORIGINAL LECTURES.

CLINICAL LECTURES

ON THE

RELATION OF RENAL DISORDERS TO DISORDERS OF THE STOMACH, AND TO OTHER ACUTE AND CHRONIC DISEASES.

By H. BENCE JONES, M.D., F.R.S.
Physician to St. George's Hospital.

Lecture I.

ON DISORDERS OF THE RENAL SECRETION IN CHOLERA, IN ACUTE RHEUMATIC INFLAMMATION OF THE KIDNEY, AND IN SCARLET FEVER.

Gentlemen,—It is my intention, in this annual course of Clinical Lectures, to change the plan which I have usually adopted; and instead of taking as my subject the most acute cases in the hospital, I shall bring before you the most interesting cases which I have noted of the connexion of renal disorders with other acute and chronic diseases. I intend not only to dwell on the disorders of the stomach which affect the urine, but I wish to take as many other acute and chronic diseases as my time will allow, and to show you their effects on the renal secretion, and the practical conclusions which may be drawn from this knowledge.

I might thus bring before you every disease to which the human body is subject; but though I should gain in completeness, I should exhaust your interest, and I shall, therefore, only dwell on the connexions and relations of those diseases which, at the present time, appear to me to possess most practical interest.

Thus, in acute disease, I shall occupy your attention with the connexion of the renal secretion with cholera, rheumatic and scarlet fever, delirium tremens, and injury of the spinal cord.

In chronic disease, I shall bring before you Bright's disease, diabetes, indigestion and its results, such as renal calculi, irritable bladder, diuresis, retention and suppression of urine. Lastly, scrofulous and malignant disease of the kidney and bladder, and their effect on the urine will be mentioned.

I shall, as far as possible, bring my cases before you as if they were at present under my care in the hospital; and, to save your time, and to avoid repetition, I shall refer you, on most chemical points, to my lectures on animal chemistry, in its relation to stomach and renal disorders.

The usual effect of acute disease, is to diminish the quantity, and to increase the colour of the urine; but a remarkable exception to this is observable in cholera, one of the most acute diseases. The colour of the urine in cholera was generally remarkably pale, even when not much more than an ounce was secreted in twelve hours.

A boy, 12 years of age, was admitted at midnight, July 15, 1849, under my care. He was in the cold stage. He had been attacked with cholera at least twenty-four hours previously. No urine was passed until eleven hours after his admission; it was very scanty, not much above an ounce; pale straw-coloured; contained a considerable quantity of albumen, with many fibrinous casts of the tubes.

The following day the urine became plentiful; it was very light coloured—specific gravity, 1013; contained albumen, and very dark-coloured fibrinous casts; also it gave a deposit of uric acid crystals. On the 19th, the water was still pale; very slightly albuminous; specific gravity, 1010. On the 21st, no albumen was found; the specific gravity was 1008.

The *post-mortem* examinations of the kidneys of those who died of cholera, whether in the cold stage or after reaction, showed that congestion of the kidneys, to a greater or less degree, was almost always present. Although this congestion gave rise to the albumen in the urine, and to the low specific gravity of the secretion, yet, in the most severe cases, there was another cause in action which produced a still greater effect on the function of the kidneys. This was the immense drain of fluid from the bowels whereby the total suppression of the urine was produced. A labourer, aged 35, was admitted July 13, at a quarter past nine, a.m. When going to work at six a.m., he was seized with vomiting and purging. At ten a.m., he became insensible, and he died at three a.m. on the following morning. For at least six hours he was kept alive by pumping, from time to time, hot brandy and water into the stomach. The watery motions saturated the bedding, and before it was noticed, they ran in a stream down the floor of the ward. No urine whatever was passed, and there was no urine in the bladder after death.

The state of the circulation through the kidney appears to me sufficient to account for the different actions of the kidney in these two classes of cases; for the above are types of other cases. I cannot admit, that a hypothetical cholera poison, striving to pass out by the kidney, causes the albuminous urine, because it appears to me, that passive congestion alone, dependent on the state of the circulation, is a far simpler explanation. Moreover, in other diseases, in which we admit that a poison probably exists in the blood, and passes off by the kidneys, albuminous urine very seldom occurs. Let me take rheumatic fever, or acute gout. In these diseases, unless the kidneys are the seat of active congestion, or of previous disease, no albumen is ever met with. No diseases are more frequent or more severe in our hospital. The urine may present all the marks of the most acute disorder; but how rarely will you meet with albumen in the urine in acute rheumatic fever, or in intense gout. I am not speaking now of those more chronic cases of rheumatism and gout, accompanied, or sometimes caused, by a state of kidney which produces albumen in the urine; but I am impressing on you the rarity of albumen in the urine as a *consequence* of these acute diseases in which a poison probably exists in the blood. The following case is almost the only example of rheumatic fever and albuminous urine which I can give you:—

A railway porter, aged 29, was admitted March 4, 1843, in the third week of rheumatic fever. The knees, ankles, wrists, and shoulders were affected. He had also severe pain across the loins. The urine was scanty, of a very deep red colour, and contained an excess of urea, but no albumen or blood-globules.

March 6.—The pain in the loins was worse than ever; it was on both sides of the spine. The urine contained albumen and blood-globules, was slightly acid to test-paper. The perspiration was highly acid and very profuse.

11th.—There was acute pain on pressing the region of the right kidney, where the pain was worse than before. The pain was better on the left side. Urine not so deep-coloured, but contained a multitude of pus-globules, and some albumen.

14th.—No tenderness on either side. Urine was alkaline, and contained some ropy mucus, and a little albumen.

17th.—Urine just passed neutral, with distinct pus-globules. No pain.

He went out at the end of the month, without any pain, but passing still some pus. On the 1st of May I still found a little pus in the urine.

The contrast between rheumatic fever and scarlet fever, in the effect on the kidneys, is too striking to be overlooked. In scarlet fever, the affection of the kidneys has been considered, by the late Dr. Miller, (a) to be a necessary part of the disease; and Dr. Begbie has stated, (b) that no cases of scarlet fever occur without some albumen being present at some time in the course of the complaint. I cannot agree fully to the fact, or to the theory. Albumen I have not found in every case, although it occasionally may be found, for a very short time, in the urine, without being followed by any bad consequences, and without the slightest appearance of any desquamation of the epithelium of the mucous membrane of the pelvis or tubes.

Whenever albumen is found in the urine after scarlet

(a) "The Pathology of the Kidney in Scarlatina." By James Miller, M.D. 1850.

(b) Dr. J. W. Begbie, *Monthly Journal of Medical Science*. Oct., 1852. "On Temporary Albuminuria."

fever, the greatest attention of the medical man is requisite to detect and to treat the commencement of any inflammation of the serous membranes.

A young man, aged 20, was admitted, June 20, 1843, on the 4th day of slight scarlet fever; on the 18th day he was apparently convalescent, but I detected some albumen in the urine. On the 23rd day, I found still more albumen in the urine, with desquamation of the epithelium. He was perfectly free from all œdema of the face or legs, and made no complaint.

25th.—Some pain in the left side. The following day it was increased, with dulness, and œgophony, and œgophonic breathing, at the base of the left lung.

On the 32nd day, the effusion into the pleura was much diminished by treatment, but, at the apex of the heart, a distinct rubbing to-and-fro sound with each pulsation was heard. This was loudest when he held his breath.

37th day.—Still pleurisy, and pericarditis; also some rusty adhesive expectoration; urine still albuminous. From this time he gradually improved, and he went out on the 9th of August, when the urine contained no albumen.

If, then, you find albumen in the urine, watch anxiously to detect and treat any inflammation which may arise; but the inflammation may come on before any albumen appears in the urine. A boy, about 14 years of age, was admitted on the second week of scarlet fever; no albumen was detectable in the urine. After a few days, he complained of most severe dyspnœa and pain in the region of the heart. Still no albumen could be found in the urine, and there was no friction of the pericardium. The following day the friction was most distinct, but no albumen was present in the urine. The next day a minute trace of albumen was found; this afterwards increased, but was never considerable. The pericarditis, which rapidly went on to extreme effusion of fluid, yielded to treatment, and, when he left the hospital, no albumen was present in the urine.

The quantity of albumen in the urine, after scarlet fever, is no test of the dangerous symptoms which may occur. Thus, I have found very little albumen in the urine, and yet the most intense symptoms have ensued.

On the 3rd Dec., 1848, I saw a school-boy, aged 19, who had been sick the night previous. I found soreness of the throat, and a scarlet eruption on the chest. The scarlet fever did well; he had no bad symptoms. On the 20th day he had some enlargement of the glands of the neck externally; they were tender to the touch. I did not examine the urine. On the 24th day he was convalescent. During the following week he had not much appetite, and he had a little pain sometimes in his head. I was not asked to see him until the 31st day; he went to bed early; the bowels had acted freely with medicine. About half-past 11 p.m., an unusual noise was heard in his room; it was found that he had vomited, and was not himself. I saw him soon after 1 a.m., the 32nd day; he was then vomiting. He did not complain of any pain in his head; I could get no urine, but nothing unusual had been observed in it. In a few minutes he had a most violent epileptic fit; he was cupped to six ounces; he complained much of the pain of the cupping, and while the glasses were on, he had another fit. Every hour, for five successive hours, a fit recurred. The pulse becoming hard previous to the convulsions, but soft and large afterwards, when perspiration came on. At seven o'clock in the morning he had had seven fits; he was bled to ten ounces. He was quieter for a time. At ten, the fits still recurred every hour, and were very strong. He was again bled to ten ounces, and was decidedly better for a time. From twelve to two, the fits became much more frequent, scarcely even remitting. There was marked opisthotonos, and the convulsions were chiefly on the right side. The pulse remained of good strength. He had much perspiration, and he passed some water in the bed. At three he became quieter, and at five in the evening the fits ceased. At half-past nine he was quiet, but unconscious.

At 9 a.m., 33rd day, he was sensible. He passed some water for me; it contained a few blood-globules; some coarse and some fine cylinders; much free uric acid; albumen very distinct, but not in large quantity. Specific gravity of urine, 1019·8; 1000 grs. of urine contained 1 gr. of uric acid.

On the 41st day, the urine gave the slightest precipitate with nitric acid and heat. The albumen was scarcely perceptible. There were still some very fine fibrinous casts to be found. The specific gravity of the urine was 1023·5; it was alkaline, from fixed alkali. He had no bad symptoms, but slowly and gradually regained his strength of mind and body, and recovered completely.

I have seen the same symptoms and the same result, when the urine, on the addition of nitric acid, has become perfectly solid, from the quantity of albumen which it contained; and hence you must not consider that the quantity of albumen in the urine, after scarlet fever, is any certain index to the severity or duration of the symptoms which may occur.

A very important question connected with this subject, is, how long the albumen may remain in the urine after scarlet fever. Another is, on *post-mortem* examination of such cases, in what state is the kidney found? I have, as yet, only this answer to give to the first question,—that I have seen the albumen continue in the urine for many months without any general symptoms, and that, when these do arise, they may, like Bright's disease, be acute or very chronic; and, to the second, that Dr. Miller told me, that, on the *post-mortem* examination of the kidneys of those who died after scarlet fever, he has seen both the enlarged and the contracted cortical structure characteristic of different stages of Bright's disease. If you have the opportunity of seeing much of scarlet fever, you may advance our knowledge by carefully watching the progress of these cases of dropsy, when the disease is in its most chronic form. The careful examination of the microscopical appearances in the urine during life, and of the state of the kidney after death, can scarcely fail to give new and important results.

By such observations, you may also determine whether desquamation of the renal tubes necessarily accompanies the albumen in the urine after scarlet fever; or whether, as I have myself seen, the albumen may frequently appear without any appearance of desquamation in the urine.

The question of the passage of the scarlet-fever poison out of the system, through the kidney, has still to be proved. In a future lecture I may return to this point. The time obliges me now to point out the general principles which must guide you in the treatment of this state of kidney after scarlet fever; the general treatment differs, however, in no respect from that of Bright's disease. Except that recovery is more frequent, and that the symptoms yield more easily to treatment, I know of no difference between this disease and Bright's disease. Mercurials are as dangerous in the dropsy after scarlet fever as in Bright's disease. Diuretics are as much to be avoided; sudorifics and aperients are as beneficial. In extreme cases of both diseases, the benefit of elaterium might be illustrated by many examples, if my time admitted me to read them. In both diseases the blood becomes impure, from the accumulation of the products of the organic changes in the body. I might sum up the objects to be attained, if possible, in these few words, namely, relieve congestion, and purify the blood.

In conclusion, this appearance of albumen in the urine in cholera is caused by passive congestion of the kidney, while the albumen, in rheumatic fever, is the result of active congestion. The albumen after scarlet fever may also, at least as regards its treatment, be considered as produced by a state of more or less active congestion of the kidney. The relation of this to Bright's disease will be the subject of a future lecture.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. VI.

REPORTS UPON THE EXHAUSTING APPARATUS OF DR. JUNOD.

By Dr. MACLEAN, Dr. SCOTT, Deputy Inspector-General of Army Hospitals; Drs. DARTNELL and FORREST, Staff-Surgeons.

[We have already given a description of this apparatus. It is a sort of large cupping-glass, fitting over the leg and thigh. When in action, a large proportion of the blood in the body is drawn to the lower extremity. The following reports upon its application are conflicting, but are valuable as the results of careful experiments. We have seen much more favourable notices of its effects from civil practitioners. M. Junod has published a small work on his

instrument. It is published by Baillière. The annexed woodcut sufficiently explains its operation.]

I have to report that this apparatus has been tried in a variety of cases in this hospital, with the view of testing its power as a therapeutic agent; and have to state that the beneficial results have been very partial, and in many instances no effect of a favourable character was obtained. I have also to observe, that the application of the instrument occupies much time, and the pain it produces operates greatly against its frequent use. I have also to remark, that the generality of Medical Officers appear to have very little faith in its power as a therapeutic agent, and dislike having recourse to it, as they consider it as so much time lost.

The diseases experimented upon were 6 cases of ophthalmia, of which 3 were acute and 3 chronic; 2 cases of pneumonia, 1 of bronchitis, and 1 of acute rheumatism. In the acute cases of ophthalmia, the patients generally expressed themselves somewhat better, and the organ became less congested and the pupils dilated; but all the unfavourable symptoms returned in a few hours. In those of a chronic character, little or no effect was produced in the affected organ. In the rheumatic case no beneficial results were obtained. The cases of bronchitis and pneumonia having partially benefited by the instrument, they are herein detailed.

Private Thomas M'Grath, 18th Regiment, aged 24, admitted 14th June; of six weeks' service; healthy-looking, and of a full habit. States that he contracted a cold on his passage from Cork a week previous to his admission, since which time he had gradually got worse. His breathing is difficult and hurried, with frequent cough. Pulse 120, full. On applying the stethoscope, crepitating râles are heard over either lung, but especially over the apex of right lung, and he complained of pain shooting from the right towards the left side. Expectoration scanty; tongue foul; skin moist. Dr. Junod's apparatus was applied, and continued for forty minutes, the air being admitted at intervals of five minutes. The symptoms manifested were great pain and uneasiness of the booted limb. After it had been on ten minutes, the pulse fell from 120 to 100, and remained so until the boot was persevered in for ten minutes longer, when the pulse fell to 96, and the patient expressed himself much relieved in his breathing, and also looked more cheerful. This improvement continued for some time; and he likewise said the pain in the side was much less. In half an hour from the time the apparatus was applied, a copious perspiration broke out over the face and chest, and the patient feeling altogether considerably better, the boot was removed. I remarked that the interior of the boot was quite moist; the muscles of the leg were quite rigid, but not much discoloured. The patient was made comfortable in bed, but no medicine administered. Early the following morning his symptoms had all returned, and the boot was again resorted to, and persevered in for upwards of thirty-five minutes. At first the pulse was sensibly affected, and fell from 120 to 112, but afterwards rose to its former standard. The pupils became much dilated, and he complained greatly of the pain he was suffering from the boot; and he appeared to be much weaker; and his breathing was so bad, and all the other symptoms so much worse, that I was fearful to place further reliance on the boot, and, therefore, had recourse to the usual mode of treatment, viz., a large blister was applied to the affected side, and an expectorant mixture given every third hour, with free purgation. He made a slow recovery, and was not discharged the hospital till the 14th of July ultimo.

The case of pneumonia occurred in a recruit, belonging to the 53rd Regiment. Peter James Regan, of full habit, and generally healthy appearance, was admitted, June 26, with pneumonia of right lung. He complained of acute pain of the right side, with some difficulty of breathing, and acute pain when he coughed. Expectoration viscid, and very scanty. On applying the stethoscope, a fine crepitus was audible over the anterior and inferior portion of the right lung, where the pain was chiefly felt. Slight dullness on percussion; pulse 140, and full; Skin hot; bowels regular; countenance anxious; tongue furred.

The boot was applied for twenty minutes, and, with the exception of the usual painful sensations on the booted limb, and slight perspiration over the body and chest, no improvement was observed in the symptoms; and the case being of a very acute type, I did not feel justified in continuing the application of the apparatus. The patient was, therefore, treated with free doses of calomel and antimony, and counter-irritation to the affected side, under which he gradually progressed, and was discharged to duty, on the 6th of July, 1853.

The above cases I selected as being specially favourable for trial; and cannot help expressing my disappointment at the results obtained.

A. Maclean, M.D.,
Surgeon Provisional Battalion.

Garrison Hospital, August 6, 1853.

We, the undersigned Medical officers of the army, have made and witnessed several trials of Dr. Junod's apparatus in the General Military Hospital Fort Pitt, and in the Garrison Hospital, Chatham, as well as on some private patients; and, although most of the cases in which it was used were cases of a chronic nature, and not fairly suited to test the merit of the instrument as a therapeutic agent, we have been well satisfied with the general result, and feel convinced, that it is calculated, when properly persevered in, and used with discretion and judgment, to aid powerfully the surgeon, as well as the physician materially, in the cure of diseases, especially of those of an acute and inflammatory character, and attended with local congestion, such as cerebral affections, pneumonia, hepatitis, rheumatism, amaurosis, ophthalmia, &c.

Among others, in which we have seen the apparatus tried with decided advantage, we may mention a severe and obstinate case of intermittent neuralgic headache of several months' standing, in a gentleman above sixty years of age, attended with great congestion of the conjunctiva of one eye. Here the affection (in which all the usual remedies were used without benefit, and under the first medical opinion in England) was relieved in half an hour, and entirely removed by a second application; also the pain and inflamination of the stump, and general febrile symptoms in a case of amputation of the fore-arm twenty-four hours after operation; as well as a case of iritis, and one of chronic conjunctivitis, &c., &c.

We may also state, that the apparatus is now being tried in a case of amaurosis of nearly two years' standing, after an attack of fever, in a young soldier of the 15th Hussars. On admission to the general hospital, this patient was suffering from continued headache, tenderness of the scalp, flushed face, &c., the pupils widely dilated and quite immoveable; now, after fifteen applications of the instrument, the headache, scalp tenderness, and flushed face are entirely removed, and the iris of each eye has become ordinarily sensitive to the stimulus of light, the pupils contracting to their natural dimensions. No improvement of vision, however, is yet apparent.

(Signed) D. Scott, M.D.,
Deputy Inspector-General of Army Hospital.
George R. Dartnell, Staff Surgeon.
John Forrest, M.D., Staff Surgeon

HISTORY OF THE RECENT EPIDEMIC OF INFANTILE LEUCORRHŒA.

WITH AN ACCOUNT OF FIVE CASES OF ALLEGED FELONIOUS ASSAULTS

RECENTLY TRIED IN DUBLIN.

By WILLIAM R. WILDE, F.R.C.S.
Surgeon of St. Mark's Hospital, etc.

Considerable excitement has prevailed among all classes in Dublin during the last month, owing to the circumstance of no less than three cases of felonious assaults upon children under ten years of age having been brought forward by the Crown at the late Commission before the Chief Justices. Since these trials, leading articles have appeared in some newspapers on the subject; and a correspondence has been published in the *Freeman's Journal*, between Dr. Ireland, the Physician to the Police, upon whose informations the cases were sent for trial, and myself, as I had one of the accused persons defended. I think it also right to mention, that so impressed were those members of the Profession in Dublin who were acquainted with the circumstances of the cases, that Professors Cusack, Beatty, and Geoghegan, and Drs. Churchill, Hughes, Hatchell, and Speedy, all came forward in court gratuitously, to tender their evidence in what they considered the cause of truth, science, and humanity.

Most practical physicians or surgeons, particularly those attached to public institutions, or who are well acquainted with the diseases of the lower classes, know perfectly well that vaginal discharges, attended with inflammation of the external parts, and an exematous excoriation of the labiæ, and the adjacent portions of the thighs, are not uncommon affections in girls aged from four or five to ten years. This affection has been lately denominated infantile leucorrhœa, but vaginitis is a more characteristic term. It is of a more decidedly inflammatory character than leucorrhœa, and the accompanying discharge is puriform. Occasionally, it assumes a very virulent appearance, resembling cancrum oris, and sloughing of the genitals, and even death has followed. It is at times epidemic. Sir Astley Cooper published, in his Lectures on Surgery, nearly forty years ago, an accurate description of the disease, and also in graphic terms described the consequences likely to result upon the discovery of such affections. Mr. Lawrence, in one of his lectures on Surgery, published in the *Medical Gazette* for August, 1830, also described the disease. Dr. Beatty, in the article "Rape," in the "Cyclopædia of Practical Medicine;" Dr. Churchill, in his work on "Diseases of Women;" Dr. Beck, in his "Elements of Medical Jurisprudence;" and, to come down to the latest authority, Dr. A. S. Taylor, in the edition of his work on the same subject which was issued last year, has entered minutely into the legal questions likely to arise in cases of this nature; so that one is rather astonished at finding that any mistake should now arise as to the nature and causes of such affections.

But as such errors have arisen, and might, but for the pains taken to expose them, have led to the most serious consequences, we think it our duty as public journalists to bring the matter under the notice of our readers, not merely as a warning to such members of the profession as might, from inexperience, be led into similar errors in future, but as an exposure of the deficient system of medical police in the United Kingdom, and as a warning to lawyers and public prosecutors with respect to medical jurisprudence —a subject, by the way, on which, except when barristers "cram" for the defence of a prisoner, they are especially deficient. Even judges may occasionally require to have the well-established laws of medical jurisprudence very forcibly pressed upon them, before they will take them in evidence against the *assertion* of an ignorant witness.

The causes of the inflammation and muco-purulent discharge from the genitals of young children may be an impaired state of the general health, arising from ill-feeding and a residence in an unhealthy locality,—scrofula, intestinal worms, and the neglect and inattention of their parents and guardians. Generally speaking, the disease arises, in the first instance, from some of the foregoing causes, and is then aggravated by uncleanliness. Being at first, and when perhaps confined to the vagina, painless, no complaint is made by the child, until the urine passing over the excoriated surfaces of the labiæ and inside of the thighs; or, in aggravated cases, the difficulty which the little patient experiences in walking attracts attention. Frequently, however, accident, or the state of the child's linen, first calls attention to her state.

It is here proper to premise, that a delusion prevails very extensively among the lower orders in Ireland to the effect, that a man can get rid of an obstinate gonorrhœa, which has "failed the doctors," by having connexion with a virgin;(a) and, as the easiest mode of effecting that object, a child of tender years is selected; and hence the felonious assaults occasionally attempted, and for which men have been most justly convicted, and most righteously punished. But in all such cases it has been proved, that *the men laboured under gonorrhœa or venereal*, although the popular impression among the lower orders is, that the disease is not only completely but instantaneously transmitted from the male to the female. But it is not alone in this country that this popular delusion prevails. From the work of Duchesne, on the Prostitution of Algiers, just published, we learn, that "the Arabs believe, that syphilis may be *transmitted* to a negro female, the individual thus transmitting it *becoming free from the disease.*" Well aware of this wide-spread superstition, and also naturally suspicious of any disease in the genitals of a female child or young girl, the mother at once jumps to the conclusion that some impure connexion has taken place, and possibly she may be confirmed in this idea by some medical man not conversant with such affections stating that it may be either gonorrhœa or the result of violence. But even without this medical authority, the mother commences a course of questioning and threatening, so precisely identical with that so graphically described by Cooper, that one would think she had been instructed out of his lectures; in fact, the evidence given upon the cases lately tried in Dublin was, in truth, but a paraphrase of the very words of our great surgeon. First commences the questioning as to the fact of connexion. This the poor child denies, and generally holds thereto for a greater or less period, varying according to her own knowledge of or her appreciation of truth, or the amount of reward offered, or of punishment threatened. Now, upon this subject I may remark, that where a child, who has neither love nor passion to influence her, has had connexion with a man, it is not likely that she will conceal it from her mother or near relatives when hard pressed; but in all cases where the crime has not been committed, considerable time elapses before the story is made out. In one of the cases tried in Dublin, the mother stated in her informations, that she had to threaten her daughter severely for more than a day and night before she would acknowledge to the fact; and she also swore at the Commission, that she threatened her little girl "*to cut her tongue out of her.*" And in another case, the mother,—a step-mother by the way,—commenced by giving the unhappy child a sound flogging, and a threatening of more if she would not confess to the fact.

Then comes the next part of this extraordinary drama, also graphically described by Cooper. The names of a number of persons are suggested, not in the first instance as having perpetrated the crime, but merely as having been kind to the child, paid it attention, or given it presents. The child acknowledges to some such act of kindness. In one of the Dublin instances, a bit of sugar, given some months before by the prisoner to the child, was the alleged reward, and also the reason why that particular person was selected; and in one of the other instances, "a penny to buy strawberries," was said to be the reward. The name having been at length selected, the threatenings are recommenced, and a series of questionings, as to whether such and such circumstances did not take place are instituted; and thus, as Sir Astly said, with great truth, "The child is driven to confess what never happened in order to

(a) Dr. Montgomery informs me, that he knew a case in which a servant woman affected with gonorrhœa induced a child to have connexion with her, in the hope of thus curing herself.

save herself from being chastised." All this time the infatuated mother, firmly believing in the commission of a foul act, little suspects that in the promptings and suggestions to her frightened innocent child, she is leading it from the path of truth and demoralizing its mind by entering into details which, as may easily be seen from the language afterwards adopted by the child at her examinations, are those of a grown person well acquainted with such matters, and of the mother who, as the great authority so often quoted said, being "perhaps not quite clear herself she is more ready to suspect others." If the child is taken into an hospital or a public institution (as occurred in three of the nine cases which lately appeared in Dublin) the mother may be disabused of her unjust suspicions, and the nature of her child's disease explained to her;—and she may return to her home happy and contented, while at the same time her child is prescribed for and soon gets well. But if, on the other hand, she applies to the police, the accused person is immediately arrested without summons or warrant, as the crime is a felony punishable by transportation for life. And a system of examination and enquiry is pursued which may lead to a public trial, in which the accused man, unless ably defended or assisted by medical evidence in his behalf, stands a good chance of being sent to Spike Island or a penal colony. Such was nearly being the catastrophe lately, the particulars of which are as follow:—

I have already stated, that the disease is occasionally epidemic, and such would appear to have been recently the case in Dublin, as I have received the particulars of no less than nine cases, viz., one recorded by Mr. Hamilton in the *Dublin Medical Press*, for the 4th of May last, and tried before the Recorder; the three which formed the subjects of the late trials at the Commission; two which presented at the Pitt-street Dispensary, under the care of Drs. Croker and Hardy; two treated by Dr. M'Clintock; and one at present under the care of Mr. Dwyer. In none of the cases where the children were first brought to public Institutions, or where private practitioners were consulted, were trials instituted, although, in three of them, the mothers were at first possessed with the same suspicions regarding violence and infection to which I have already alluded. In the case related by Mr. Hamilton, the first of the epidemic which presented, the facts are these:—A beggar child, residing in a dirty, unhealthy lane, leading from one of the principal markets, was in the habit of receiving bread and other charities from P. Tracey, the butler of a solicitor residing on the north side of the city. Upon a certain day, the master of the house, when going out to dine, observed her at his hall door, waiting to receive the usual charity given to her at such times. He desired her to go away from the place. Trivial as this circumstance is, it is worthy of note, inasmuch as it would be one of those facts laid hold of by the Crown as corroborative of the child's statement regarding time and place. Some time afterwards, the mother having discovered a vaginal discharge and excoriation, etc., in her child, put her through the usual course of examination, and then brought her to the police-office, where she charged the servant of the gentleman alluded to with having violated her upon the day when she was seen at the door by the master, and swore that the crime took place in the gentleman's office, the next room to the dining parlour in which his family were then sitting either at or after dinner! The case came, in due course, before the magistrates; the medical officer of the police made the usual examination of both parties; found the man perfectly free from disease, but stated, that the child laboured under a vaginal discharge, with other marks, which, together with the child's evidence, induced the magistrate to send the case for trial, and to refuse a large amount of bail offered for the prisoner. The informations of the child are very concise, merely stating how, when, and where the act occurred. Neither the mother, nor the medical officer of the police swore any informations, and as the gentleman's family were naturally exceedingly distressed at the circumstance, the case was kept as private as possible, and no account of it appeared in the public newspapers. The child, says Mr. Hamilton, in his report, was sent to the Richmond Hospital, "by the police, as having been violated; the man suspected of the offence was in custody. The face was pale, but not delicate-looking; the crime was said to have been committed a fortnight before. Her story, which she *detailed very glibly*," being that already related. The disease in the genitals was characterised by the usual symptoms of swelling, redness, superficial sores, vaginal discharge, eczematous excoriations, extending over so much of the thighs as were washed by the discharge, or came in contact with each other. A few of the neighbouring lymphatics were enlarged. To assist in forming a diagnosis of the case, Mr. Hamilton performed inoculation, with the matter of the sores, on the thighs of the patient; but it failed. The child, he says, was in a "filthy state," at the time of her admission. The accused person did not exhibit "the smallest trace" of any affection of the genitals. "I expressed an opinion, therefore, says Mr. Hamilton, "that as far as the medical evidence went, there was nothing to show that any violence had been used with the child, or that contact had communicated the venereal disease." The Medical Officer of the police acknowledged at the trial, that the appearances might be from dirt, though they might be from violence; the case was, therefore, sent for trial before the Recorder; but, at the Sessions, "the child completely broke down in her evidence, and the innocence of the accused was fully proved." In this case, it must be remembered, that the girl who so glibly detailed the whole circumstance of the connexion, was in hospital for a fortnight, away from the tutoring of her parent, between the date of the arrest and the day of trial. She was taken from the hospital to the Court. The master of the servant, to his credit be it told, believing fully in his innocence, had him defended at the trial, but although acquitted, he could not take him back into his service, owing to the prejudice which existed against his character.

I have not heard of any other case, until about the beginning of July, when it would appear, that with the close weather which was felt in Dublin at that time, several cases occurred in the dirty lanes, and close unhealthy localities of our ill-sewered city. In point of time, the first of these cases was that of Margaret Walsh, a child, aged nine and a-half years, in whom the disease presented in a very virulent form when it was discovered by her step-mother, who, however, acknowledged that she had remarked her *walking lame for several weeks before*. There was considerable swelling and inflammation of the parts, and a most profuse purulent discharge. Upon the discovery of the disease by the step-mother, she at once accused the child of impropriety, and demanded the name of the person who had diseased her. Upon the child's denying all knowledge of such, she was forthwith "soundly flogged," and repetitions of the punishment promised until she confessed. It came out at the investigation, that the mother took down the cross from the mantle-piece, and threatened her therewith,—a very impressive mode of adjuration among the lower order of Irish. The neighbouring women interfered, and by threats and promises endeavoured to extort an acknowledgment, but without effect. Names of different persons were then suggested, but still the child said she could not remember any of them having offended her. Finally, an elder sister who was present during one of these scenes of torture, reminded the child of an old pensioner named Barber, who resided in a distant part of the city, but who was formerly a neighbour of hers, having given her a bit of sugar some months before, when they lived in his neighbourhood. This she acknowledged, and then arose the accusation. The mother and child rushed to the police-office; the accused was immediately arrested, carried before the magistrate, and, upon the evidence of the child and the police doctor, committed for trial and sent to prison. In her information, sworn upon the 30th July, the child stated that the prisoner, who lives at a distant part of the city, took her into the open hall of an adjoining house; and she then entered into a most minute detail of the whole circumstances of the transaction, too disgusting to be quoted here. She also swore to having had intercourse with the prisoner several times during the previous eighteen months. The hall where the crime was alleged to be committed is one of the most public places which could be found. My object in entering into these minutiæ is to show, that, even irrespective of medical testimony, the police magistrate should have been more cautious than he was. The medical officer of the police examined both parties; found the man free from disease of any description, but stated his belief to the mother and the magistrate, that the child had got a disease the result of infection. Nevertheless, although the man was so far clear, he was sent for trial. All the foregoing circumstances came out at the trial, where accurate notes were taken of the evidence. After the police examination, the mother took the child to the neighbouring dispensary, where Dr. Speedy, upon seeing the case and recognising its true

character, immediately said, "Now, I suppose you are going to accuse some person of having injured your child,"—an impeachment to which she pleaded guilty. He most generously investigated all the circumstances of the case, and came forward at the trial before the Chief Justices; but he was not examined for two reasons. The case for the Crown broke down in several respects, and the Medical Officer of the police said that he could not then, after the medical evidence which had been given upon a former trial that day, undertake to swear that the child was not infected with the infantile leucorrhœa which was common among children of the lower orders. The prisoner's counsel, however, in a very adroit address to evidence, put it to the Jury, that the child had gonorrhœa which she had received from some other person, as the prisoner was not in any way diseased; and, after a few words from Chief Justice Monahan, the Jury at once acquitted the prisoner, who was discharged, with, however, that suspicion against his character which, among persons of his own class, is not easily eradicated,—the laurels which he won by long service in his country's cause rather tarnished by the time he spent in Newgate, and his next quarter's pension somewhat lightened by the three or four pounds which he had to pay for his defence—while the unhappy child was stigmatised as a young prostitute who had acquired gonorrhœa when little more than nine years of age! Notwithstanding all the discrepancies in the foregoing recital of Barber's case, he might still have stood a good chance of transportation, but that a strong impression had been made upon the Court and the jury by another trial which came on almost immediately before, although the date of the offence was subsequent to that now mentioned.

A Mrs. Cosgrave, an intelligent and respectable woman in her rank in life, though, as it appeared in Court, not of the most cleanly habits as regards the care of her children, was informed by one of her daughters, upon the morning of the 20th July, that her sister, a little girl, aged about 9½ years, "was very sore," etc. Upon examination, the mother found her linen greatly soiled (it was subsequently sworn at the trial that the child had not had a clean chemise for eleven days, nor been washed for many months), the genitals were red, swollen, and discharging purulent matter, and all the external parts, thighs, and anus excoriated, and covered with an eczematous eruption. She awoke the child, asked her the *cause* of her disease, and questioned her as to how it had occurred, or *who* had been meddling with her. The child answered almost in the very words given by Cooper, "No one, mother; nobody has, I declare to you." Threats of the most severe punishment were then resorted to, as the mother swore in her informations, and as she afterwards detailed at the Commission, such as "cutting her, and bringing her to the doctor," and that "the doctor would *cut the tongue out of her head* if she did not tell what had occurred to her." At the end of the second day the mother suggested to her (as the child acknowledged upon her cross-examination) the name of Patrick Kane, a coachman, residing with his wife and family in the same lane, and who being very fond of children, was in the habit of allowing this little girl, along with his own children, and other boys and girls, to get upon his master's car or carriage while driving round to the stables. Here was the third case made out.

The fourth was that of a little girl aged 7, named Delmere, who resided in the same lane, (which, owing to the neglect of the police and the corporation authorities, is a very unhealthy locality), and in the same house with the prisoner. She, becoming severely affected with vaginal discharge, told her mother, that she was sore; who, upon examination, very properly said, as she swore in her informations, "You are scalded," but asked no questions, and paid no further attention to the matter. Next day, the elder child Cosgrave, who had, by this time made up her mind to the accusation, with all its details and circumstances, meeting her little neighbour in play, and knowing that she also was sore, told her all that had happened to her, and what she had told *her* mother about Mr. Kane. Immediately afterwards, the mother of the elder child sent for the mother of the younger, and told her that, "Kane had committed violence upon both the children." During the night, the exasperated and infatuated mothers went to the police, and had the man taken out of his bed; the accusation being for a felony, and not requiring either warrant or summons.

At the Police-office next morning, Saturday, July 23rd, each child swore to *precisely the self-same story*, that the prisoner at 1 o'clock on the Friday week before (which she said she had reason for remembering), had taken her up to a hay-loft by a certain ladder, committed the act, made use of certain expressions, and then brought her down again. With respect to the commission of the crime, the examining magistrate led each child into the most minute details by asking the following—"Did the prisoner lay you down?" "Did he take *down* his breeches?" "Did he take up your petticoats?" "Did he lie down upon you?" "Did he put his private parts into yours?" To each question of which the child answered "Yes, Sir!" she being then upon her oath.(a) But, she herself gave no history whatsoever of the transaction further than her answers to the magistrate, and never said, "No!" to any question put to her. In fact, I believe, she would have said "Yes" to the most preposterous question put to her by the magistrate. This may possibly be the usual form of examination, but it is one which, I think, in the case of young children, and especially when labouring under fear of punishment, and where there may be a doubt of their veracity, is very objectionable, being, I think, liable to the imputation of "a suggestion." In proof of this, it is remarkable that the exact expressions employed by the magistrate, with respect to the mode of committal of the act were those used by the child at the subsequent examination before the commission, when, although more than three weeks had elapsed, she was able to detail the circumstance minutely. Furthermore, the term "private parts" used by grown persons, and employed by the magistrate and the law officers of the Crown, is certainly not the expression likely to flow spontaneously, or without tuition, from the lips of young children in the rank of life of the prosecutrices. (b)

Before I proceed further into the details of these two cases, it is right to inform the reader, that the accused person was my coachman, and hence the reason why I have thus anxiously investigated the whole matter, not merely for the purpose of defending him, but of showing, that the crimes were never committed; and thus wiping out the foul national stain of having it alleged, that *four* children were violated in our city within the space of two or three months. A man may bear a previously good moral character, yet, we know, be guilty of the most heinous offence; I have, therefore, only to say for this person, that he had lived with myself and others many years, and bore a most unblemished character. He and his wife and family lived in the lane running at the rear of the street in which I reside; and, being remarkably fond of children, he was in the habit, as I already mentioned, of allowing those residing in the lane to get upon the car or carriage "for a drive," when passing in or out to the stables, which he usually does *at stated hours*, and also of permitting them to go into the yard, and to occasionally get on the hay-loft (to look at some kittens, *as the child acknowledged* on her cross-examination). I allude to these circumstances here, because, as in the former case, they afforded materials for the Crown to get up *corroborative evidence*.

[To be continued.]

TWO CASES OF EXTRA-UTERINE PREGNANCY,

IN ONE OF WHICH RECOVERY RESULTED, A SIX MONTHS' FŒTUS HAVING ESCAPED BY THE BOWEL.

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The occurrence of extra-uterine conception, though fortunately rare, is yet of sufficient frequency to make the subject one of considerable practical interest, especially when its great mortality is considered. The following cases, which have come under my notice, will serve to illustrate some points in the history of this anomalous form of pregnancy; and the one first related is of especial interest, both on account of its favourable termination, and of certain pecu-

(a) Persons who may be acquainted with the ignorance or simplicity of young children will be rather surprised at hearing them, when handed the book in a Court of Justice, and asked if they know the nature of an oath, without a minute's hesitation reply, "If I told a lie I'd go to hell."

(b) In a case of felonious assault tried lately at the assizes, before Judge Ball, at Maryborough, the child, on her cross-examination by Mr. Curran, acknowledged, that she had been told by a policeman's wife, in the barrack where she lately had resided, how to describe the act which she said had been committed upon her. It was a case somewhat similar to those which recently occurred in Dublin; the child having had a discharge, and the prisoner being unaffected. The case broke down completely, and the man was acquitted.

liarities which it presented, as will appear on perusal of the following history.

Mrs. R., aged 37, a healthy woman, of sanguine temperament, and fair complexion; is married, and has one daughter, 15 years of age; has had two miscarriages, one about ten years since, by which her strength was considerably reduced; the other previous to this, and less serious in its consequences.

The patient menstruated last in the latter part of September, 1852; and at Christmas, when three months advanced in pregnancy, was taken ill suddenly with pains in the abdomen, which were compared to labour-pains, but were unattended by any vaginal discharge. These were followed by symptoms of peritoneal inflammation. After nine weeks, she got about again, and remained well, with the exception of dragging pain in the left iliac region, which has ever since prevented her from lying on the right side. The abdomen continued to increase in size, the enlargement being at first confined to the left side; and, at the eighth month, it was nearly as large as it had been previously at the full time.

On June 18, 1853, the patient experienced a sensation of tightness across the lower part of the belly, sickness and pain at the chest, and an increase of the pain in the left iliac region, having had, since the beginning of the month, a draining discharge from the vagina, unaccompanied by clots or any membranous substance, which she regarded as the returning menstrual secretion, and which, together with the fact, that she had never felt the motions of the child, led her to infer that she was mistaken in supposing herself pregnant.

On June 23, five days from the commencement of her illness, a frequent bloody discharge from the bowels appeared, accompanied by distressing tenesmus, the flow from the vagina having ceased a day or two before. I saw the patient for the first time two days later, when she presented the appearance of a person in severe distress. The countenance was pale and anxious, the skin hot, the tongue furred and dryish, pulse small and frequent; she complained of sickness, thirst, loss of appetite, great pain, and some tenderness on pressure over the left iliac fossa, extending upwards towards the hypogastric region. The motions were small, devoid of fæcal odour, and consisting of dark red, grumous liquid. They were attended with severe tenesmus. She had been confined to bed for two days.

The belly was large and equally distended, tense and tympanitic above, dull on percussion, and resistant below. A solid tumour, not notably irregular, was felt on firm pressure, which was not productive of much pain, occupying the left iliac and lumbar regions, and extending across the abdomen, nearly to the right iliac fossa. The breasts were enlarged, and contained milk; the areolæ were pale; there was no increase in the size of the follicles around the nipple.

A vaginal examination disclosed the following conditions:—The os uteri was felt lying close against the pubic arch, and directed backwards; the lips were small; the cervix distinct, about half an inch in length, and the mouth closed. Immediately behind, occupying the upper part of the cavity of the sacrum, and prominent against the posterior vaginal wall, was a solid globular mass; this extended upwards on either side, as far as the finger could reach; it was not manifestly influenced by the slight motion of which the abdominal mass was susceptible.

In two days, the hæmorrhage from the bowels ceased; but the diarrhœa and tenesmus continued, with but slight intermission, the discharge consisting of dark, offensive liquid, and causing great reduction of strength, and complete loss of appetite. On July 6, thirteen days after the first appearance of hæmorrhage from the bowels and tenesmus, two small portions of bone (fœtal skull) passed per anum, attended with great pain and straining, and the escape of a few drops of blood. On examining the rectum, an irregular bony mass was felt, at a distance of about four inches from the anus, quite denuded of soft covering, and firmly impacted in the gut, so that any attempt to remove it caused excruciating pain. This circumstance, and the uncertainty respecting the relative position of the fœtus and peritoneum and other important structures, induced me, and justly, as the event proved, to defer any manual interference, until, by the aid of nature's efforts, the fœtus had been brought nearer to the anus. The tumour in the vagina was found to have descended lower, and to have lost its globular shape. Though blanched and completely prostrate, the patient was free from pain, the only uneasiness being a slight tendency to bearing down, increased by pressure on the belly. She had taken food fairly. The next day the return of the purging and straining had effected the desired object; the mass was considerably lower, and one of the bones, which was partially detached, was removed by grasping it between two fingers introduced within the anus; it was found to be a parietal bone, which, by maceration, had lost all its membranous covering. This gave temporary relief, but the feverish state continued, and the distressing symptoms soon returned. The bearing-down pain which accompanied each motion, and the soreness produced by the frequent discharge, added to her discomfort.

Such was the patient's condition on July 10th when I removed, with a pair of dressing-forceps, a portion of bone which was lying against the posterior wall of the gut. In a short time her straining brought another bone close to the sphincter, which was removed in like manner, and subsequently two smaller pieces. I could then feel a large mass filling the rectum, consisting of integuments, irregular pieces of bone, and what appeared to be the base of the skull. The tenesmus had ceased with the removal of the large bones, and the woman expressed herself as being entirely free from pain. I determined, therefore, not to attempt the removal of the remainder, especially as I had requested the assistance of Mr. Luke. The bones removed were the remaining parietal, the halves of the frontal, and part of the occipital; there was no hæmorrhage, excepting only a slight oozing from a scratch in the margin of the anus.

The next day the patient felt comparatively comfortable; she had slept well, and taken nourishment freely; two motions were passed, containing a considerable quantity of solid fæces. Mr. Luke saw her, and removed, with the aid of dressing-forceps, the remainder of the fœtus entire, and in a very offensive state. The integuments were of a blackish-green colour, and of almost pulpy consistence; of the head and face only the dura mater, the sclerotic coats of the eyes, and a mass of disjointed bones remained; of the right arm, the humerus and ulna only are left, and these are devoid of covering; the rest of the fœtus, which is that of a female, at about the sixth month, is uninjured. At Mr. Luke's request, it has been placed in the London Hospital Museum. The placenta, a flattened, and somewhat ragged mass, was passed with a motion shortly after the removal of the fœtus.

In a week from this time the patient was able to leave her bed, a dose or two of castor-oil having sufficed to regulate the bowels, which had become confined, and to restore a healthy character to the motions, the latter having been, for a few days, of a sero-purulent nature. The only remaining symptoms,—namely, a slight bearing-down pain while moving about, and a sensation of sinking at the chest, disappeared in a few days, and before the end of the month she had resumed her usual domestic occupations.

As regards the treatment employed, it was necessarily of the expectant kind, and will require only a few words. It consisted chiefly of the administration of anodynes and astringents to relieve pain and check the diarrhœa, in addition to which opiate injections and suppositories were found extremely useful. Tonics and stimulants, combined with a diet as nutritious as possible, were clearly beneficial in supporting the patient's strength under the depressing influence attendant on the retention of so large a mass of putrefying substance.

The details of this case, if given in full, would have extended this communication to a considerable length; I have preferred, therefore, narrating only the principal facts. The chief features of interest it possesses, and those in which it differs materially from the generality of cases of extra-uterine fœtation, are the expulsion of the fœtus by the rectum *entire*, at about the usual term of pregnancy; the comparatively slight constitutional disturbance, and absence of anything like severe peritoneal inflammation, and the rapid recovery of the patient, convalescence having been established within a month after the commencement of nature's process for the evacuation of the offending body.

On reviewing the history of the case, it seems probable that the attack of peritoneal inflammation which occurred at the third month of pregnancy, effected adhesions between the cyst containing the fœtus and some portion of the sigmoid flexure, and thus prepared the way for the escape of the former into that viscus. This took place, no doubt, when hæmorrhage from the bowel commenced. It thus appears,

that eighteen days, from June 23 to July 11, were occupied in its expulsion from the cyst, and its passage from the body. As to the particular variety of extra-uterine pregnancy to which this case belongs, we have, I think, no means of judging with certainty; but the extreme rarity of the interstitial or parietal form,—the histories of fifteen cases only having been collected by Dr. A. G. Carus, of Berlin, since its discovery,—renders it improbable that such was its nature; and the fact, that the fœtus had passed the age of two months, the period at which Fallopian pregnancy usually proves fatal by rupture of the sac and the escape of its contents into the cavity of the abdomen, excludes that variety from our consideration; while, in ventral pregnancies, the limbs of the fœtus can be commonly felt as irregular prominencies by the hand placed on the abdomen; and the fœtus usually remains encysted for a longer period than in this case. On the other hand, the locality of the pain and swelling during gestation, point to the left ovary as its probable situation.

From the general appearance of the fœtus, and the fact, that ossification had advanced considerably in the first bone of the sternum, and in each os calcis, there can be no doubt that it had reached the sixth month. The absence of those symptoms, sickness, fainting, &c., included under the term "quickening," was to be expected, inasmuch as their cause, the sudden appearance of the uterus in the cavity of the abdomen, had never existed, and the weakly, ill-nourished condition of the child, depending, probably, on its peculiar locality, may account for the absence, at so advanced a period of the fœtal movements, these being, when present, more distinctly felt than in natural gestation.

It is worthy of remark, that no membranous or other substance resembling decidua, was discharged from the uterus, as has been commonly observed in the course of extra-uterine pregnancy. It is possible that here, as in two cases related by Dr. R. Lee, the decidua may have surrounded the chorion in place of occupying its usual position in the cavity of the uterus.

The tubal variety of gestation is that most commonly met with, and the most certainly fatal. The following case, which came under my observation nearly two years ago, and which I shall briefly relate, presents no exception to the rule, but is interesting, as showing how serious a lesion may exist with symptoms comparatively insignificant.

Mrs. D., a healthy married woman, of about 30 years of age, and of intemperate habits, was seized, in the month of November, 1851, when three months advanced in pregnancy, and in perfect health, with an attack of what appeared to be nothing more than derangement of the digestive organs. Bilious vomiting, and slight pain on pressure over the stomach and bowels, were the only symptoms. In the night, while getting out of bed, she fell with some violence against a chair, and it was supposed struck the abdomen. Early on the following morning, she was found quite dead by her husband, who had been sleeping by her side. Suspicion attached to the husband, and a *post-mortem* examination, by order of the Coroner, was made, at which I assisted the gentleman who had attended her, and to whom I am indebted for the above particulars.

The surface of the body was completely blanched, and on opening the abdomen, the walls of which were loaded with fat, about four pounds of clotted blood were found occupying the lower part of the belly, and extending as high as the umbilicus. On removing this a fœtus was observed enclosed in its membranes, and projecting into the abdominal cavity through a rent in the left Fallopian tube, near its junction with the fundus of the uterus. In the removal of the uterus and its appendages the membranes were ruptured, and it was found, on examination of the cavity which contained the fœtus, that the small placenta, consisting chiefly of the flocculent ramifications of the chorion, was placed over the point at which the tube penetrates the uterus to reach its cavity; clots of blood, partially filling the cavity, had escaped, apparently from rupture of its substance. No traces of peritoneal inflammation existed. The fœtus was one of between the second and third month.

There can be little doubt that rupture of the sac took place on the evening previous to the patient's death, there being no other cause to account for the symptoms which existed at that time; the hæmorrhage immediately attending the rupture was probably slight, the great bulk of the blood being poured out during the night subsequent to the injury she sustained in getting out of bed.

NEW INVENTIONS.

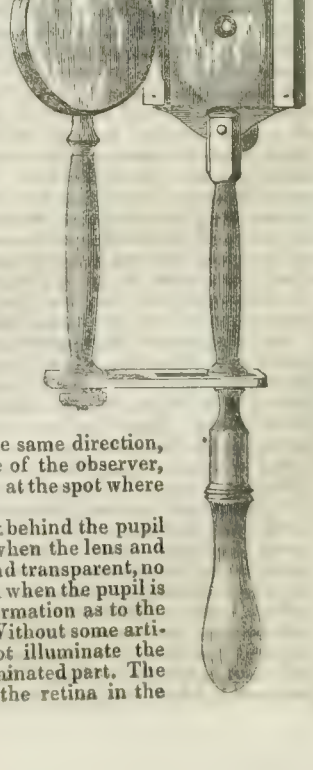
SOME ACCOUNT OF A NEW OPHTHALMOSCOPE.

By T. SPENCER WELLS, F.R.C.S.

At the conclusion of the late Mr. Dalrymple's "Pathology of the Human Eye," the lamented author stated that no plates of amaurotic diseases had been given, "because the objective symptoms are scarcely subjects for the artist, little generally being visible suited to pictorial representation." He adds, and few would be found to dissent from his views. "Moreover, the history of amaurosis has, I humbly submit, yet to be written. It is among the most difficult subjects in ophthalmic medicine, and well worthy the labour of a life to investigate, explain, and supply a rational and successful therapia."

I think it will be found that the investigation of this important subject will be much facilitated by the aid of sundry instruments recently constructed in Germany for the purpose of illuminating the retina in such a way that its condition may be examined in the living eye. Helmholtz, of Königsberg, deserves the credit of originating the movement; and his *Beschreibung eines Augenspiegels* contains a full explanation of the principles on which illuminating mirrors should be arranged. The greater part of this brochure has been translated in the *Edinburgh Monthly Journal of Medical Science*, and a full description of Helmholtz's mirror is also given, with some account of modifications made by Epkens and Rekos, and a description by Dr. Donders, of Utrecht, of the appearances he observed in two cases of partial amaurosis, by the assistance of one or other of these instruments.

The instrument of Helmholtz is undoubtedly a great assistance in examining the condition of the refracting media of the eye. The condition of the lens and its capsule and of the vitreous humour can be much more accurately defined by its use than by ordinary observation; but, after numerous trials, I became convinced that its illuminating power is far too feeble to enable one to see at all distinctly anything whatever on the retina, and that an instrument more recently contrived by M. Kotzius, of Leipzic, is immeasurably superior in this respect. The instrument of Helmholtz is preferable for examining the refracting media, and it possesses the great advantage, that it may be used with an undilated pupil without producing much contraction; while the intense light from Kotzius's instrument requires full dilatation, or the pupil becomes closely contracted. But, for the grand object of examining the condition of the retina itself, this latter instrument is very far superior to any other that I have seen.



This instrument consists, as may be seen by the accompanying woodcut, of a perforated mirror and a lens. The rays of light from a lamp are concentrated by the lens and thrown on the mirror. This is held before the eye to be examined, and the rays are thrown through the pupil on to the retina. The unabsorbed rays return in the same direction, and are received by the eye of the observer, which is behind the mirror, at the spot where it is perforated.

In a healthy eye, the part behind the pupil is absolutely dark. Even when the lens and vitreous humour are clear and transparent, no ordinary examination, even when the pupil is dilated, can afford any information as to the appearance of the retina. Without some artificial assistance, we cannot illuminate the retina and also see the illuminated part. The rays of light return from the retina in the

same direction as they were thrown on to it, so that we cannot bring our eyes into the direction of the rays of light returning from the retina without at the same time cutting off the supply of those rays. But, by the aid of this instrument of Kotzius, the rays are reflected at an angle upon the mirror, are then conveyed to a focus on the retina by the media of the eye, and the unabsorbed rays, on leaving the eye, return to the mirror whence they came, and are also received by the eye of the observer.

When the instrument is to be used, the pupil is dilated by atropine, if not naturally dilated. The patient is seated in a dark room near the corner of a table, on which a bright lamp is placed at the level of the eye. The surgeon sits before the patient, and screens the face of the latter by an upright shade, so that the eye is the only illuminated part. Holding the mirror opposite the eye, he then adapts the lens in such a manner that a bright concentrated light is seen to fall on the pupil. Then he applies his own eye to the back of the mirror. The instrument is held at different distances from the eye until a clear view is obtained, and then the patient, by moving his eye in different directions, exposes the different parts of the retina to view. This appears rather difficult at first, but a very little practice enables one to find the proper position of the instrument. When the retina is not clearly seen although the pupil is well illuminated, a concave glass is interposed between the mirror and the observed eye, by the hand not employed in holding the instrument.

Examination of the retina in this manner is very interesting. Bloodvessels are first distinctly seen ramifying upon it, and by tracing them from the smaller branches to the larger roots, we arrive at the point where the optic nerve enters. This differs in appearance from the rest of the background of the eye, as it is not covered by pigment, or a network of vessels, but a sort of transverse section of the nerve here lies open to view, with a few fine vessels passing through it. The arteries and veins of the retina enter and leave near the inner part. Sometimes a portion of the vessels may be seen concealed in the substance of the nerve itself, showing that this substance is transparent during life. The two orders of vessels are distinguishable from each other as the blood is of a brighter colour in the arteries, and the walls of the latter and their first subdivisions are thicker than those of the veins. Pulsation cannot be distinctly recognised so far as I have been able to discern, though some observers fancy they can see it. The first divisions of the vessels border the inner side of the optic nerve, and then extend all over the field of the retina. The appearance of the red vessels on the illuminated base is really beautiful. Helmholtz remarks, that, close to the inner side of the nerve, he has always remarked a small semilunar strip of shadow, which appears to be from a fold of the retina. This appearance is universal, and is doubtless produced by the plica semilunaris. In most parts of the eye the base appears of a yellowish red, of a brighter red around the optic nerve, and darker the further we pass from it,—not of an equal colour, but as if with small darker patches. The point of direct vision (macula lutea, or foramen of Soemmering) has a peculiar appearance. The eye is directed exactly upon the ray of light, and the retina is seen at that spot to be darker, greyish-yellow, without admixture of red; and no traces of capillary vessels can be seen on it. It is difficult to make this out without practice, because the reflection from the cornea is apt to destroy it; while this reflection does not interfere when the eye is turned to either side for the examination of the lateral portions of the retina.

As an auxiliary in diagnosis, the ophthalmoscope must prove very valuable, as anything opaque before the retina must mask its vessels. Cloudiness of the vitreous humour, according to its degree, will obscure the view of the vessels of the retina. Opacity of the lens or of its capsule would, of course, act in the same manner.

But it is in assisting the study of the pathology of amaurosis that the chief utility of the instrument will be found. Dr. Donders has already distinguished a limited effusion of blood between the choroid and retina, or in the latter membrane itself with chronic inflammation,—in one case of insensibility of about two-thirds of the retina. After examining a great many sound eyes, I have myself detected, in various forms of partial or total amaurosis, congestion and varicosity of the vessels of the retina, partial removal of the pigment in patches, and exudations into the substance of the retina, or upon its surface. Representations of these appearances, when accurate, are exceedingly beautiful; and the objective symptoms of amaurosis thus become admirable subjects for the artist. When they have been thoroughly examined and carefully recorded, they must contribute important information towards the history of the disease which Mr. Dalrymple so justly said has "yet to be written."

I should have stated, that I may have mis-spelt the name of M. Kotzius, as I have never seen it written or printed.

30, Brook-street, Grosvenor-square.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

CASES OF LARYNGITIS, ETC., IN WHICH TRACHEOTOMY WAS PERFORMED.

The operation of tracheotomy, when performed under certain circumstances, is perhaps the most signally triumphant one in the whole range of surgery, being capable not merely of relieving pain, of removing disease, or of prolonging life, but actually, as we shall presently have to see, of restoring animation to a body in which all the perceptible vital functions have ceased. The following series of cases, besides affording illustrations of most of the conditions in which its performance may be called for, reflect some very interesting information respecting the operation itself. In the first place, as with the exception of three, in two of which the patients were already dead from the effects of chloroform, they comprise all which have come under our observation during the last year; and as the whole seven are successful cases, it seems evident, that under proper care the risk attending this procedure is not great. Secondly, in answer to the question as to how long the artificial opening may be kept patent with impunity, we have to mention one case in which the patient, now in average health, has worn the tube for six years with little inconvenience, and shall allude to several others of nearly the same duration. Thirdly, as to the best instrument wherewith to operate, we believe there is among the surgeons to the Metropolitan hospitals an almost unanimous and an increasing preference for the scalpel over the trocar. In very few of the following cases was the latter instrument used, and in one o those, even in the very able hand of Mr. Birkett, it occasioned delay and had to be laid aside. Mr. Birkett informs us, that he has before seen great inconvenience result from its employment, and that he has quite decided never again to resort to it.

Cases like the following not only justify the operation performed, they do more; they set forward its immense advantages and little risks so prominently, and so clearly point to it as the one remedy efficient for the relief of the condition described, as to render its adoption, under all similar circumstances, a matter of absolute duty. The surgeon in attendance on cases of laryngitis, whether syphilitic or idiopathic, should be very careful not to allow the fatal termination to ensue, without affording to his patient the chance of relief by opening the windpipe. Should the respiration have become persistently difficult, from laryngeal obstruction, and one or more paroxysms of very urgent dyspnœa have occurred, it will be safer at once to perform tracheotomy than to risk the recurrence of the latter at a time when possibly surgical aid may not be at hand. It is far better in the case of such a simple operation, to do it unnecessarily, than to allow a patient to die for the want of it. We make these remarks with the more cogency, because more than one case has come to our knowledge in which the *post-mortem* evidence went to prove, that the disease affected the larynx only, and that its effects would, in all probability, have been obviated by resort to the measure under discussion. Both were cases of syphilitic laryngitis. It will probably be remarked by some of our readers, that our series does not include an example of croup relieved by tracheotomy. One such has, however, come recently under our notice, and we only abstain from here publishing its details because we believe that the operator himself intends shortly to bring it before the public. It occurred in University College Hospital, and the operation was performed under very urgent circumstances by Mr. Lister, one of the resident physician's-assistants. The little patient made a most satisfactory recovery.

ST. BARTHOLOMEW'S HOSPITAL.

Case 1.—SYPHILITIC LARYNGITIS.—URGENT DYSPNŒA, WITH LOSS OF CONSCIOUSNESS.—TRACHEOTOMY.—FAVOURABLE PROGRESS.

[Under the care of Dr. BURROWS and Mr. PAGET.]

Mary Crawder, aged 32, a widow, having the appearance of tolerably good general health, was admitted on August 22, labouring under the symptoms of laryngitis. Her respiration was hurried and stridulous; the voice and cough extremely horse, and there was also present a considerable degree of pyrexial disturbance. From the history given, there seemed good reason for believing the affection of syphilitic origin, and some patches of very suspicious-looking psoriasis on the arms confirmed this opinion. She stated, that it had commenced with rigors and great pain about the throat a fortnight ago, and that, during the night following the first symptoms, she had suffered from an attack of dyspnœa, so urgent that it obliged her to sit up in bed gasping for breath for two hours. After a few days' medical treatment she was so far relieved as to be able to return to her usual work, at which she continued until three days ago, when the symptoms again returned with much severity. In spite of the remedies prescribed by her medical attendant, the disease, since this relapse, had appeared to get worse. At the time of her admission, the difficulty of breathing was so great that the immediate application of eight leeches to the throat was ordered by one of the hospital apothecaries. Dr. Burrows saw the patient an hour or two afterwards, and prescribed for her.

℞ Hydr. chlorid. gr.ij.; pulv. opii gr.ss., nocte maneque sumend.

℞ Potassii iodidi gr.v.; potassæ bicarb. gr.v., ex aquâ cinnam. ter die. Emplast. canth. sterno.

August 23rd.—Has not slept in the night, but by the leeches and blister the pain previously complained of in the throat and chest has been much relieved. The voice is not so hoarse as yesterday. Respirations 32, attended both in inspiration and expiration by a hissing noise, which often assumes a stridulous character, more especially during sleep. There is some tenderness over the thyroid cartilage. Pulse 72, full, and somewhat resisting. Very little air appears to enter the chest, and the ribs can scarcely be observed to move.

Rep. pil. Adde haust. sing., vin. ipecac. mx., ut antea sumend. Cataplasma lini gutturi.

24th.—Has slept pretty well, and is, in all respects, better.

25th.—Further improvement. Respirations quieter, 24; less hissing when awake, though still very stridulous during sleep. The gums are swollen and very vascular.

Rep. haust. Omit pil.

26th.—This morning, at the time of the early visit of the Clinical Clerk, Mr. Nesbitt, to whom we are indebted for this account of the case, the improvement appeared to be progressive. The patient was quite cheerful, and had slept well; her voice and cough were less hoarse; the respirations were only twenty in the minute, and though still slightly stridulous, were not nearly so much so as on previous occasions. There was a distinct mercurial fetor with her breath, and the secretion of mucus was more copious, in fact, her only complaint was of being "almost choked with phlegm." About noon, however, the breathing became much more difficult, and, on this account, the attention of Dr. Kirkes was called to the case, at about half-past one p.m. The respiration was then 32, laboured, and wheezing; large drops of perspiration stood on the face, and the expression had become extremely anxious. As the chief difficulty seemed to be in the clearing of the glottis of the phlegm which encumbered it, Dr. Kirkes ordered a little warm wine and water to be given her. About a quarter of an hour later, Dr. Kirkes was summoned in great haste from another ward, with the information that the woman had got much worse; had become black in the face, and appeared to be either dead or dying. With a view to the performance of tracheotomy, the attendance of Mr. Paget, who chanced to be in another part of the building, was immediately secured. On arriving at the patient's bedside, she was found pulseless, and making only, at long intervals, spasmodic efforts at breathing; the features were livid, pinched, and deathlike; the skin cold and clammy; the nails black, and the eyes fixed and glazed. It was evident that no time could be lost, and Mr. Paget accordingly at once opened the trachea, a little below the cricoid cartilage, and introduced a silver tube. During the operation she was quite insensible; the blood which flowed was in small quantity, dark in colour, and of a thick consistence, like that of a dead person. Immediately the tube was introduced, a spasmodic inspiratory effort was made, which was followed by the forcing out of some thick mucus and blood. After breathing through the tube for a few minutes, the pulse returned, the skin became warm, and the features lost their dusky appearance. As soon as it could be swallowed, a little brandy and water was administered, to promote expectoration. 10.30 p.m.—Feels comfortable; respirations 20, quiet, and natural; face pale, and lips red; skin warm, and perspiring. On auscultation, it was ascertained that air entered freely into every part of the lungs.

27th.—Has passed on the whole a very good night, but coughed a good deal. Aspect tranquil, and respirations natural. She takes fair quantities of fluid nutriment. The wound is very little inflamed, and looks well. Mr. Paget has directed a sort of respirator, made of muslin four times doubled, to be fixed lightly over the mouth of the tube.

September 3rd.—The exhibition of mercury was continued up to the 30th, when rather profuse ptyalism occurred, and necessitated its suspension. The patient has suffered, since last note, from a trying cough, attended with the copious expectoration of phlegm; in other respects, however, she has progressed favourably, and there appear fair grounds for expecting that she will make a good recovery. The tube has several times been removed, but is still worn. The wound suppurates freely.

Case 2.—CHRONIC LARYNGITIS, PROBABLY WITH ULCERATION.—URGENT SYMPTOMS.—TRACHEOTOMY.—RECOVERY WITH A PERMANENT OPENING.

[Under the care of Mr. PAGET.]

The next case to which we have to allude is one of very chronic and most probably ulcerative inflammation of the larynx, occurring in a person of advanced life. Mrs. Stocker, aged 67, was admitted into Lucas Ward, January 7, 1853. She had been aphonic for two years, having at the commencement of that period lost her voice during an attack of bronchitis. The disease had, she fancied, been aggravated by an injury which she had received six months ago, in which she had fallen and struck her throat against a banister. Within two months after the fall, the breathing became difficult; and, within two months later, she began to experience pain and difficulty during deglutition, more especially just as the morsel of food was passing over the larynx. These symptoms gradually increased, until the time of her admission, when the danger of immediate death from obstructed respiration was so urgent, that Mr. Paget at once opened the trachea. The operation was performed with a scalpel; and, when the incision into the tube had been made, the rings of the latter were found to be so hard and unyielding, that it was impossible to introduce the canula. Mr. Paget accordingly cut away, without much difficulty, a portion of several rings on one side of the first opening, after which the canula was readily got in. The relief to the dyspnœa was immediate and complete; but the patient was of broken constitution and advanced age, and made only a slow recovery. On March 12, more than two months after the operation, she left the hospital, in very much improved health, but unable to breathe at all when the mouth of the tube was closed.

We have seen this patient again within the last few weeks, she having been re-admitted under Mr. Paget's care, on account of spasmodic cough and occasional difficulty in swallowing. The canula was changed; and, after remaining in the hospital a short time, she was again discharged, much relieved. She is unable to speak above a whisper, and cannot breathe when the artificial opening is covered. Respecting the practice of excising portions of the trachea, it may be remarked, that the only complaint since the operation has been of the *smallness* of the aperture. Mr. Paget believes the larynx has been involved in ulceration, and that portions of it have been destroyed, while its patency has probably been interfered with by the persistent thickening of the parts, and possibly by their cicatrization also. Most likely the canula will now have to be worn till death; but this alternative is not, as the following case will show, such a very deplorable one.

GUY'S HOSPITAL.

Case 3.—LARYNGITIS.—TRACHEOTOMY.—RECOVERY.—CONTINUOUS EMPLOYMENT OF THE CANULA FOR SIX YEARS WITHOUT INCONVENIENCE.

[Under the care of Mr. HILTON.]

Our attention was lately directed to a patient then under the care of Dr. Babington, for a slight bronchitic affection, on whom, six years previously, Mr. Hilton had performed the operation of tracheotomy. Sarah Cole, aged 34, married, a pale, cachectic-looking woman, who was in early life of very dissipated habits, and suffered much from syphilis. In 1846, she had been under care for syphilitic ulceration of the throat, and had been discharged apparently well after a short treatment. The disease, however,

relapsed, and gradually involved the larynx; and, on account of severe difficulty in breathing, she was re-admitted in July, 1847; and, within a few days of her admission, the difficulty of breathing having meanwhile increased, until suffocation appeared to be impending, Mr. Hilton had been obliged to open the trachea. The progress of the case after this operation had been very satisfactory, and the patient had left the hospital well within the month. She was, however, at that time still unable to breathe through the larynx; and the canula, fixed by means of a tape round the neck, was accordingly retained. Since that time, she had with much carelessness been exposed to all sorts of weather, and had led a life of great poverty. On several occasions she had suffered from severe colds on the chest, and had usually been obliged to apply five or six times a-year to Mr. Stevens, her medical attendant, in order to have the tube withdrawn, cleaned, and replaced. The mucous secretion of the trachea and bronchi had always escaped by the canula, and never by the mouth; indeed, beyond the fact, that a very small whiff of air could be blown through the larynx, there had been no evidence that that passage was not entirely closed. The patient had been throughout completely aphonic, and, whenever the orifice of the canula had been closed, immediately suffered from inability to breathe. The case was of unusual interest from the fact, that the larynx, probably from contraction and cicatrization, had remained impervious, and that the patient's life had thus been prolonged solely by the keeping open of an artificial canal for the ingress and egress of air. The circumstance, that the tube has been worn with so little inconvenience for so long a time, and that, too, under very unfavourable conditions, is a very important one. We are acquainted with several cases, now in occasional attendance at the hospitals, in which the canula has been worn for very lengthened periods, but none which have, in this respect, quite equalled the above. Mr. Cock has mentioned to us one, among the many on whom he has performed the operation, in which a man of middle age has retained the tube for nearly five years. His larynx has pretty well recovered itself, and he can now breathe and speak with the false opening covered; but, finding his tube an object of interest, and occasionally profitable, he is not anxious to have it removed. A patient at St. Bartholomew's Hospital, under Mr. Paget's care, has breathed through the canula for between four and five years with impunity. He is a fellow of very dissolute habits, and takes no kind of care of himself, not unfrequently getting drunk, and allowing the tube to be displaced. In all these cases, the apparatus worn consists of a curved silver canula of considerable size, and round; in its rim are holes, in order to allow tapes to be attached; and a smaller tube is fitted in its interior, in order that it may be removed and cleaned by the patient without difficulty, while the necessity for disturbing the outer one is thus avoided. To return to Mr. Hilton's patient—the case with which we began—we may state, that, after a few weeks' treatment, by means of tonics, etc., she has again returned home in good health; and, should she in future observe proper precautions, there appears no reason why her life should be shortened by her present disease.

Case 4.—MALIGNANT GROWTH FROM THE TONSIL AND PHARYNX. — IMPENDING SUFFOCATION. — TRACHEOTOMY.—RECOVERY.

[Under the care of Mr. HILTON.]

William Forster, aged 31, an unhealthy-looking man, was admitted at ten o'clock, on May 24, suffering from extreme dyspnœa. There was found to be a large tumour, occupying the whole left submaxillary region, the left half of the pharynx, and pressing closely upon the larynx. His pulse was slow, feeble, and very fluttering, countenance pale and anxious, skin cold and clammy; he was but just able to articulate a few disconnected words. The urgency of the symptoms being rapidly increasing, Mr. Hilton at once performed tracheotomy, and with almost immediate relief. Three hours afterwards the patient was asleep, and breathing comfortably, and in the evening he expressed himself as feeling "quite well." He passed a good night, and on the following day was able to communicate the history of his complaint. It appeared, that he had been admitted in September last, on account of enlargement of the left tonsil, which had then acquired the size of a hen's egg, and much impeded his swallowing. Excision was performed, and the cut surface assumed a very unhealthy appearance, and was long in healing. On microscopic examination of the removed portion, it was found to contain numerous cells resembling those characteristic of cancer. When at length cicatrisation was effected, deglutition became much more easy; and, in order to recruit his health, which was very bad, the man went down to reside at Dover, where he rapidly regained flesh and colour. Towards Christmas, however, the growth again began to increase, and, involving the submaxillary glands, projected externally in the left neck, and internally on the palate and pharynx. On May 14, 1853, he was admitted under the care of Mr. Cock, on account of great difficulty of breathing, and the opening of the trachea was contemplated. In the meantime, however, under the use of anodynes, the dyspnœa subsided, and, after a few days, he left the hospital, but had not been more than a fortnight at home before the symptoms returned, and he was obliged to again seek admission in the condition noted above. After the performance of tracheotomy, nothing unusual occurred; the larynx soon became sufficiently relieved to permit of respiration, and, when the orifice of the canula was covered, of speech also. As, however, the cause of the obstruction still remained, it was deemed best not to remove the canula, but to keep it *in situ* as a precautionary measure against the occurrence of another attack. After a few weeks, the patient left the hospital, and went into the country. He is now attending the City of London Hospital for Diseases of the Chest, as an outpatient under Mr. Hilton's care, and is taking sarsaparilla and iodide of potassium, under the influence of which great improvement in health has resulted, and the tumour has really appeared to diminish in size. He can speak tolerably well, but with a hoarse voice, and breathes comfortably by the natural passage, still retaining the tube, but keeping it covered by his neck-handkerchief. It has occasioned him no kind of inconvenience.

Case 5.—ACUTE LARYNGITIS.—URGENT DYSPNŒA.—APPARENT DEATH OF PATIENT. — TRACHEOTOMY. —ARTIFICIAL RESPIRATION.—RECOVERY.

[Under the care of Dr. ADDISON and Mr. BIRKETT.]

In the evening of Tuesday, August 23, Joseph Contrevich, a German, aged 20, was found by the police, in a street near Bishopsgate, almost dead from suffocation. It appeared that he was on his was home from the German Hospital, at Dalston, and some medicines which had been given him at that Institution were found in his pocket. The policeman immediately procured a cab, and conveyed him forthwith to St. Thomas's Hospital; but, as acute laryngitis is a "medical" disease, and as the whole of the medical beds were already occupied, the authorities of that Hospital refused to admit him. Thus far the poor fellow's search after aid had been singularly unfortunate; and while being carried the short distance from St. Thomas's to Guy's, he all but expired. At the latter, he was immediately taken in, and conveyed to a medical ward, under the care of Dr. Addison, and as the danger of suffocation appeared to be most imminent, Mr. Birkett was at one sent for, with a view to the performance of tracheotomy. In the short interval which elapsed, however, before that gentleman arrived, the extreme urgency of the symptoms had somewhat abated, and the patient was able to swallow some warm wine and water. Notwithstanding however, this improvement, his condition was still one of the greatest peril; his pulse was scarcely perceptible; face anxious; extremities cold; respiration stridulous and laboured. A consultation was held, in which Mr. Cock took part, as to the propriety of deferring the opening of the trachea in hopes that the disease might subside under other treatment. Scarcely, however, had the operation been decided on, than its performance was precipitated by a sudden aggravation of the worst symptoms. In an extreme paroxysm of dyspnœa the patient gasped for breath for a few seconds, and then fell back apparently dead. His jaw dropped, his face was black with congestion, there was no perceptible pulsation of the heart, and not the least effort at respiration. The requisite instruments being at hand, no time was lost. At two free incisions, Mr. Birkett laid bare the trachea, and an attempt to pierce it with a trocar having failed, on account of the flexibility of its rings allowing the instrument to impinge against its posterior wall, the operation was completed by the scalpel. Mr. Birkett then introduced a blunt trocar and canula into the incision; the trocar having been withdrawn, Mr. Cock immediately began artificial respiration. About a dozen efforts at the latter had been made before there was any sign of returning life; some catching attempts at inspiration were then apparent, and the pulse soon afterwards again became perceptible. Mr. Cock having desisted from his efforts, the patient gradually improved, and in a short time was breathing comfortably. After the lapse of a few hours, he might have been considered out of danger, and during the following night he slept well. Up to the present date, August 28, no treatment has been adopted beyond the exhibition of mild nutriment, with a little brandy at times. The course of improvement has been uninterrupted, and no symptoms of any moment have occurred since the operation. The tube is still in the wound. No history of syphilitic disease can be obtained from the young man, nor does his appearance countenance such a view. He states that his symptoms commenced with sore throat and loss of voice on the

day previous to his admission, and that they rapidly got worse. The very great difference between adult laryngitis and infantile croup could not be better shown than by such cases as this, which also conclusively exhibit the very local limitations of the former disease. Although it had progressed so far as to quite occlude the larynx, yet no remedies whatever have been necessary for its subdual, beyond the loss of blood involved in the operation, since which no symptoms of inflammation whatever, either local or general, have been present.

Case 6.—SUCCESSFUL TRACHEOTOMY FOR THE REMOVAL OF A FOREIGN BODY FROM THE LARYNX OF AN INFANT.

[Under the care of Mr. BIRKETT.]

About a year ago, we were much interested in observing the successful event of a case in which Mr. Birkett had performed tracheotomy for the removal of a foreign body from the larynx of an infant. The particulars of the case are very briefly as follow:—In the evening of October 7, 1852, the patient—a very robust female child, aged a year and a-half—was eating walnuts, when she was suddenly seized with violent spasmodic cough, and became blue in the face. Having vomited, she appeared a little relieved; and her parents neglected to call in medical aid until the following morning. The night was passed by the little sufferer in a condition of distressing dyspnœa; and the surgeon, who was consulted in the morning, at once recommended her removal to the hospital. At the time of admission, twenty-two hours after the accident, respiration was performed with the greatest difficulty, and each effort was attended by a laryngeal crowing sound. The extremities were almost cold, the countenance dusky, and the pulse extremely feeble. From these symptoms, there appeared little doubt but that the fragment of walnut was still lodged in the larynx; and, having failed in his attempt to remove it from above, Mr. Birkett immediately proceeded to perform tracheotomy. Having without difficulty exposed the trachea, and divided four or five of its upper rings, a pair of small forceps were introduced, and passed upwards towards the larynx, without, however, any success in detecting the foreign body. A curved probe passed upwards in the same manner having likewise failed, and the patient appearing much exhausted, Mr. Birkett determined not to persist in his attempt, as the urgent symptoms were now relieved, and it was not improbable that the portion of walnut might come away spontaneously. A small silver canula was accordingly fixed in the wound. Very shortly afterwards, the child became quiet, and began to breathe comfortably; and she continued through the night in a satisfactory state. On the following morning, Mr. Birkett removed the tube, and made several attempts to push the piece of nut upwards, by means of the end of a flexible catheter; they, however, again failed, and the tube had to be replaced. On the next day, October 10, Mr. Birkett again attempted, with the catheter introduced through the wound, to push the impacted body upwards, and at length succeeded; the moment, however, that the piece of nut was extricated, the child swallowed it, so that it could not be obtained for inspection. Just as the instrument was passing through the glottis, Mr. Birkett had, however, distinctly seen the fragment, enveloped in mucus, in the infant's mouth. On withdrawing the catheter, the respiration was found to be so comfortable, that it was not deemed necessary to re-insert the tracheal canula, but the wound was allowed to remain open. For a few days subsequent to this, the child suffered from bronchitic inflammation, which was, however, readily subdued; and, near the end of the third week, she was discharged from the hospital quite well, the wound also being soundly healed. We must not omit to state, that, on the day following the successful attempt to extricate it, the bit of walnut was found to have passed undigested by the bowels.

ST. THOMAS'S HOSPITAL.

CHRONIC LARYNGITIS.—URGENT DYSPNŒA. TRACHEOTOMY.—RECOVERY, WITH CLOSURE OF THE WOUND.

[Under the care of Dr. BARKER and Mr. LE GROS CLARKE.]

Joseph West, aged 49, an excavator, was admitted February 8, 1853. The following history of his complaint was obtained from him after he had been recovered by the operation by Mr. Horley, one of Dr. Barker's clinical clerks; to whom we are indebted for the notes. About fourteen months back, he had a severe cold, with sore throat and difficulty of breathing; this lasted through the winter, but only troubled him occasionally. In the beginning of October last, he had hoarseness and sore throat, and about the middle of the month, extreme dyspnœa; these were for a time relieved by bleeding, blisters to the throat, &c.; he has, however, been subject to occasional attacks ever since. In his work he had lately been much exposed to wet, but for the last five weeks he had been confined to the house by constant dyspnœa, loss of voice, and sense of obstruction in the throat. He had been intemperate in the use of beer, of which, when at work, he usually drank large quantities. Five years ago he had suffered from syphilis, but it appeared to have been well cured, and no constitutional symptoms had since shown themselves.

Feb. 8, 12 noon.—He is breathing with extreme difficulty, and inspiration is accomplished with a wheezing, almost crowing noise. All the muscles of respiration are being very powerfully exerted, and the patient is unable to lie down, excepting with the head much raised. The chest is very imperfectly expanded; the aspect is pinched and anxious, and the face of a deep, leaden hue; pulse 96, irregular. Cupping on the chest, to the amount of 12 oz., having been performed, some relief was obtained; shortly afterwards, however, the dyspnœa again increased, and his distress became extreme. At 1·30 the peril of suffocation appeared so imminent, thas Dr. Barker was induced to request the immediate attendance of Mr. Le Gros Clarke, in order to perform tracheotomy. This operation having been accordingly performed, in the ordinary manner, and with all convenient expedition, the relief afforded by it was most signal. No sooner had the air gained free access to the chest, than the altered expression of the patient, the restoration of a healthy colour, and the cessation of the spasmodic gasping for breath, evinced the opportuneness of the remedy. After a short time, the breathing had become almost tranquil, and the pulse much more regular.

Vespere, 7 p.m.—There is a good deal of subcutaneous emphysema over the front of the chest and neck, and up the right side of the face. The breathing is tranquil, and but very little quickened; the pulse 100; full and regular. Much mucus has passed by the tube, and some also has been expectorated by the mouth. He makes signs that he has headache and feels sick.

℞ Hydr. c. cret. gr. v.; antim. pot.-tart. gr. ¼, tertiis horis.

9th.—Has been rather restless in the night; still expectorates rather copiously, and complains of headache; in all other respects tolerably comfortable.

Rep. pil. sine. antim. Ung. hydr. fort. 3j. in axillis infracand. bis quotidie.

10th.—Improving. The expectoration is diminished, and his expression is less anxious. When fluids are swallowed they cause much cough, and occasionally a few drops are spirted through the canula. This occurrence has been noticed repeatedly since the operation. The external emphysema is diminishing, but it still prevents any stethoscopic examination of the chest being instituted; the latter, however, appears to be fully expanded, and its walls rise and fall well. Pt.

11th.—The tube was this morning removed from the wound, and it was found that he could breathe easily without it; respiration is, however, still accelerated; the cough is troublesome, and the expectoration free. If the tracheal wound be covered, the patient can speak, but his voice amounts to little more than a harsh whisper.

12th.—The tube has not been replaced, and the breathing, although still quicker than natural, is easy, and unattended with pain; it can be accomplished tolerably well even when the wound is closed, but is then attended by a harsh laryngeal sound. Pulse 93, soft, and of good power.

13th.—The wound is, to-day, kept covered by lint, and the respiration is tranquil and easy; the voice is louder and less harsh. The mouth being slightly sore, the mercurial inunction is suspended, and the pills are to be taken only every six hours.

14th.—Excepting that the mouth is very sore, he feels better, and is comfortable in every respect; the harshness attending the respiration and voice is much diminished.

Rep. pil. bis die sumend.

From the last date the patient made very favourable progress. On the 17th, the wound in the trachea had closed, and the exhibition of mercury was shortly afterwards discontinued. On the 5th of March he caught cold from being out in the square, and had an attack of hoarseness, with pain in the throat; it was, however, much relieved by the immediate application of leeches, and had disappeared in the course of a few days. He was discharged, quite well, in every respect, on the 21st of March.

PULSATING VARIX OVER THE BRIDGE OF THE NOSE.—OPERATION.—CURE.

[Under the care of Mr. SOLLY.]

The disease of the vascular system to which we have here to allude, differs materially from that exemplified by the case related last week, (*Medical Times and Gazette* for September 3), and, indeed, from most, if not all, of the various forms

of pulsating tumour which have been described by authors. Approaching, perhaps, the nearest to that known as varicose aneurism, it yet had, in the circumstances that there was no history of a wounded artery; that the cavity communicated, apparently, not with one only, but with several arterial trunks; and that it was situated in parts in which no large vessels exist, well-marked features of distinction from that affection. To avoid, however, needless repetition, we will describe its characters in describing a case. Two years ago an example of it accidentally came under our notice at the Hospital for Diseases of the Skin, where the subject of it was under care on account of an obstinate eczema. He was a robust young man, and had for nearly ten years known of the existence of a beating swelling over his left eyebrow, which had increased for several years at first, but had then become quite stationary. It was a prominent, soft, feebly pulsating tumour, the size of a bantam's egg, of a nearly round outline, and extending from beneath the eyebrow, half way up the forehead. By gentle pressure it could easily be emptied, but immediately refilled when the hand was removed: when empty it was quite collapsed, and felt like a thin-walled cyst. The refilling appeared to be accomplished chiefly from two or three points along its lower border, and by firm pressure at these parts its pulsations might be very much diminished in force, but not completely arrested. The skin over it was thin and stretched, but not in any way diseased, and the blue tint of the blood could scarcely be said to be seen through it. In proof that the blood was contained in a single thin-walled cyst, a portion of the most prominent part might be taken between the finger and thumb, when nothing could be felt to intervene excepting the skin, and what might have been supposed to be the attenuated coat of a vein; on deep perpendicular pressure in any part of the tumour the finger at once impinged upon the subjacent bone. When covered by the palm of the hand, a feeble, tremulous thrill was felt, and on listening with a stethoscope a faint bruit was heard synchronous with the pulsations. The man stated, that for some years it had not increased in size, that it had never bled, and that, excepting a disagreeable feeling of tension when he held his head down, it had caused him no inconvenience. He was fully determined not to submit to any treatment, and Mr. Startin and Mr. M'Whinnie both concurred in the opinion, that, considering the circumstances, there did not appear to be any reason for advising him to do so. When the skin disease got well we lost sight of the patient, and have not since seen him.

A second and yet more interesting example of probably the same kind of tumour has lately been in St. Thomas's Hospital, and has been operated on with complete success by Mr. Solly. The following are the particulars concerning it:—

Mary Ann Eastman, aged 22, a pallid but healthy young woman, was admitted February 16, 1853. The bridge of her nose, naturally a little sunken, was occupied by a soft pulsating tumour, which extended upwards a little way into the forehead, downwards to the middle of the nose, and on each side to the angle of the eye. It was altogether, perhaps, about as large as a walnut, and projected forwards a little above the level of the forehead, and not quite up to that of the tip of the nose. The skin over it was nowise diseased; but, being very thin, it readily transmitted a slight purplish hue from the blood beneath. The pulsations were distinct in all parts, but much stronger at the lower angles on each side than elsewhere; a tremulous thrill was felt, but it was not often that any bruit could be distinguished on auscultation. To the fingers it felt in all parts as if it consisted of a single cavity; and, by very gentle pressure, it might easily be emptied of its contents, when the bone beneath was felt to be roughened by irregular absorption. The patient stated, that in infancy and childhood she had been quite free from swelling on the part now affected, and that it had commenced to form about six years ago, "as a large vein beneath the skin." It was still rapidly increasing in size; and, besides the deformity it occasioned, had caused much headache, and, if the head were held down, at once became tense and full, feeling as if it would burst. On firm pressure over the course of the angular arteries, at each lower corner of the tumour, the strength of its pulsations was much diminished.

On Saturday, February 28, Mr. Solly performed an operation on the tumour, which consisted in passing horizontally through it two long needles, one at its upper and the other at its lower part, each being made to pass as close as possible to the bone, with the hope of including the posterior wall of the cyst. A twisted suture was then passed, with tolerable tightness, over the projecting ends of each needle, which was left to ulcerate out. The operation did not involve much hæmorrhage. It was hoped that a large portion of the cyst would be obliterated, and that the rest being divided into several compartments, congulation of the contained blood would take place. Such results, however, did not follow; the needles came away in about ten days; and, excepting that the size of the tumour was a little diminished by the contraction of the cicatrices, it remained as before the operation, and pulsated quite as strongly. Under these circumstances, Mr. Solly determined to adopt a more radical procedure, viz., to lay open the cyst itself, and to ligature such vessels as were found to open themselves into it. About a month after the former operation, accordingly, the patient was placed under the influence of chloroform, and a free incision was made vertically into the tumour, when a most profuse hæmorrhage of mixed venous and arterial blood took place. This having been arrested by means of pressure in various directions, but more especially below, Mr. Solly proceeded to tie up several portions of the cyst from which the streams of blood seemed more particularly to issue, as it was not found practicable to secure the mouths of any isolated trunks. By about five ligatures the bleeding orifices were completely commanded, and the whole cyst effectually puckered up. The patient was returned to bed, and a compress placed over the wound.

This operation was quite successful; after a moderate suppuration, the ligatures came away, and the wound healed; the tumour was completely obliterated, and, in its stead, an irregular cicatrix remained. The patient left the hospital well about six weeks afterwards.

BLOOMSBURY DISPENSARY.

CHRONIC ABSCESSES IN THE THIGH.

[Under the care of Mr. GEORGE L. COOPER, F.R.C.S.E.]

Elizabeth Pratt, aged 20, was admitted under my care as a patient of the Bloomsbury Dispensary, February 16, 1853, with two tumours, distinct and separate from each other in size; one about the dimensions of an egg, the other of an orange, situated on the upper and outer third of the right thigh; their feel is that of a solid and fatty character, quite free from pain, and produce no œdema of the limb. Fluctuation is quite indistinct, and they appear to be movable from their attachments. Her health is quite sound, catamenia regular, appetite good, and bowels open; she complains of a slight cough, but is not the subject of any pulmonary disease, nor has she suffered from any strumous symptoms. She is of a cheerful disposition, and has resided from childhood on the Continent. Being superior to the ordinary class of persons admitted at charitable institutions, I have received her at my own residence as a morning patient, and taken much interest in her case. At the same time, with my full concurrence, she has obtained other opinions, all of which, I am happy to say, accorded with that of my own. Her own history of the case, which I have subsequently obtained, is as follows:—At the age of 5 years, when residing in Calais, during her passage over a wooden bridge, some of the planks partially gave way, through which she was suspended, and much hurt in this particular situation. The skin was much grazed, and the thigh generally bruised. It apparently got well, with the exception of a little fulness remaining in this region. At the age of 14 years, now nine years since the accident, she used to complain of a pricking sensation, and could not lie with comfort on the right side. There was no pain in the knee, or in the hip-joint, but some induration in the thigh. These symptoms passed unobserved until three years afterwards, when, walking in the Rue St. Honoré, Paris, she was struck in the same part by a large barrel, in consequence of a coalition of vehicles at that moment, since which time the two swellings have gradually increased in size, or, in her own words, have appeared to grow.

Ordered, on her admission, tinct. iodinæ quotidie applicand.

℞ Infus. cascar. ʒvii.; scillæ oxymel. ʒi. M., duo cochl. ampl. ter die sumend.

25th.—Suspecting there might be fluid in the cysts, ordered empl. lyttæ ad tumor.

℞ Ung. pot. iodid. ʒiij.; ung. hydr. ʒj. F. ung. pro applicat. postea.

℞ Ferri syr. iodid. ʒj.; aquæ destill. ʒvij. M., duo cochl. ampl. ter die sumend.

March 4.—Pot. iodid. ʒss.; inf. cascar. ʒviij. M. ter die ii. cochl. ampl.; tinct. iodinæ pro applicatione.

24th.—Observing no diminution in the size of these tumours, I recommended her to take Mr. Erichsen's opinion, who fully accorded with me in the treatment, and advised a removal of them. Accordingly, on the 26th, I determined to dissect them out, considering them to be encysted. Chloroform having been administered to her, and the usual incisions having been made, I arrived at the cyst of the largest, which, being exceedingly dense and hard, induced me to puncture it, to ascertain the contents, when, greatly to my surprise, and to those gentlemen who were present, a considerable gush of pus took place, showing it to be an old chronic abscess. On opening the second, our expectations were

then, of course, realised, it being similar to the former. A portion of the cyst I then cut out, which was enormously thick and firm. The subsequent treatment was that usually adopted in these cases, since which both the cavities have filled up, and recovery has followed.

In considering the history of this interesting case, we may date its origin to so long a period as fifteen years ago, a circumstance remarkable, in showing how slow and gradual these abscesses develope themselves; at the same time how apparently harmless to the neighbouring structures and to the general health of the individual they often seem to be; and, as a practical lesson, how easy it is to be deceived by the density of the cyst, and the elasticity of the muscles supporting and surrounding it.

THE STUDENT'S NUMBER

for the Session 1853-4 *will be published on the* 17*th. It has been found impossible to obtain the requisite information from the various Schools to enable us to publish it at an earlier period.*

Prospectuses and Advertisements should be forwarded immediately to Mr. James Lucas, 46, *Princes-street, Soho.*

Medical Times & Gazette.

SATURDAY, SEPTEMBER 10, 1853.

MEDICAL EDUCATION IN INDIA.

We have just received the Annual Report of the Grant Medical College in Bombay, which has now reached the seventh year of its existence. The perusal of this Report has given us very great satisfaction, exhibiting, as it does, the establishment of Medical Education in the great Asiatic Continent, and also showing, that the system of instruction is based upon sound principles. When we reflect upon the prejudices which existed, and still exist, among the Hindoos, upon the subject of dissection, and the consequent ignorance of any just principles of medicine or surgery among that people, we cannot but regard the introduction of the European methods of teaching and practising our Profession as likely to lead to the most happy results.

We learn, too, from the perusal of the pages before us, that many improvements in the system of Medical Education, for which we ourselves have long contended, have been adopted in the Medical Schools of Bengal and Bombay; and we confess to a feeling of something like mortification at the unfavourable contrast presented by the activity and zeal displayed by the Medical teachers in our Indian possessions, when compared with the defective arrangements still tolerated at home.

But as we do not wish to praise unduly that which is distant, and to depreciate indiscriminately what is near, we think it only fair to admit that under a new system, such as exists at present in India, there is a fairer opportunity for the introduction of new experiments than in a country where certain plans of teaching have become sanctioned by long usage. Again, the number of pupils at the Indian schools is hitherto very limited, and it is obviously much more easy to exercise a stringent supervision over a few, than to regulate satisfactorily the educational career of many hundreds. Another point which may be adverted to, is the fact, that the Medical Schools in India are supported by the Government, and that only one exists in each Presidency; while at home, as is well known, the Medical Schools are supported by their own resources, and labour under the disadvantages of competition,—a wholesome principle as applied to trades and manufactures, but occasionally productive of evil in scientific undertakings, in which the plan of underselling and over-puffing sometimes damages, very seriously, the cause of education.

With these preliminary observations and reservations, we may state that the methods of instruction and examination pursued at the Grant Colleges at Bombay are very efficient, and reflect very great credit upon those who conduct them.

"It will," says Dr. Morehead, the Principal of the Grant College, "be universallly admitted, that no system of medical education can pretend to efficiency or completeness which does not include, as one of its essential conditions, a systematic and carefully conducted plan of medical and surgical clinical instruction; and that no plan can be so characterised which does not require from each student at least two years' regular and attentive attendance in well-arranged medical and surgical clinical wards, conducted by competent and painstaking clinical instructors, in an hospital sufficiently large to command a varied selection of medical and surgical diseases. Each student should, moreover, for a certain period, be employed in the careful and assiduous performance of the duties of clinical clerk and surgical dresser. But it is not sufficient that well-arranged systems of instruction be laid down for medical schools. The protection of the community, and the character of the Profession, require that the test of examination should be also applied; and it may be very safely affirmed, that no examination which has in view to test ability to practise medicine and surgery, can be satisfactory or adequate, unless it be conducted at the bedside of the sick in the clinical ward."

In accordance with these views, we find, that the Indian Medical students are subjected to a thorough course of Clinical instruction; the Medical and Surgical wards are visited every morning; and, to enforce regularity of attendance, the roll-call is put in requisition at the commencement of every visit. The attention of the students is maintained by questioning them, without any reference to order, on the symptoms, pathology, or treatment of the case under consideration. In addition to this daily Clinical instruction in the hospital, regular lectures are delivered in the College, on the cases under treatment in the wards; and in the Surgical department, the minor operations of surgery are performed by the students, and the after-treatment of fractures is also entrusted to them, under the superintendence of the Surgeons. The system pursued in granting diplomas and qualifications is also worthy of the highest commendation. Examinations are continually held in all the departments of Medical science; and, after three years, a general examination is held upon all the subjects; after which trial, the student receives a certificate of proficiency. After a further period of study, he is examined again, not by his teachers, but by a Board of Examiners unconnected with the College where he was educated; and, if approved, he finally receives his diploma.

There are a few circumstances worthy of remark, in comparing the system of Medical instruction pursued in India with that followed in our own land. In the first place it is observed that the Indian students are very imperfectly acquainted with the elementary branches of knowledge previously to commencing the study of medicine, being inferior in this respect to the students of our own country. Then, with regard to Clinical medicine, there is a peculiarity in the hospital practice of India, which renders Clinical instruction, literally so called, far more easy to be imparted than elsewhere, for, as the patients are unacquainted for the most part with the English language, remarks may be freely made at the bedside upon their cases and their treatment, which would be injudicious and improper, in a language with which they were familiar. It is also remarked by Dr. Morehead, that the

Indian student, unlike the British, evinces but little spirit of self-education after he has received his diploma; and that the Indian Graduate of Medicine is like the Indian student of every other subject, impressed with the idea, that when he leaves school he has nothing else to learn." Hence it is necessary in India, far more than in England, that the period devoted to Medical study should be employed in the best possible manner.

Before concluding, we may express our high gratification on finding that the sentiments expressed in our pages, on the subject of Clinical Medicine, have been re-echoed from the Medical Teachers of India, and that they are now pursuing the plans which we mentioned with approbation, when treating of the examinations at the University of London. In Dr. Morehead's Report, a quotation is given from a leading article of this Journal, in which we applauded the plan lately adopted by the Medical Examiners of the University of London, in taking the candidates for degrees to the bedside of the patients, and requiring them to explain the diagnosis and treatment of the cases. We were not aware, when that article was written, that the same system, on a larger scale, was already in operation in the Medical Schools of Bengal and Bombay, or we should have noticed, in due terms of approbation, so praiseworthy a feature in the Medical Education of India.

THE CHOLERA AND THE BOARD OF HEALTH.

In 1846, Mr. Edwin Chadwick and Dr. Southwood Smith were appointed, with three others, to form a Metropolitan Sanitary Commission, "to inquire whether any and what special means may be requisite for the Improvement of the Health of the Metropolis." In 1847, the Commission made a "First Report" to Her Majesty, and stated (p. 48):—

"That typhus is, to a great extent, preventible; and we have every reason to believe that the spread of cholera is preventible by the like means, namely, by general and combined sanitary arrangements. That these arrangements, instead of being incidental and collateral to other measures, are paramount, and principal, and effective, not only against cholera, but also against other epidemics. That on an examination of the actual state of the back streets, lanes, courts, and alleys, of the Metropolis, it is found that in general little or no improvement has taken place in their sanitary condition since the prevalence of cholera in 1832; and that were this disease again to break out in the present state of these localities, there is no reasonable ground to suppose that the pestilence would not spread as extensively, and prove as fatal, as on its former visitation."

This was in 1847. By November, 1849, however, London had suffered a mortality, from cholera alone, of 14,588; and during the whole period of the prevalence of the disease, the Registrar-General's returns were filled with details of the horrible sanitary condition of the Metropolis generally. In the year the Report of the Commission was delivered, there had been timely warnings of the approach of the enemy. In June, 1847, it was commiting its ravages at Odessa, and in one month there had been 824 cases; while, by July, 1848, there had been at St. Petersburg 17,742 cases and 10,138 deaths; and at Moscow, 9754 cases and 4309 deaths. Yet "the filth of London was permitted to accumulate and ferment in its 300,000 cesspools; and the foul tidal ditches of Bermondsey, Shoreditch, and Lambeth, still continued to pollute the surrounding atmosphere." Fourteen thousand five hundred human beings in London fell victims to the scourge, notwithstanding the experience and the resolves of Mr. Chadwick and of Dr. Smith, and their assurances that sanitary arrangements were effective against cholera. Only one consolation was left to the people of England. They trusted that from the dread experience of the past, the Board would set vigorously to work, and establish effectual sanitary arrangements. Such was either the hope, the opinion, or the cruel satire of the Registrar-General. In the first week of September, 1849, occurred the highest number of deaths from cholera in London, and then the people of England assembled in their churches to pray that the plague might be stayed. On this the Registrar-General remarks:—

"The prayer for the public health in England is a solemn pledge, not only that all the powers of the State, but that the local authorities, the clergy, the educated classes, who form and govern opinion,—all the multitudes who join in that prayer,—will employ the means which, with God's blessing, will insure its accomplishment, and save the people from the ravages of the cholera and other epidemics. Thousands of the houses of London have now no pure water; in some places, where the cholera is most fatal, the inhabitants are driven to use the polluted waters of tidal sewers for culinary and household purposes. This state of things will exist no longer; the first engineers of the country will be employed to lay the rivers under contribution, and in every house there will be a spring of fresh, filtered, living water; for circulating water is the life-blood of a city. The bodies of the dead, 'sown in corruption,' will be decently interred in distant grounds and sacred groves, where their flesh may be resolved into its elements, without tainting the air and destroying their brothers. The carnage of slaughtered animals will no longer be suffered to infect the air of cities. The sinks and sewers of London,—black, bubbling lakes and rivers under-ground, extending from the Thames to the house-drains and cesspools,—send up damps into dwellings nightly, travel by us in the streets daily, and through a thousand mouths, by the way and river-side, pour their poisonous incense on the passengers for ever; these emanations, if not drawn through and decomposed by fire, will no longer open under our faces, but ascend with the smoke over the houses, and other matters be carried solid or in streams of water, over distant fields."

Four years have passed over us since that period and that prayer, and we venture to assert, that if the Registrar-General had been gifted with the spirit of prophecy, he could not have uttered a more bitter satire upon the Board of Health. Long before the cholera touched our shores, the Board professed to know what was effectual against it; but did nothing, or, in some instances, did worse than nothing. The cholera came again, and found precisely the conditions which had been protested against before. Much had been said about graveyards, and certain powers were obtained to do something; yet the matter was so egregiously bungled, that in the end the Board found they had not the power to do anything, and the year 1849 ended with 14,500 deaths from cholera.

But there have been indications in Europe for some time, that the cholera,—for which, since 1847, the Board have known an "effectual," "paramount," and "principal" preventive,—may, perhaps, again approach our shores; nay, it is considered by some, that it has actually arrived. The Registrar General says (August 27): "Now our hopes that England may escape are less sanguine;" and we shall now inquire how far the hope of escape may be entertained, or cast aside, so far as the Board is concerned, by our experience of its past doings.

Let us take up the Registrar-General's Weekly Returns for August 13, 20, and 27, and Sept. 3. First, in the Return for August 13, we find a death registered "in South St. Giles-in-the-fields, at 34, Parker-street, on August 7, the son of a bricklayer, aged 15 months, 'diarrhœa (2 weeks).'" The Registrar remarks:—

"This is the second death from the same cause in this house within the last two months. The informants in both cases complained most bitterly of the horrible smells arising

from the sausage manufactory next door, where all sorts of domestic animals are kept. As this is the third complaint I have received respecting this place, I visited it yesterday, but did not perceive any very remarkably bad smell, although there certainly was a something not very fragrant in the atmosphere. The informant says, that the very bad smells are not constant, but occur principally in the morning when the various processes are in activity. I have a little patient in the same house suffering from a low fever."

And, again, Sept. 3, another death (the third) in the same house and in the same family.

"Another child, aged 6 months, died at 41, Parker-street, on August 9, of 'diarrhœa (9 days),' and another, on August 4, of the same complaint, at 24, Great Wild-street, in the same sub-district."

Now, we refer back to the returns for 1849, and we find recorded as to this place, that in September of that year there had been in this street 3 deaths at No. 51,—1 at 52, and another where the number of the house does not appear, and also that the Registrar then complained of the unwholesomeness of the whole locality.

Again, August 20, 1853:—

"In Waterloo sub-district (1st part), Lambeth, at 6, Isabella-place, on 12th August, the daughter of a labourer, aged 2 months, died of 'diarrhœa (7 days).' The Registrar writes as follows:—'This filthy hole (Isabella-place, *Broad-wall*) is at all times rife with disease and death. My only surprise is that any human beings can exist in such an atmosphere; yet every one of the 7 or 8 hovels it contains, some of 2, others of 4 rooms, has a family in each room. There is neither air, light, nor ventilation of any kind. I do not register, probably, one-fifth of the fatal cases originating in this place, as many persons are removed to the workhouse or Fever Hospital, and are registered there. My return of this week is the largest in my sub-district since the period of cholera. Fever and diarrhœa are increasing.'"

And in 1849, the same Registrar says of this place (Broadwall):—

"During the week there has been a great increase in the deaths from cholera. About half the cases have occurred in the vicinity of Broadwall, Eaton-street, Whitehorse-street, Wootton-street, etc.,—places more or less subject to effluvia from bad drainage. The total deaths are six times the average."

We now come to the return for August 27, 1853, where 18 deaths from cholera are registered, and compare the state of things then, and in 1849. On August 22, 1853, there is 1 death, "infantile cholera," at 9, Nag's-head-court, Whitecross-street, a filthy, low locality; and in 1849, on Aug. 11, there was also a death from cholera at No. 4 in the same court.

On Aug. 20, 1853, there was a death from "cholera spasmodica" at 9, St. Oswald's-place, Lambeth, and the informant says "that they have no drainage (in 1853) beyond that into a cesspool, and that in rainy weather there is a most offensive effluvium." In July and September, 1849, there were 3 cases of cholera in the same place.

On August 22, there was a case of cholera at 37, Princes-square, St. George's in the East. At the Coroner's Inquest, the Jury appended to their verdict—

"That the death was probably caused by the fetid and noxious effluvia arising from the foul water daily obliged to be pumped from a cesspool in Mr. Gough's house, where deceased was a servant, and which was poured into the surface channel of the street, and stated to be of a most nauseous and offensive character, there appearing to be no other drainage or sewerage in the square."

And, on September 21, 1849, there was also a death from cholera at No. 21 of this same square.

August 21, 1853, at 189, Fleet-street, there was a death from infantile cholera. From June to September of 1849, there had been deaths from cholera at Nos. 48, 100, 116, 139, 147, 152 (2), and 164, and 1 at Bolt-court; and the Registrar then stated, that there was, in the neighbourhood of St. Bride's, excessive want of drainage, and accumulation of filth.

August 25, 1853, a case of English cholera at 113, Fetter-lane. In 1849, there were deaths at Nos. 13 (2), 43, 84, 94, and 110.

August 23, 1853, a death from cholera infantum at Turner's-yard, *George-street*, Chelsea. In 1849, there were 6 deaths at this place.

August 26, 1853, a death at 240, Evelyn-street, St. Paul's, Deptford. 1849, a death at 84, same place.

August 27, 1853, a death at 159, High-street, Woolwich. 1849, 3 deaths at No. 50, and 1 at 138.

August 24, 1853, at 135, Kingsland-road, a death from "diarrhœa, typhoid fever, exhaustion." The Registrar adds:—"Adjoining this house there are heaps of raw bones belonging to a marine store dealer, carrying on a very large business not at all suitable to the neighbourhood. The house is very much confined at the back, but the stench of the bones is very noxious, and they sometimes lay there so long that the steam rises from them as from a dung-heap. This is the second death in the house from the same cause." In October, 1849, the experience of this neighbourhood was, that about this same spot there had been no less than 14 deaths from cholera, and the Registrar then said, speaking of a death there—"this is from the same street where the cholera was so fatal to so many in August last. My informant tells me *nothing has been done* as regards drainage, or even whitewashing the interior of the houses, which are in a most filthy state."

We must cite one other instance before concluding:—

August 26, 1853, at 18, *Quaker-street*, Spitalfields, a death from English cholera, "accelerated by a bad smell from the back of the house. The privy is close to the back room, which is unfit to live in from the effluvia." This being the condition of things in 1853, how was it in 1849? Thus:—

Sept. 1.—1	death	at No. 2,	*Quaker-street*,	Spitalfields.
,, 1	,,	17,	*Quaker-street*,	,,
,, 1	,,	12,	*Quaker-street*,	,,
,, 1	,,		*Crown-court*,	,,
,, 1	,,	11,	*Quaker-street*,	,,
Sept. 22.—1	,,		*Crown-court*,	,,
Oct. 6.—2	,,	10,	*Quaker-street*,	,,
,, 1	,,	3,	*Quaker-street*,	,,
,, 1	,,	6,	*Quaker-street*,	,,
Oct. 13.—1	,,	10,	*Quaker-street*,	,,
,, 20.—1	,,	10,	*Quaker-street*,	,,

After such a record as this, we ask:—Of what avail was the evidence collected in 1847, at the public expense?—of what avail the announcement of the Board, that sanitary arrangements would be effective against cholera?—of what avail their knowledge, in 1847, that "no sanitary improvement had taken place in London since the scourge of 1832, and that if the disease broke out again, it would spread as extensively, and prove as fatal, as on its former visitation?"—of what avail their actual experience that in 1849 it did so spread, and that it proved more fatal than in 1832?—of what avail that the deaths of 14,500 human beings cried aloud for the practical application of the sanitary resolves of 1847?—and of what avail that, in 1849, the dirt and the ditches, the cesspools, the sewers, and all the sinks of putridity and corruption, were marked out and laid down, as on a chart, by the Registrar-General, for the especial purpose of assisting the Board of Health in arranging preventive sanitary measures?

Our experience of Boards of Health, "from the beginning," has never been very delightful. We bear in mind the first Board of Health, doing nothing for 125*l.* paid

to each member from the public purse, except recommending cajeput oil for the cure of cholera!

It is a melancholy reflection, that a Board which has had the health of the greatest nation on earth under their charge —a charge which, if duly attended to, on their own professed principles in 1847, would have entitled them to a Nation's gratitude,—we say, it is a melancholy thought, that next year they are to retire from what might have been that high position, not only without deserving or obtaining the gratitude of any portion of the community, but amid the universal cheering of the representatives of the people, at the downfall of a useless, cumbersome, and inefficient body. Let us hope, however, that, when they are at length obliged to retire from their posts, they may not be quite so callous as to forget what they *did* for Croydon, and what they *left undone* for the inhabitants of Jacob's Island, of Quaker-street, Spitalfields, and hundreds of similar spots in a Metropolis whose health they were paid to watch over.

REVIEWS.

A Manual of Materia Medica and Therapeutics; including the Preparations of the Pharmacopœias of London, Edinburgh, and Dublin, with many New Medicines. By J. Forbes Royle, M.D., F.R.S. Second Edition. London. 1853. 8vo. Pp. 801.

This edition of one of Mr. Churchill's series of Manuals is really a new edition, as all the formulæ have been revised according to the new editions of the London and Dublin Pharmacopœias. In this labour, and in the revision of the chemical formulæ, the author has been assisted by Mr. F. W. Headland, who has also contributed a valuable tabular arrangement of the mineral materia medica, and various other additions. The work is already so well known, that we need not say more than that it is the cheapest and most portable work on the subject. The woodcuts are beautifully executed, the printing perfect.

Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. Revised to 1853. By G. J. Guthrie, F.R.S. Fifth Edition. London. 1853. 8vo. Pp. 603.

Many of the lectures of which this work is composed have been published separately at different times, and are so well known, that we need not say more than that they are here collected in a convenient and portable form, and that the author has thoroughly revised his materials, and has not been content with teaching what he learned in the war from 1808 to 1815, but has added the results of the subsequent experience of others in more recent Continental disturbances, and in the Holstein war, thus producing a work which we can safely and strongly recommend to the careful perusal of naval and military surgeons.

The Invalid's Own Book; a Collection of Recipes from Various Books and Various Countries. By the Honourable Lady Cust. London. 1853. 8vo. Pp. 144.

This is an admirable collection of recipes for preparing a great variety of drinks, gruels, jellies, puddings, soups, syrups, cordials, pastry, etc., for the use of invalids, with directions for the cooking of fish and meats. It will not only be found useful to the friends of invalids, but to the medical man, who is often at a loss when called upon to suggest something which may suit the capricious appetite of a patient without proving injurious.

Habit, Physiologically Considered. A Lecture Delivered at the Bristol Literary and Philosophical Institution. By John Addington Symonds, M.D., Consulting Physician to the Bristol General Hospital. Pp. 28. London. 1853.

This essay has already been published in the pages of our Contemporary, the *Psychological Journal;* but its merits are quite sufficient to entitle it to appear in a separate form. Although addressed to a mixed audience, it is based upon principles strictly scientific, and the popular illustrations justify very fully the premises laid down by the author. The subject of table-moving is explained in an appendix; and we are glad to find that so able a writer as Dr. Symonds coincides in opinion with the views expressed upon that subject in our columns some months since.

The Domestic Medical and Surgical Guide for the Nursery, the Cottage, and the Bush, etc., etc. Written at the Request of Mrs. Chisholm. By Jabez Hogg, M.R.C.S., etc. Second Edition. London. 1853. 8vo. Pp. 156.

The author has attempted the very difficult task of writing popularly upon professional subjects; and, if he has not entirely succeeded, it is not from want of good intention. His "Apothecaries' Shop" for private families is far too extensive, and, in all the directions for treatment, too little is said of natural treatment, and too much about drugging. The treatment is altogether too heroic. The emigrant, or family man, in case of pleurisy for instance, is told to "bleed from the arm as much as the person can bear, or until the pain is relieved; then give a dose of tartar emetic or antimonial wine, followed by five grains of calomel," and so on.—P. 106. The mother is told to give her new-born babe "half a teaspoonful of castor-oil once or twice."—P. 99. The following extraordinary direction is given as to cholera, the italics being the author's:—"Remember this, *never move the patient from the apartment where seized by the disease*, as, from experience, we know 99 cases out of 100 are then followed by death."—P. 78. We are told of *black spots on the face.* "These, when examined by a microscope, are seen to be little worms."—P. 69.

Having noticed these and sundry other similar defects in glancing through this book, we cannot recommend it, although it contains much useful information.

On the Development of Military Offences in Camp and Quarters. By Frederick Roberts, Staff-Surgeon. Pp. 34. Chatham. 1853.

In this pamphlet the author considers the various circumstances which induce the commission of crimes among the soldiers of the British army, and observes very truly, that the punishments inflicted upon delinquents are seldom found to diminish crime, while they cause enormous expense to the nation, and impair very materially the numerical force of the military body. Thus it appears, according to the calculations of Mr. Roberts, that "out of a force of 140,000 men, about the strength of the English army in 1849, 4000 are to be daily deducted on account of crimes; and if we estimate each prisoner to cost 30*l.* annually, on account of food and raiment, and including expenses of prison establishments, salaries, etc., (underrated, were the interest of money laid out in building prisons taken into consideration,) 3000 prisoners would cost the Government 90,000*l.*, and the army loses their services, as well as those of the 1000 deserters uncaptured."—P. 4. The remedy for this state of things is to be found, according to Mr. Roberts, in improving the physical and moral condition of soldiers, and in the adoption of a system of discipline, which, while it is sufficiently strict, is not unnecessarily severe. In proof of the position, that the increase of physical comfort and the higher moral condition of the troops tend to diminish crime, it is stated, that, in the cavalry, artillery, and sappers and miners, who are comparatively better educated, and enjoy better pay, the number of punishable offences is much smaller than in the infantry, where the pay is less, where the clothing and diet are inferior, and the moral condition somewhat lower.

Second Annual Report of the Wilts County Asylum, Devizes. For the Year 1852. Devizes. 1853.

This Report contains a statement by the Committee of Visiters concerning the construction of the New Asylum for the county of Wilts, and also an elaborate summary by the Medical Superintendent, Dr. Thurnam, of the moral and physical condition of the patients. Although this Asylum has been opened less than two years for the reception of the insane, it appears to be already in a high state of efficiency; a fact which is officially recorded by the Commissioners in Lunacy in a minute which is appended to the Report.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

WRITERS' CRAMP.

M. Hubert Valleroux related to the Société Médico Pratique of Paris the case of a man, aged 40, an accountant, of good constitution, who wounded the middle finger of the right hand with a bit of a percussion cap, in discharging a gun, four years ago. Although the fragment was immediately extracted, a certain degree of sensibility remained. Subsequently an abscess formed, which, when opened, gave exit to another bit of cap. Some time afterwards, the patient began to experience cramp in the hand, which could not steadily hold the pen, but permitted it to slip about, so as to render him incapable of keeping his books. Then the affection spread, though in a slighter degree, to the left hand, and the man was obliged to give up his employment entirely. Frictions, liniments of every kind, effected no melioration in the patient's condition, and M. Hubert Valleroux inquired whether any of the members of the Society could assist him. The extension of the affection from the right to the left hand appeared, according to M. Dreyfus, to indicate, that this curious affection was of rheumatismal origin. M. Perrin remarked, that the affection had been described of late years by several authors, under the name of writers' cramp, and that mechanical support seems to give the patient the most relief. M. Delthil stated, that the disease was not confined to writers. There were two cases upon record; one of its occurrence in a shirt-maker, who became unable to use the scissors; the other, in a church-clock painter, who lost the power of steadily holding the long brush necessary in his art. M. Amenille recalled to the Society's remembrance the fact, that there had already been a discussion upon this fact, with reference to a certain pianist, whose fingers became so convulsively cramped in executing a piece, that he was forced to give up his profession. Attempts to afford him relief had been made by fitting on the fingers large heavy rings, and on the wrist a heavy bracelet. No advantage ensued.—*Société Médico-Pratique of Paris*, May, 1853.

This disease is occasionally, though rarely seen in England; but M. Hubert Valleroux is in error in supposing that the extension of the cramps from one hand to the other is rare. It may be regarded, on the contrary, as the rule, though the affection is usually more severe in the part where it commenced. As occurring in writers, it may be more accurately described as affecting the muscles of the thumb. In a case mentioned to us by Mr. Holmes Coote, the disease consisted, not so much in spasmodic contraction of the flexor muscles, as in a sudden temporary paralysis of the extensor muscles of the thumb, for the digit did not convulsively close in the palm of the hand, but simply slipped away from the pen, after being applied to it for a few moments, evidently from loss of power in the opposing force to the flexor muscles. The disease in this case extended from the right to the left hand, where, however, it never attained the severity manifested in the part first affected. The only mechanical contrivance which afforded even partial relief, was an apparatus consisting of a circular holder attached to two rings, which fitted on to the fore and middle fingers, and held the pen suspended independent of the thumb. But after a time the extensor muscles of the fingers became weak, and the patient was obliged to acquire the habit of writing with the left hand. It is worthy of remark, that every other movement of the hand, however minute, save that of writing, was retained perfectly by this patient.

GALVANO-PUNCTURE IN VARICOSITIES AND ANEURISMS.

By Dr. WERNER STEINLIN.

In opposition to the many favourable results recorded after the application of galvano-puncture in aneurisms and varices (vide Schuh's Communications, Jahr. LXIX.), there are upon record several cases in which, in place of the coagulation of the blood, or in conjunction with it, there has ensued inflammation, followed by suppuration. Baumgarten and Wurtemberg, therefore, established experiments to learn the influence of the different poles, and found—1st. That the negative pole alone effected no coagulation. 2nd. That both poles together effected a slow, weak, and often incomplete coagulation. 3rd. That the positive pole alone worked out this effect quickly, safely, and completely. These experiments were conducted upon living men and beasts; also upon fluid-blood, contained in closed vessels, so that not only the ultimate result, but the whole process was watched. Then they instituted experiments upon albumen, and obtained the following results:—That coagulation takes place at the positive pole only, while at the negative pole there is only a froth; that the coagulating power of the positive pole differs according to the metal of which its needle is made; that the working is strongest where zinc is employed; lastly, that a considerable separation of the two poles influences the action but little, provided the intervening substance be a good electrical conductor.—*Wien Ztsch.*

FREEZING MIXTURES APPLIED TO THE SKIN TO PRODUCE INSENSIBILITY TO PAIN IN OPERATIONS.

By Dr. ILISH.

Dr. Ilish recommends strongly the practice of freezing the integuments to produce insensibility to pain in operations. The full effect is generally obtained in from two to three minutes; but a longer time is required in summer than in winter. Dry snow is better than pounded ice.—*Med. Zeitung.*

ANEURISM BY ANASTOMOSIS CURED BY GALVANO-PUNCTURE.

By M. NELATON.

A young woman, aged 20, presented herself at the hospital to be treated for a tumour, situated over the nasal eminence, extending more to the left than to the right, manifestly composed of a convolution of blood-vessels, which could be traced by the finger. There was a distinct trembling synchronous with the arterial systole, and the ear detected a well-marked murmur. The patient referred the disease to a blow received two or three months before. The nature of the affection was immediately recognised by M. Nelaton, as consisting of dilatation of the arterial trunks in this region. The situation of the tumour in the mesial line would have rendered necessary ligature of both carotid arteries; and M. Nelaton preferred, to so dangerous a proceeding, a trial of galvano-puncture, which he performed in the following way:—

Two needles were applied to those points of the tumour where the pulsations were most apparent, and then brought into connexion with the battery of Bunsen ("Systéme de Piles de Bunsen") composed of thirty pairs of plates, which were permitted to act uninterruptedly for ten minutes. For the distance of a centimetre from the point of contact of the needle, connected with the positive pole, an induration was felt, caused by the coagulation of the blood, in the tortuous vessels of the part.

The pain was very slight indeed. A similar application of electricity was effected, eight days afterwards, in another point of the tumour, and with the same result. In short, six sittings sufficed to stop the pulsations in the whole extent of the tumour, and to lead to the obliteration of the plexus of arteries of which it was composed. The harder parts became in time absorbed without recurrence of the permeability of the vessels.—*La Presse Med. Belge.*

UPON FLUIDS WHICH STOP HÆMORRHAGE.

By SEDILLOT.

Eau de Pagliari, consisting of Tinct. Benzoes, ʒviii.
Alum, lb. i.
Water, lb. x.

This preparation, which has a pale straw-colour, and is transparent, possesses an extraordinary power of coagulating blood.

Eau de Rabel, consisting of Acid. sulphur., 100 parts.
Alcohol, 300 parts.

The acid should be poured upon the alcohol slowly.

Baume de Compingt has not yet been analysed, but appears to contain an empyreumatic oil.

Eau de Hepp is a modification of the Eau de Pagliari.

Medical Statistics of Belgium.—Belgium has 1257 doctors in medicine, 658 surgeons or officers of health, 871 pharmaceutists, and 1128 sages femmes; thus giving to each physician, surgeon, or officer of health, a population of 2287 persons. The number of Practitioners is greater in the country than in the towns—namely, 3042 against 1326 in the latter. The proportion of Practitioners relatively to population varies greatly in the provinces. In Brabant there is 1 to 1789 inhabitants; in Antwerp 1 to 2047; in Liége 1 to 2080; in Namur 1 to 2791, and in Luxembourg 1 to 3,733.—*La Presse Médicale Belge.*

FOREIGN CORRESPONDENCE.

MEDICAL SKETCHES IN GERMANY.

No. I.—INTRODUCTORY.

The spirit of philosophic research which produced such brilliant results in the French schools, during the earlier years of the present century, appears within latter times to have taken its highest development at the eastern side of the great frontier of the Rhine. In these observations we wish it to be clearly understood, that we no more undervalue the labours of the rising French schools, the successors of the Breschets, the Dumas, the Andrals, the Rouxs, and the Lisfrancs, than we do those of the predecessors of the modern German observers, in their respective departments of science. But while we fully recognise the philosophic zeal and real genius of such men as Bernard, Wurtz, Becquerel, Nelaton, Gosselin, and their compeers, both in Paris and the French provincial cities, we believe we are justified in saying, that at no period have there ever been so many able, zealous, and enthusiastic minds devoted to the advancement of the science of medicine in all its departments, direct and collateral, as there are now to be found in the numerous schools of Germany. Many of these men are still young, many of them with European, we may say, with world-wide reputation, only now in the prime of life and manhood.

There is so much that is highly interesting in the enthusiastic character of these teachers, so much that is peculiar and highly attractive in the manner in which their labours are pursued, and in many instances with the result of giving a most marked impress to the doctrines of their schools, that we have been led to hope that even a rapid and imperfect sketch of their chief characteristics, selected in a few of the most distinguished schools, would prove acceptable to the English reader. The peculiar circumstances under which these sketches are made must prove their apology, for whatever shall be found incomplete and imperfect in their details. There are some features about the German schools in which they differ in a very remarkable manner from those with which we are acquainted elsewhere; and herewith there are connected some considerations which it may not be unimportant to bear in mind in connexion with many problems regarding medical education still unsolved at home.

It is in Germany that the old idea of a "school," in its proper sense, has become again realised; here it is that we find the "master" forming his school around him, acquiring a reputation, and attracting pupils, followers, and admirers from the most distant quarters, and all this under circumstances which elsewhere would be considered to present insuperable difficulties to the establishment of a medical school of even the most mediocre reputation. In other countries the great schools are in the great cities; here the size and population of a town, and the attendant condition seem to have no necessary connexion whatever with the scientific status, of the school; of this, perhaps the most remarkable example that can be cited, is that of the small town of Giessen, which, though possessing scarcely more than 7,000 inhabitants, numbered, till very recently, among its teachers, a Liebig, a Julius Vogel, and a Bischoff,—names universally renowned in their departments, and whose labours made an insignificant town of Hesse Darmstadt the resort of the votaries of science from all countries.

Thus, as the "old master" in the great era of the art of painting created a school around him, whether his home was chosen in Perugia, Ferrara, Bologna, or the great capital of the world itself, so have the German master-minds in medicine overcome all surrounding obstacles, whether in the obscure provincial town or the stately cities of Berlin or Vienna. How should these great examples encourage and sustain the teachers of the English, Irish, and Scotch provincial towns, by showing them how they too may create great schools!

Two other peculiarities are deserving of notice: one regarding the mode of nomination to professorships; and the other having reference to the important system of auxiliary teaching.

Whatever international differences and petty jealousies exist, almost as a natural consequence, between the several States of which collective Germany is composed, in science at least, the beautiful idea of the common "Vaterland" seems, to a very considerable extent at all events, to be thoroughly felt and appreciated, and, in the nomination to professorial chairs, it is constantly acted on. To exemplify the practice to which we allude, we will suppose that, in any given German University town, a particular chair becomes vacant by decease or retirement. While in other cities, in a similar case, local interests, Government patronage, (a) and all the vile and corrupt influences of a debasing nepotism, more or less glossed over as they may be with specious appearances and pretexts, are brought into play; in the German school the object seems to be that which is naturally the most consistent with the continuance of its fame and reputation, namely, to select and if possible to secure the services of the best and most competent man in the particular department in which the vacancy exists. For this purpose and with this view, an observer known in this branch of science, either by his successful teachings as professor or *privat-docent* in another school, or one who has made himself distinguished by his writings and investigations, is invited or "called" to fill the vacant chair. As this "call" is generally from a higher University and to a position of more distinction or emolument, or both, it is generally accepted; but instances have occurred in which, through local attachments or still higher feelings, the invitation has been respectfully declined. In making these selections, difference of country presents no obstacle; thus, the Pole may be called to Bavaria, the Prussian or the Rheinlander to Wurtemburg, the Bavarian to Austria. In the instance of the lamented and distinguished Kievisch Von Rotterau, he was first called to Würzburg, and thence to his native country—to Prague. More recently, Liebig has been called to Munich, Henle to Göttingen, Lebert to Zürich, etc. Many serious practical difficulties have been found to attend the system of concours; and, even theoretically speaking, it is much to be doubted whether in progressive sciences, such as medicine must always be, and in which the talent for original research deserves so much to be encouraged, any modification of this system could be produced which would include all the possible cases. If the German method of calling to chairs those most worthy were generally adopted, and a wide range of selection, and a well-guaranteed and sufficiently large selecting body were provided, we have little reason to doubt that it would be successful.

The last point to which we shall at present allude is that of teaching by assistant or auxiliary professors, known in France under the name of *agregé*, in Germany under that of *privat-docent*. A limited number of observers distinguished in their respective departments, after passing an examination (usual, but, we believe, not universally enforced) are allowed to lecture on their respective subjects, the attendance on such courses receiving full recognition from the University. From this body of trained teachers, the professors are subsequently elected. No position can be supposed more favourable for developing the energies of a teacher than that of *privat-docent;* his classes, and, consequently, his emoluments, depend on the success which his teachings command, and while he has the full advantage of academic recognition, it is solely by the fame of his lectures that he gains a class. As a result of this system, Germany now numbers among the *privat-docents* of her various schools some of the most able, enthusiastic, and devoted followers that ever cultivated science,—men imbued thoroughly with a pure and ardent "geist" for the advancement of their science, and who have exerted the highest influence on the medical and moral tone of the schools in which they work, and on the minds of the students who follow their courses.

In a few subsequent sketches we purpose to notice more particularly some of the most prominent schools, professors, and scientific bodies, academies, etc., as well as their leading doctrines, and the extensive range of occasional and periodical literature of modern German medicine.

(a) It is to be remembered, that the "concours" has been abolished in France. As nothing ever was or ever will be perfect, we do not mean to assert that all German appointments to chairs are unexceptionable.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, August 23, 1853.

MONTHLY JOURNAL.

AGREEABLY to my prediction, the Monthly Journal has appeared; but, with one exception, all traces of its crew are gone. The steersman, hitherto the mere puppet of the officers, alone is seen; not one solitary figure parades the quarterdeck.

The crew, too, seem chiefly new, and, with one or two exceptions, raw hands; while, stranger still, one of the old quarterdeck officers seems degraded to a foremast man, in which situation he exhibits more than usual costiveness.

The vessel itself, too, appears to have been in dock for repairs; and whatever it may have gained in compactness, it has evidently lost in capacity. Its tonnage, formerly pp. 102, is now reduced to pp. 79, while its owners expect that its freightage shall yield the same return as heretofore.

Altogether, the smart little privateer is sadly changed; its rakish-looking rigging has been supplanted by a more merchant-like rig; its port-holes have been battened down and painted over; and not a single black muzzle is now to be seen peeping out from stem to stern. It no longer courts observation, and seeks occasion to display its capabilities for fight, but quietly hugs the shore, deeming, under its altered circumstances, discretion to be the better part of valour. We hope it will not have to encounter squally weather, as it seems ill prepared for stormy waters.

PERCHLORIDE OF IRON IN ANEURISM.

The new method of treating aneurism by injecting into the sac a concentrated solution of perchloride of iron, introduced by Dr. Pravaz, of Lyons, was tried last week in the Royal Infirmary here. The case was not well suited to test the results; the aneurism being a large thoracic one, pointing through the sternum, and the instruments used were not well adapted for the purpose. Mr. Syme injected the sac on two separate occasions, but the patient has since died. The little instrument described in your last Number has now found its way to Edinburgh; and, if not too complicated, seems well adapted to the purpose; so that it is to be hoped, future trials may be more successful, if suitable cases alone be selected.

MORE ACTIONS OF DAMAGES.

We are given to understand, that an action of damages has really been raised by Mr. Glover, Surgeon of Police, against Mr. Syme.

"Quem Deus vult perdere prius dementat."

There can be no doubt whatever, that the charges brought by Mr. Syme against Mr. Glover were sufficiently damaging, and, if believed, well calculated to disqualify him from any other situation besides that of Police-Surgeon. For what are they?

"He (Mr. Glover) then" (says Mr. Syme, Letter to Commissioners of Police, April 9, 1853) "gave a certificate 'on soul and conscience,' describing the particulars of an injury which he had not seen, and expressing an opinion as to what he had no means of knowing anything."

And again, in a letter to the Lord Provost, of date July 1, 1853, Mr. Syme says:—

"It appears that Mr. Glover has attempted to justify his conduct to your Lordship and the Lord Advocate by alleging, that he took an opportunity of privately and surreptitiously examining the limb while the nurse and clerk were absent from the ward. I express no opinion as to the extreme impropriety of such a proceeding, *since it never took place*. If the case had terminated fatally, as it threatened to do, or if all the inmates of the ward, which is a small one, had undergone a change, it would have been difficult to disprove the statement in question, however inconsistent with fact. But the patient has recovered, with a perfectly sound limb; and an intelligent young man still occupies the bed, which afforded the best opportunity of seeing all that passed during Mr. Glover's visit, to which his attention was closely directed. By the evidence of these two witnesses, I am prepared to prove, that Mr. Glover did not examine the limb, or make any attempt to do so, until the arrival of my clerk, when he put his hand on the bed-clothes, apparently with the view of turning them down, but was instantly restrained."

All this is certainly libellous enough! For what does the accusation amount to? That a certificate on soul and conscience was falsely given; and that then, reversing the proverb, and supposing that two blacks *will* make a white, it was attempted to be covered by a falsehood, deliberately written in an official communication to the authorities, and published in the Edinburgh newspapers. Can any accusation be worse, and more calculated to ruin the character of Mr. Glover? But then, what if it be true? Mr. Syme must enter a plea of justification, and prove his allegation; and what if that proof be satisfactory, as he confidently declares it will?

NORTH LEITH ASSOCIATION FOR PROCURING MEDICAL AID.

The practice of introducing medical clubs has hitherto not made much progress in Scotland; but an Advertisement with the above heading, which appeared in some of the Edinburgh papers of last week, has been much censured by the Profession. For the present, we withhold the name of the medical man who lends himself to it, as we do also that of the clergyman who figures at the head of it.

It proposes a scale of fees rising to meet incomes of 156*l.* per annum, or even higher. It is impossible, with the utmost exercise of charity, not to form a disagreeable impression of a medical man who lends himself to this. The overstocked state of the Profession has tended much to its degradation, and miserable shifts to get practice are continually resorted to.

We are always suspicious, also, when we see clergymen and doctors acting in concert. In Scotland, where polemics run high, religion is too often prostituted to the attempt to gain professional advantage; and ordained clergymen and unordained deaconesses have each their favourite to push in and recommend; so that, what between the Established Church "fancy" and the Free Church "pet," neutral men have a small chance.

All such clubs and associations have a tendency to lower the character of medical men, to render them careless of patients whom they attend per contract, and to lead them to select medicines rather on the ground of their cheapness than of their being suitable to the case. For, at the usual rates, such attendance cannot cover the expenses. It has been ascertained, from accurate calculations made upon an extensive scale, that in dispensary and hospital practice, (which form a just criterion in the matter,) the cost of medicines alone, independent of any remuneration for skill and lost time, amounts to 4s. 3½d. for each case. A fairer and better plan would be, for parties in health to club together to cover each other's expenses in sickness, each paying his own doctor, and paying him as a gentleman ought to be paid, not leaving him to scrape pennies out of the dirt like a beggar, as the poor slaves whose misery drives them to serve medical clubs are compelled to do.

MR. SYME AND THE PROVINCIAL MEDICAL ASSOCIATION.

The report of the meeting of the Provincial Medical and Surgical Association at Swansea has occasioned much disapprobation here. It was fully expected that the Association, as a body, would have reversed their approval of that part of Mr. Hester's address which reflected on Mr. Syme. In the statement of Sir Charles Hastings, two reasons are given for this strange procedure, neither, in our opinion, very tenable:—1st. The hasty character of Mr. Syme's resignation, and the angry spirit of Dr. Simpson's letters. 2nd. The Association not being responsible for everything printed by their direction.

In regard to the first, Mr. Syme's hasty resignation was a step which most gentlemen would have taken when attacked so unscrupulously and falsely by a brother member, and when the Association, by ordering that attack to be published, virtually adopted it as their own. As regards Dr. Simpson's letters, strange to say, the department of "Medical News" in the Monthly Journal, so prolific in all matters of this kind, has never published them, so that we are utterly in the dark, both as to *what* he had to do in the matter, and as to how he did it. Still, the "angry spirit" of Dr. Simpson's letters, supposing it to exist, is no apology for the treatment received by Mr. Syme.

As to the second excuse, it is marvellously foolish. Such repudiation may do for Pennsylvania, but it won't answer here; and so, I suspect, the Association would find to its cost, were Mr. Syme advised to bring an action. The Association have printed and circulated the libels of another man, and have thus made themselves responsible for them, besides giving them all the additional weight which they derive from going forth with their sanction and authority.

GENERAL CORRESPONDENCE.

[It is to be understood that we do not consider the insertion of a communication to imply entire approval of all that it contains. We sometimes print much in which we cannot agree, in order that all shades of opinion may be fairly represented.—Ed.]

MILITARY MEDICAL STATISTICS.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the Statistical Report on Sickness, Mortality, and Invaliding among the troops in the United Kingdom, which have recently been published, at page 6 is the following passage, viz.: —"The establishment of the Registrar-General's Returns, as stated in the introduction to this volume, has afforded, for the first time, the means of comparing the mortality among soldiers with that of civilians at the same age; such a comparison, however, must not be made with the general mass of the population, as the cavalry in England, being chiefly quartered in large towns, or their immediate vicinity, and aggregated in masses, are thereby exposed to the deteriorating causes which give rise to increased mortality. It is, consequently, with a town population that the comparison in question must be made, and the following calculation has been adopted for that purpose."

At page 7, the ratio of deaths among the Dragoons and Dragoon Guards is given at 13·6 per 1000; and, to show a comparison, that among a town population at 11·9.

Now, Sir, I protest altogether against this, as being a false standard of comparison. To compare 13·6 deaths per 1000 among the chosen of the population serving at home, well-fed, clothed, and housed, with moderate duties, and very little night exposure, with 11·9 deaths per 1000 in the mixed population of a town, between the ages of 20 and 40—corresponding to those of soldiers—unselected, many poor and even wretched, is wholly untenable. These are not parallel cases. A ratio of 13·6 deaths per 1000 in Dragoons and Dragoon guards, carefully examined on enlistment, is relatively (the absolute excess being 1·7 per 1000) far higher than 11·9 in a mixed, unselected population, among whom the rejected recruits remain, and among whom the pensioners of the army die, and very few of whom will have returned into the society, whose health they have weakened, in as strong a bodily condition as persons of their own ages in civil life, and many but to swell the mortality (the temporary pensioners alone, according to the reporter's figures, at the rate of 105 per 1000 in Great Britain, and 155 (!) per 1000 in Ireland) by consumption chiefly, of the civil population. Although men on enlistment are to have no disease, (as specified by the regulations,) yet, originally without any disease, we see hundreds soon effected with the identical diseases persons in civil life are suffering and dying from, and which other recruits were ejected for, die and discharged annually. Now, had we taken indiscriminately, without examination, the sound and unsound, the sane and insane, the halt, the maimed, the blind, men of a certain age, into the army, what would have been its rate of mortality? Of course still greater than now, and that of towns' population less.

To bring forward the mortality of a town population as a fair comparison with that of our chosen dragoons, is, on another account, inadmissible. If we take a view of localities, we shall find, that almost all the quarters of the cavalry are not *in* towns, but at the outskirts, or at some little distance from them. Piershill is not *in* Edinburgh, but a few miles from that city. The cavalry barracks at York, Leeds, Bradford, and nearly all others from North to South, are not *in* those cities and towns. If the men are "aggregated in masses," and "thereby exposed to the deteriorating causes which give rise to increased mortality;" if the ventilation of their barracks is defective, cubic space deficient, sewerage imperfect, whose fault is that? The men themselves make no choice of these deteriorating causes. As to the air of heaven outside their barracks, that is pure enough.

The contrast in the mortality among the dragoons with that of a "town population," is bad enough; but let us look at that in the humbler foot soldier. In the Foot Guards, the reporters show the mortality, in the period under review, to have been 20 4-10 per 1000 of strength annually, and the number discharged as invalids at 28 per 1000,—12·7 per 1000 having been discharged under 14 years' service. The names of the towns where the mortality was 11·9 per 1000 are not given by the reporters.(a) According to a Number of the *Quarterly Review* (not being able to refer to the Registrar-General's reports) the mortality in London, between the ages of 20 and 40, is 10 per 1000 less than half that in the selected Foot Guards. The mortality in the French army in France, from 1842 to 1848 inclusive, was on the average 19 per 1000 annually,—the mortality in the male civil population, between the ages of 20 and 30, being from 10 to 12 per 1000; and yet these reporters on military medical statistics say, that "there is no necessity for medical officers taxing their ingenuity to find reasons for the annual loss they sustain, when those under their charge only succumb to the ordinary laws of mortality!" Then double the rate of mortality in soldiers serving in their own country to that which occurs in the civil population of corresponding ages, is the result of the "ordinary law of mortality!" Sublime wisdom! lofty morality!

At pages 48, 49, and 50, the reporters enter into an overwrought, rambling speculation, about the increase in the number of soldiers pensioned annually since 1845, and the marked excess in their mortality since the same period, when it is quite plain, to plain people, that the greater number of discharges have arisen from the deteriorated condition of recruits since the last ten years, and the improved means of physical diagnosis, of late years, of tubercular phthisis being detected much sooner now by such means; and in place of men dying in the service, they die after a few months' miserable existence as pensioners. At page 49 is a table showing that mortality among the temporary pensioners steadily rose from 806, in 1845, to 1633, in 1852, and that the same in eight previous years ranged from 618 to 895 only. The total number (permanent and temporary) pensioned between 1834 and 1841 was 25,571, and from 1845 to 1852 was 32,116. The rate of mortality in the service during the eight years under review, is shown to be much less than in the period antecedent to 1837. In the former reports, the rate of deaths in the Dragoons and Dragoon Guards was 15·3 per 1000 annually. In the present report the rate is 13·6 per 1000. In the Infantry of the Line, the rate of mortality in the present report is shown to be $17\frac{9}{10}$, and in the depôts of corps serving in the West Indies, (the only rate given in the Infantry at home,) in the former reports, 18·5. In the Foot Guards, the rate per 1000 in the present report is shown to be $20\frac{4}{10}$, and in the former reports it was shown to have been $21\frac{6}{10}$ in the same number.

Thousands of discharged soldiers die annually immediately after leaving the service. At page 48 is a table showing that 26,693 permanent pensioners died in eight years, from 1845 to 1852, and 1446 temporary pensioners in the same period. "It seems unnecessary to pursue our investigations into the diseases for which these men were discharged." The reporters say, at pages 28, 29:—"Are their arrangements such as to enable them correctly to name all the diseases the men died of, and were discharged for?" Organic diseases are extremely frequent in soldiers. They are observed to be so predominant that Dr. Davy, remarking their prevalence among the diseases of soldiers, broached the idea of an "organic constitution" in certain seasons and years. If the inquiry was further extended, I think that this organic constitution (if it may be so called) of Dr. Davy would be found always to prevail in the army. Soldiers die from diseases foreign to those they are admitted under into hospital. As this is well known to occur to a great amount in the army, and as the name of a disease is not changed in the returns, a considerable degree of uncertainty in the character of the statistical evidence of Army Medical Reports must exist. Examinations after death discover an alarming extent of tubercular disease, as is observed in the *Necrological Journal*, at the Invalid Depôt, Chatham, and in regimental records.

I am, &c. Frederic Roberts,
Staff-Surgeon of the Second Class.

(a) This is a mistake. The names of the 24 towns and their population are given in Abstract X., page 73 of the Report. They are not given in No. II., probably because they would have occupied too large a space; but a reference is given there to the volume of the Registrar-General's Report, where they may be found.—Ed.

THE EXAMINATIONS AT THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I could require no better confirmation of the truth of the opinions advanced in my last communication, than that contained in a letter of "A Surgeon to a Large Public Charity." The disgust that he states he felt at the paltry and insufficient examination he was forced to endure, must be felt by all who, like him, spent their time in conscientiously striving to master the difficulties of a laborious and most important Profession. In fact, such examinations are mere incentives to idleness; any men of tolerable abilities can obtain knowledge enough to pass them, after six months' work with a grinder; no difference is made between the man who passes his examination creditably and he who just manages to squeeze through; the diploma is given to each, and the wise man and the lucky blockhead are both bidden

to arise and be satisfied. Such a perfect organization of folly ought to be destroyed; and I hope that the time will soon be present when the authorities of the College, instead of doing their utmost to lower the character of our calling, by insisting upon students submitting themselves to the degradation of answering the silly little questions that are weekly put to the candidates for the diploma, will be forced to stand in the van of the army of reform, by making the examinations surer and more extended tests of knowledge and ability.

But, Sir, the fact of the examinations being short, and consequently incomplete, is far from being the only evil of the system. The examiners are appointed to their highly responsible office just when they have obtained extensive private practice; and, in consequence, they literally have not the time to spend in study so as to keep up with the current knowledge of the day. Thus, they are unable to make any inquiries concerning the knowledge of the candidate in pathology, a completely new science; their anatomy is such as was taught by Abernethy thirty years ago; their physiology is naught. And yet, with admirable coolness, they appoint as their Hunterian Professor, Owen, who, instead of following the example of his elders, and describing the human body as a heterogeneous mass of bones, muscles, blood-vessels, nerves, glands, areolar tissue, and adipose matter tied up in a bag of skin, reduces it to a magnificent and harmonious system, which bears in its very simplicity marks of innate truth. But, if an unfortunate student in the College Library, on a Friday evening, was to mention such a term as "pleurapophysis," the Congregation of the Elders would immediately fall into violent hysterics, turn lead-coloured, and burnt feathers and glasses of cold water would be in great requisition. The Council of the College of Surgeons has officially given its approval of the system of anatomy as taught by Professor Owen, by continuing him annually in his chair in the theatre; it has given the whole weight of its authority to his teaching. Does it not, therefore,—I speak it with all reverence—savour a little of self-stultification for it to continue to examine students upon a plan which it has decided to be obsolete, and full of confusion? Perhaps uncharitable persons may say, that the Court of Examiners do not like to see young men more learned than their seniors; and may give this as a reason why the same questions that were put half-a-century ago, continue to be asked still.

A large theatre has been built—thirty or forty annual lectures only are delivered in it. What is done with the room all the rest of the year? Why are not learned men invited from all parts of the country to give the results of their research and experience in the Profession? Where is there a professor of military surgery for the benefit of those who are entering the service? Where is the chair of physiology? The Council are forced by an Act of Parliament to have a Professor in comparative anatomy: the only thing that they have done of their own accord is to appoint a lecturer to give six lectures upon surgery and anatomy. The Council of the College stands as a dead wall to prevent the progress of science and learning.

He is a sanguine man who thinks that improvements such as I have feebly attempted to portray will be carried into effect by the good feeling and discrimination of the ruling powers. Every reform now-a-days requires pressure from without. And I hope that the whole body of Medical men in this country will join in a struggle to raise the Profession in a scientific point of view; to force the student to keep up to his time, to urge him to try to influence the future by his study and perseverance, and make "Excelsior" his motto, by altering the tests of his knowledge, and forbidding the College examinations any longer to be the hope of the idle, the scorn of the honest, and the derision of the wise.

I am, &c. A Medical Student.

Birmingham Gaol.—The inquiry is still proceeding; we defer remark until all the evidence shall have been taken.

Practising Druggists.—W. E. Colebrook, of Dunstable, "chemist and druggist," brought his action for recovery of a threatening letter, signed "Thomas Lusepher," and also for 10*l.* liquidated damage. The Judge gave one farthing damages, and no costs; but the plaintiff's evidence is interesting in a medico-ethical point of view. He said, on cross-examination:—"I was a pill-maker. Mrs. Flemon is a draper. I am her manager. I manage the shop. I was articled to my uncle as a physician, and afterwards apprenticed to a draper. I served with my uncle two years, but my nerve was not strong enough for the practice. I first began my medical practice when at Mr. Beale's, at Dunstable, and have continued it ever since. It was all stock-in-trade in the house. The value of herbs and drugs in the house was about 400*l.* or 500*l.* I had a medical library at the cottage, which was burnt. I don't know how many books there were, but about 600. I can't recollect the names of any of the medical authors."

REPORTS OF SOCIETIES.

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. Greenhow, Esq., President, in the chair.

INCIPIENT SCIRRHUS OF THE BREAST.

[Communicated by Mr. GREENHOW.]

The following case would scarcely be worthy of the attention of the Society, did it not appear to me to connect itself with a question of great practical moment in operative surgery. The dexterous and scientific use of the knife, as a most valuable agent in the treatment of surgical disease, is undeniable; nevertheless, to operate with skill can be considered as the means only, important as it may be, in the treatment of cases in which it is unequivocally required, and not as the end of surgical science. There is no class of cases in which it is of greater consequence to determine the propriety of having recourse to the knife, as a means of cure, than in diseases of the female mamma, either confirmed, or approximating to, genuine scirrhus or cancer. It is very long since I arrived at the conclusion, that, in the great majority of cases in which operations were formerly performed with scarcely a feeling of doubt or hesitation in the mind of the surgeon, the welfare of the patient, as regards the degree of suffering and the duration of life, would have been best promoted by palliative and soothing measures of treatment. But still it must be admitted, that there are some affections of the mamma tending to, or in the incipient stage of, scirrhus, in which more active surgery may be wise and successful, and in which the extirpation of the affected portion of the gland may lead to the entire and permanent cure of the patient; and it is in the belief, that the case I shall very shortly detail may prove of this character, that I wish to draw your attention to it. Eleanor Tulip, aged 54, a robust-looking woman, unmarrried, and who had never been pregnant, was admitted into the Newcastle Infirmary, November 25, 1852, with a moderate-sized tumour in the left breast. When much engaged in nursing sick friends, about a year ago, she began to feel pains in the part, of a lancinating character. It was tender to the touch, and the nipple began to be retracted, with some hardness of the part. These symptoms have gradually increased until the present time, with scarcely any interruption of the general health. At one time, she had some uneasiness in the axilla, accompanied, as she thinks, with swellings, which, together with the pain, have now quite disappeared. On careful examination, the nipple is found to be much retracted, but the integuments around it are soft and free from disease. Immediately behind the nipple the gland is hard and somewhat tender, and through this part she has frequent shooting pains; but the induration is of small extent only, and the part has a less ponderous feel than is usual in confirmed scirrhus; no enlarged glands ca nbe discovered in the axilla, and the rest of the mamma appears in a perfectly healthy condition. The recent commencement of the disease, its limited extent, the healthy condition of the integuments, even of the nipple, which seemed to be retracted into a sort of cup by the contraction of the subjacent part, rather than to have sustained any alteration in its proper organic structure, and the absence of that ponderous character which belongs to true scirrhus of the mamma, led me to conclude, that, though the final tendency of the disease could not be mistaken, it was yet in the incipient or proximate stage only, in what may perhaps be not improperly termed a *scirrhoid* rather than a true *scirrhus* condition; and, influenced by these diagnostic considerations, I determined to remove the affected part by operation. This was done on November 30, and the main interest of the case depends upon the accuracy or fallacy of the data, or supposed data, on which I had proceeded. The tumour was small, and consisted principally of a dense fibrous structure, identical with what is found in genuine and confirmed scirrhus; but the grand modern test of diseased structure remained to be applied; and the microscope fails to reveal those peculiar cells which have been invariably found to characterise true cancer. In this, then, consists the great and important distinction; the natural structure of the portion of the gland affected was converted into dense fibrous arrangement; but, though this change may be properly considered as an important part of the diseased process, the diagnostic phenomenon which belongs to the matured disease was yet absent; and, from this circumstance, I am led to hope that the diagnosis was correct, and that the prognosis is favourable. Hitherto, the progress of the case has been quite satisfactory, but the future history of the patient must show whether or not the practical distinction which I have endeavoured to draw between incipient and fully-developed scirrhus be founded

in truth. In these remarks I am very sensible that I am laying open a field of controversy and argument, from which, however, I am by no means desirous of escaping, but would very gladly elicit the opinions of others on a subject which I have long looked upon as forming a question of great practical interest and importance.

BRIEF ACCOUNT OF A WOUND IN THE HEAD FROM THE BURSTING OF A MUSKET, THE BREECH LODGING IN THE CELLS OF THE ETHMOID AND SPHENOID BONES, FOR A PERIOD OF EIGHT YEARS.

[Communicated by a Military Surgeon.]

An officer, 32 years of age, serving in the island of Ceylon, in the year 1828, while in the act of firing at an elephant with a cut-down musket of the old description, was knocked down by the bursting of the piece. He lay insensible for some time; but, being alone, was uncertain how long; and, on the return of consciousness, found himself wounded in the forehead, the *débris* of the musket lying about him. He was, however, able to get on his feet; and, on assistance arriving, and search made, most of the shattered fragments were forthcoming, but the breech, which was nowhere to be found, until after the lapse of several days, when it was ascertained to have been the cause of the wound, and that it actually remained embedded in the skull. In the course of about three months, the patient had recovered sufficiently to resume his duties; the wound in the forehead remaining open, but being protected by a covering of black plaster. So matters rested for a few months more, when the pointed portion of the iron breech made its way through the palate, together with the head of the screw by which it had been secured to the stock, and which was still loosely inserted through its proper hole in the iron, as they had together been torn from the wood-work. They had continued to descend gradually lower and lower, so that the point of the iron was in almost constant contact with the tongue, by which its edge was worn smooth and polished. As will be naturally concluded, a profuse secretion of pus was kept up; this was generally most offensive, requiring the greatest attention to cleanliness, and a consumption of lint and tow somewhat enormous; despite all which, the discomfort of the sufferer was occasionally added to by the engendering of maggots within the wound. It was on one of these occasions, eight years after the accident, that I first saw the case, and had, from the officer himself, a statement of which the preceding is a summary. The worms were at this time got rid of by the use of stimulating injections, but not without great pain. The wound in the forehead was triangular, with a base about half an inch long, just above the ossa nasi, and from its centre to the apex was a full inch. Within was seen, horizontally placed, and level, or nearly so, with the base, the circular end of the iron; while, as before mentioned, the other end, with the head of its connecting screw, had now descended very low through the opening in the roof of the mouth, the small end of this screw being situated in the right nostril, and easily twirled by the thumb and finger, applied to the opposite one in the mouth. There had been great desire to get away this screw; but, though so loose, there was not space to admit of its being withdrawn; to obtain which, an ingenious attempt had been made, some months previously, by Mr. Elliott, a young surgeon, to saw off about half an inch, thus reducing its length to an inch and a half; and he had nearly succeeded, when obliged to desist, from the suffering caused to the patient, but who expressed his intention to submit to a further trial at some subsequent date. The attempt, however, was never repeated. On the evening of March 25, 1836, after the excitement of a mess dinner, with much conversation, and some rather loud singing, in which this officer bore a conspicuous part, while leaning over to one side, his chair slipped from under him, and he came to the floor in a sitting posture, but did not at the time appear to have sustained any hurt; though it was scarcely to be expected that such a succussion, with a large foreign body in the head and in such close proximity to the brain, could take place without consequences of a serious and dangerous tendency. The next day, headache and general pyrexia came on, and rapidly increased with evident vascular determination to the brain, delirium ensued, and death closed the scene on the 2nd April—the seventh day after the fall. Eight hours after death the head was examined. The brain and its membranes were in a high state of vascularity, and a small abscess was found in the anterior lobe of the right hemisphere, very thinly separated from the orbitar plate of that side, and connected with a dense membrane that supplied the deficiency occasioned by the absorption of a triangular portion of the cribriform plate of the ethmoides, this adventitious membrane being, of course, the only medium of separation between the brain and the cavity containing the iron, which, on removing the membrane, was brought into view, but was only fully exposed by an horizontal section of that part of the os frontis, below the superciliary ridge and orbitar plate, with the necessary vertical ones to complete the separation. The cavity formed of the ethmoidal and sphenoid cells, the inner bony structure of which had been removed by absorption, had a black appearance, and a fetid sulphurous odour; the iron, was now removed without difficulty by the bullet forceps; had a black charred appearance, with a strong odour of gunpowder, and, when cleared of its adherent impurities, weighed (including the screw) within a drachm and a half of three ounces; its length, $2\frac{3}{4}$ inches; and its greatest transverse diameter $1\frac{3}{16}$ inches. The screw exactly 2 inches in length.

CASE OF TUMOUR OF THE BRAIN.

[Communicated by Mr. GEORGE YEOMAN HEATH.]

The tumour was removed from the head of a boy, aged 14, who had been a patient under my care at the Eastern Dispensary. About a month previous to his coming to the Dispensary, this lad had received a blow on the left side of the back of the head, low down, and close to the neck. He walked home, with some assistance, after the receipt of the injury. A little more than a week afterwards, he began to complain of pain in the left side of the head, which gradually increased. Shortly, the sight of the left eye became affected, and he was observed to have an unusually sullen manner. When first seen by me, he complained of severe pain in the whole left side of the head; he spoke very slowly, and did not answer questions readily. The sight of the left eye was impaired, dim, and he frequently saw objects double: there was no great pain in the eye, nor did it exhibit any unusual vascularity. The pupils of both eyes were dilated, but contracted sluggishly under the influence of light. Leeches were ordered to the head; a large blister was afterwards applied to the back part of the neck; he was freely purged, and he was brought pretty rapidly under the influence of mercury. In spite of this treatment, however, the symptoms gradually progressed, and three weeks after coming to the Dispensary, he was confined to bed, and the sight of the left eye was entirely lost. It would be tedious and unnecessary to give the Society a detailed account of the symptoms, as recorded in the further progress of the case, and of the treatment employed. It will be sufficient for the complete comprehension of its character, to state generally, the gradual and successive steps by which the different senses, and the voluntary and involuntary movements were, each in turn, invaded by the disease, and suppressed; life itself being at last extinguished by the cessation of nutrition, and the stoppage of the respiratory movements. As long as the boy was able to speak, he complained of pain, more or less severe, in the whole head. The loss of vision in the right eye, soon followed blindness in the left; then hearing was impaired, and, by degrees, entirely lost. Taste, which had been morbidly altered soon after his confinement to bed, was next destroyed. No observation was made on the sense of smell. Speech continued longer, and he continued to ask for water to drink for some time after becoming totally deaf. It was difficult to fix the exact period at which voluntary movement ceased, but, during the fortnight preceding his death, no voluntary movements of the limbs were perceived, although he continued until the last week of his life to masticate slowly and imperfectly the soft food put into his mouth. At the commencement of the last week of life, he had a severe attack of convulsions, after which he lay entirely without motion, swallowing only liquid, or soft nourishment placed on the back of the tongue, and exhibiting no sign of life, but this and the movements of respiration. Fæces and urine passed involuntarily for several weeks before death. At the autopsy, I was ably assisted by Mr. M'Nay, Surgeon to the Union. The body was excessively emaciated; on the back of the head, one inch behind the mastoid process, a faint appearance of congestion was observed in the scalp; within within the head, about an ounce of clear serum was found. The upper surface of the hemispheres was healthy. After the removal of the brain, on examining its base, the tumour was perceived, forming a remarkable projection below the floor of the third ventricle. In fact, it overlapped the commissure of the optic nerves; behind, it lay upon the crura cerebri, and overlapped the pons Varolii. The surface of the tumour was covered with effused lymph, and the vessels of the pia-mater, in its neighbourhood, were much injected. Upon the inferior surface of the middle lobe of the left hemisphere a small spot was noticed where the grey matter was softened; in the centre of this spot there was a space about the size of a pin's head, in which the grey matter was destroyed, and the white matter of the brain exposed. The brain was now carefully sliced from its upper surface, towards the base. Nothing unhealthy was discovered until the third ventricle was reached; the upper surface of the tumour was then seen projecting through the floor of the ventricle. The tumour appeared loose in its bed, and was easily turned out. When removed, it was found to be as large as a pigeon's egg, and, on making sections of it, it ap-

peared to consist of brain-substance, intermixed with a considerable quantity of calcareous matter; its inferior surface was covered with effused lymph, loose and jelly-like. On submitting portions of the tumour to microscopic inspection, numbers of exudation corpuscles were found, together with the proper brain-globules, but no nucleated cells. The softened spot discovered upon the inferior surface of the left hemisphere was cut out, and also examined by the microscope. The softened grey matter contained exudation corpuscles. The chief question of interest to be determined in this case was, the cause and origin of the tumour, whether it was to be considered as the consequence of the blow which the lad had received six months before his death, or that it had arisen altogether independently. The determination of this point was of the more consequence, since the case was to be the subject of a Coroner's inquest. The history of the case was in favour of the view, that some connexion existed between the two events; but the fact, that such tumours do arise in the brain independently of any injury, and the existence of the softened spot at a distance from the original growth, in which a similar disease appeared to be in process of formation, negatived that opinion. The most probable view appeared to be, that a strong predisposition to the production of such morbid growths existed in the lad's system; that they might have occurred without the receipt of any injury, but that, considering the manner in which the symptoms of disease had followed the blow, this might be looked upon as the exciting cause determining the production of the growth at the particular period that it manifested itself.

Mr. Valentine Hutchinson exhibited a specimen of

ANEURISM OF THE ABDOMINAL AORTA,

which had become adherent to the diaphragm, and burst into the left chest, instantly killing the patient. It occurred in a middle-aged man, who had been suspected of malingering for some time previous to his death; but, as Mr. Hutchinson had simply been called upon to make the autopsy for the Coroner, he could not relate the symptoms complained of during life. The tumour formed by the aneurism was about the size of the fist, and partially filled up by layers of clot, some of which were of considerable standing.

Mr. Gibb exhibited an

ENLARGEMENT OF THE MIDDLE LOBE OF THE PROSTATE,

taken from a man aged 54, who died of heart disease, under the care of Dr. Bulman, in the Newcastle Infirmary. The man had not complained of any difficulty in passing water until two days previous to his death, when retention took place, and the catheter was introduced. The catheter slipped into the bladder without encountering any obstruction, and the same operation was performed on the succeeding day. The cause of retention appeared to be the debility and distress arising from the heart disease. On examining the urinary organs after death, the prostate did not appear, on external inspection, to be at all enlarged; and it was only on laying open the urethra and bladder, that a tumour formed of the hypertrophied substance of the prostate, of the shape and about the size of an ordinary grape, was found projecting from the gland at the lower aspect of the orifice of the urethra into the cavity of the bladder, and had no doubt been the cause of the retention. The rest of the urinary track was quite healthy. It was singular that the flow of urine had been free until a few days previous to death, as the tumour appeared almost to close the orifice of the urethra.

MEDICAL NEWS.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Sept. 1, 1853:—

Dadley, John William Farley, Patrington, Yorks.
Ferguson, Fergus, Bolton.
Hutchinson, William Johnson Dawson, Yorkshire.
Jeeves, William Younge, Sharrow Grange, Yorks.
Kirk, George, Middlesborough-on-Tees.
Roberts, Charles West, Bristol.
Thorpe, Samuel, Manchester.

Medical Benevolent College.—At a meeting of the Council, held on Tuesday last, thanks having been voted to the Rev. Thomas Bazeley, the Rector of Poplar, for kindly preaching in aid of the funds of the College, the Treasurer reported that Dr. Kenny, of Canton, had, unsolicited, advocated the cause of the College in that distant country, and remitted 222 dolls. (55*l.* 10s.) as the result of his disinterested exertions. Many of the Chinese are liberal contributors.

APPOINTMENTS.

Naval.—Surgeon Robert Pottinger (1847), to the Stromboli, 6, paddlewheel steamsloop, at Portsmouth.

Military.—59th Foot: Assistant-Surgeon William Braybrooke, from the Staff, to be Surgeon, vice Campbell, deceased. —Hospital Staff: William Sinclair, gent., to be Assistant-Surgeon to the Forces, vice Braybrooke promoted in the 59th Foot.

Militia.—Kent Artillery: Octavius Frederick Heritage, gentleman, to be Assistant-Surgeon.

DEATHS.

Linton.—On Saturday last, the 3rd instant, in his 79th year, Charles Linton, Esq., of the Royal Navy, one of the medical officers who attended the battle of Trafalgar in Codrington's ship the Orion.

Norton.—On the 2nd instant, at Jersey, while on a visit to that island, after a few days' illness, Matthew Norton, surgeon, of Gloucester-place, New-road, in his 75th year, to the great grief of his family. M.R.C.S.E., 1804.

Monument to Dr. Jenner.—His Royal Highness Prince Albert has transmitted 25*l.* to the Committee for the proposed monument to Dr. Jenner. The statue is to be a colossal bronze figure, and is to be erected in a conspicuous part of the Metropolis. The model has been designed by W. C. Marshall, R.A.

Medical Benevolent Fund.—At the Annual Meeting, held in July, the Report for the past year was read by the Treasurer. It was adopted, and ordered to be printed. The following officers and Committee for the year were appointed:—*President*—Sir James Clarke, Bart., F.R.S. *Trustees*—Sir Charles Hastings, M.D., D.C.L.; Dr. George Burrows, F.R.S.; William Newnham, Esq.; Joseph Toynbee, Esq., F.R.S. *Other Members of the Committee*—Edward Ambler, Esq.; John Bacot, Esq.; William Bowman, Esq., F.R.S.; John Churchill, Esq.; Dr. John Conolly, D.C.L.; G. T. Dale, Esq.; George Fincham, Esq.; Sir John Forbes, M.D., D.C.L.; Joseph Hodgson, Esq., F.R.S.; Thomas Hunt, Esq.; John Ince, Esq.; Dr. Bence Jones, F.R.S.; J. R. Martin, Esq., F.R.S.; G. Pilcher, Esq.; E. Saunders, Esq.; William Self, Esq.; Dr. Sibson, F.R.S.; Henry Sterry, Esq.; Dr. West; Erasmus Wilson, Esq., F.R.S. *Treasurer and Honorary Secretary*—William Newnham, Esq. *Honorary Secretary to the Committee*—Joseph Toynbee, Esq., F.R.S.

Pharmaceutical Society of Great Britain.—On Tuesday, a numerous meeting of the members of this Society was held at the Institution in Bloomsbury-square. A discussion of about three hours took place upon the subject of the determination of the Administration to enforce certain bye-laws, and terminated with a vote of confidence in the Council.

British Association for the Advancement of Science.—The annual meeting of this Association took place at Kingston-upon-Hull, on Wednesday, when the proceedings commenced with the assembling of the General Committee for the despatch of business, Colonel Sabine presiding. The general meeting was held in the evening, when the usual introductory address was delivered by Mr. W. Hopkins, M.A., F.G.S., Vice-President of the Royal Society.

Devon and Exeter Hospital.—The 112th anniversary of this Institution was held on Tuesday. At twelve o'clock the Governors left the hospital, and proceeded to the cathedral, where an appropriate sermon was preached by the Rev. G. H. Shield. The collection amounted to 32*l.* Seventy-two gentlemen subsequently sat down to dinner at the Clarence Hotel, and a pleasant evening was spent. A large supply of venison was presented by Lord Clifford, Lord Poltimore, and Sir T. D. Acland.

Leicester Gaol.—The Queen has appointed William Baly, M.D., Medical Superintendent of Milbank Prison, to be one of Her Majesty's Commissioners for inquiring into the affairs of the Leicester County Gaol and House of Correction.

The University of Cracow.—The Council has proposed that the lectures shall henceforth be delivered in the German, instead of in the Polish language. This proposal has been accepted by the Schools of Law and Philosophy, while the School of Medicine declared itself incompetent to decide on the question.

Pension.—The widow of the late D. M. Moir, the "Delta" of *Blackwood*, Author of "The Anatomy of Sleep," "The Anatomy of Drunkenness," &c., &c., a surgeon of high repute, deceased a few years since, has, at the recommendation of the Earl of Aberdeen, been nominated for the pension of 100*l.* a-year, by Her Majesty. This is, we believe, the first instance in which a medical man, or one of his relations, has obtained a pension for literary pursuits, independent of the Profession.

Comparative Mortality in France, England, and Prussia.—In France, the annual mortality is 1 in 42; in England, 1 in 45; in Prussia, 1 in 38; in Austria, 1 in 33; in Russia, 1 in 28. In the latter country, the mortality to 100,000 living is 3590 annually; while that of 100,000 living in England is 2207. In most of the towns of Italy, the mortality is 3 or 4 per 100; at Naples, to 100,000 living, there are 4046 deaths annually. It is in England,

that, contrary to all expectation, the mortality is less than in all civilized States; and this, notwithstanding the high rate of mortality in her great manufacturing towns. It is the agricultural districts that produce for England this favourable result, as compared with other countries.—*L'Union Médicale.*

EPIDEMICS.

THE DEATHS IN NEW YORK for the week ending the 20th ult. were 969, of which upwards of 400 were caused by the extreme heat.

YELLOW FEVER.—The fever at New Orleans, and several other places in the Southern States, was hourly on the increase. The deaths at New Orleans, on the 21st, from it were 270; and for the week, 1350; and from other causes, 230. It had also broken out at Baltimore and Cumberland; at Natchez, with a population of only 5000, the deaths had been upwards of 300 from the same cause. A correspondent of the *New York Tribune* writes respecting New Orleans:—"At the hospitals the suffering is very great, and it is a wonder that any recover. In one room I visited there were about 40 women. They are placed, in cots on either side of the room, with just room enough between the cots for the attendants to give the poor sufferers their medicines."

CHOLERA.—This disease has now spread over the Baltic Provinces; cases are upon the increase at Stettin, (170 had died previous to Aug. 23,) and are numerous at Dantzig, where the epidemic may become extremely dangerous, in the lower part of the town, and in the environs, in consequence of the humid atmosphere. In Denmark, the heat, which has prevailed some time, has caused great intensity to the cholera, and the alarm among the inhabitants of Copenhagen is such, that all who could leave for the provinces, which are yet healthy, have done so. The Medical Boards sit *en permanence*, and several physicians have already fallen victims to the disease. The King of Sweden has suspended the Swedish Consul at Lubeck for supposed laxity in not announcing cases of cholera that had broken out there. In spite of all quarantine precautions, this epidemic has introduced itself into Sweden, and is raging there, though not to so fearful an extent as in Denmark. The King himself visits the cholera hospitals, and nothing is left undone to mitigate the evil. At Spendborg, on the 20th, there were 21 deaths out of 55 cases. The cholera appears to be increasing at Stockholm, as the official return on the 19th stated 21 cases and 13 deaths. The disease is also prevalent at Ystad, Gothenburg, and Carlscrona. It is stated to have likewise made its appearance in Christiana. Accounts from Copenhagen, up to the 26th inst., state, that the cholera was again somewhat on the increase. The military arrangements for inspection of the troops were changed, the infantry not called out, and the cavalry only to the extent of 120 men to each squadron. The cholera was diminishing in St. Petersburg, but was spreading, though in a mild form, over all the eastern provinces.—*Berlin.*—August 30.—The cholera has appeared here in a very virulent form, though in a very few cases; since the beginning of the month up till now, 52 cases have occurred, of which 37 were fatal. Now that the epidemic is here, the deliberations as to the building a cholera hospital have been brought speedily to an end in the affirmative. *Hamburg.*—We have received information from Hamburg, on which reliance may be placed, that Asiatic cholera, which for several weeks has appeared there in single or isolated instances only, forming what is technically called "sporadic" cases, is now assuming an epidemic form. There appears to have been in all, from 160 to 180 cases of the disease, about two-thirds of which have been fatal, a circumstance which proves the extreme virulence of its character. The present seats of the malady are the places where the poor English sailors, to the number of about 800, lodge and spend their time on shore. They are at present wholly uncared for. During the epidemic of 1848, great numbers of lives among this class of men were lost for want of the most common precautions, and this loss of life will be repeated unless timely measures are taken for their protection.

THE CHOLERA IN LIVERPOOL.—A death from Asiatic cholera has occurred in Liverpool. The deceased was a German emigrant, and had imported the disease from Hamburg, and the death occurred in a crowded lodging-house in one of the inferior parts of the town. The attention of the Health Committee has been drawn to the case, and also to the dangerous overcrowding of these emigrants' lodging-houses, which are numerous in Liverpool.

CHOLERA AMONG SEAMEN.—Several cases of sickness among the ships in the harbours of Stockton and Hartlepool have been reported as English cholera. Some of them have been accompanied with aggravated appearances, and the faculty are divided in opinion as to the nature of the disease. Whatever be the disorder, several seamen, on board different ships, have died after a few hours' illness, and have been hastened to their graves.

SCARLATINA.—This disease is still very prevalent in Milnthorpe, and many cases have proved fatal among children, both in the town and neighbourhood.

MILLBANK PRISON.—Another death from cholera (18 hours) has occurred in this prison, in the person of a female, aged 30.

PEAT CHARCOAL AS A DISINFECTANT.—Peat charcoal is in use at the gaol, where it has been found extremely serviceable. It entirely disinfects the solid night-soil in the cesspools, and converts it into a valuable manure, which is removed without occasioning any risk to health, or offensive odour.—*Hertford Mercury.*

VACCINATION has been made compulsory in Egypt. In the year 1851, 79,108 children were vaccinated by the public *employés*. Of these children 17,471 belonged to Upper Egypt.

MORTALITY NOTABILIA.—The deaths registered in London during the week ending Saturday, Sept. 3, numbered 1029, while the average of the corresponding weeks for the last ten years, not including the cholera in 1849, was 950. The mortality little exceeds the average raised in the same proportion as the increase of population. Cholera was fatal to 16 persons; namely, 12 children, and 4 adults. In the last eight weeks from the week ending July 16, 3, 6, 9, 4, 19, 10, 18, and 16 deaths from cholera were registered. Diarrhœa in the same period was fatal to 54, 73, 81, 110, 139, 126, 137, 152 persons, and shows a tendency to increase. The deaths from typhus, which in the preceding week were 37, rose last week to 48; scarlatina has increased from 18 in the previous week to nearly double that number,—namely, 32 deaths in the last week. The tubercular diseases and those of the heart and blood-vessels show but little variation in the mortality from that in the former week. 5 persons died in child-birth, 123 from consumption, 4 from aneurism, 4 from delirium tremens, and 2 from intemperance. Of the 1029 persons whose death are recorded, 520 were children under 15 years of age, 317 of the age of 15 to 60, and 191 of the age of 60 years and upwards.

Births.—Last week the births of 805 boys and 777 girls, in all 1582 children, were registered in London. The average number in eight corresponding weeks of the years 1845—52 was 1378.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·732 in. The mean temperature of the week was 55·7°, which is 3·3° below the average of the same week in 38 years. The highest temperature of the week was 70·2° on Tuesday; the lowest was 45·0° on Saturday. The wind blew from the west and south-west during the first five days of the week, and from the north for the remainder: its horizontal movement averaged 110 miles a-day. More than an inch of rain fell during the week; of this large quantity for the season nearly half an inch fell on Thursday.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending September 3:—

	Males.	Females.	Total.
Workhouses	45	49	94
Military and Naval Asylums	3	...	3
General Hospitals	46	16	62
Hospitals for Special Diseases	3	3	6
Lying-in Hospitals	1	...	1
Lunatic Asylums	1	1	2
Military and Naval Hospitals	2	...	2
Hospitals for Foreigners, &c.	...	...	...
Prisons	2	4	6
	103	73	176

DEATHS *in the Metropolis for the week ending Saturday, September* 3, 1853.

CAUSES OF DEATH.	SEP. 3. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	520	317	191	1029	11527
SPECIFIED CAUSES	516	315	188	1020	11495
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	248	46	21	315	5027
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat	6	25	16	47	384
3. Tubercular Diseases	63	101	7	171	1775
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses	58	26	31	115	1039
5. Diseases of the Heart and Blood-vessels	4	24	13	41	247
6. Diseases of the Lungs and of the other Organs of Respiration	45	16	25	86	745
7. Diseases of the Stomach, Liver, and other Organs of Digestion	16	24	22	62	696
8. Diseases of the Kidneys, etc.	...	11	3	14	92
9. Childbirth, Diseases of the Uterus	...	4	...	4	98
10. Rheumatism, Diseases of the Bones, Joints, etc.	2	5	2	9	77
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	...	1	15
12. Malformations	1	...	...	1	42
13. Premature Birth and Debility	24	4	1	29	227
14. Atrophy	25	1	5	31	270
15. Age	...	...	39	39	405
16. Sudden	1	1	1	3	63
17. Violence, Privation, Cold, and Intemperance	23	26	2	52	293
CAUSES NOT SPECIFIED	4	2	3	9	32

TO CORRESPONDENTS.

It is requested that the postage of all communications to the Journal should be paid.

MEDICAL ETHICS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged by your giving me your opinion of the following questions in your next Number of the "Medical Times and Gazette."

I am, &c. AN EIGHT YEARS' SUBSCRIBER.

A B having practised in the South for a few years, wishes to be near his friends in the North, and consequently advertises in the "Medical Times and Gazette" for a partnership, or succession to a practice, in a town in the North; C D answers the advertisement through a medical friend in town, representing C D's practice as bringing in £600 per annum, with three appointments—physician to infirmary, gaol, and barracks—and to give A B twelve months' introduction. A B immediately writes to his friends to make the necessary inquiries, and, during this time, C D's friend writes to A B, telling him the subject had been quite long enough before him to give a decided answer, as there was now another party in the field. Upon receipt of this A B starts immediately for the north, and makes the usual inquiries; had also an interview with C D, who stated, that he wanted £600 down for his practice, with twelve months' introduction. From the inquiries A B made, matters were not so satisfactory; the gaol appointment was not held by C D, and other reasons determined A B not to purchase the practice. Now A B, before advertising, had fixed upon practising where C D practises, and has given C D nearly six months to dispose of his practice. C D, upon hearing that A B is likely to practise in the same town, tells his friend that A B has acted ungentlemanly, &c., and threatens to publish the correspondence. Now A B wishes to know whether he would be acting against the laws or otherwise of the Profession (?) by practising where C D is now practising.

[A delicate question. Much will depend on the proof A B could give of having determined to practice in the town before his correspondence with C D.]

MR. GUTHRIE AND THE EXAMINATIONS AT THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—You must wish for fair play in the consideration of every question. I have no doubt you will gladly find room in your Journal to insert the following remarks, in answer to those that have gone before, on Mr. Guthrie as an Examiner at the College of Surgeons.

I have not the pleasure of Mr. Guthrie's acquaintance, and never exchanged a word with him except across the examining table. It is very improbable I ever shall see him again. My testimony, then, is impartial. I beg to say his manner of questioning me was urbane and gentlemanly, and when I seemed a little at a loss, from a feeling of nervousness, he showed consideration and kindness, coupled with no little forbearance. It would be presumption in me to attempt to exculpate Mr. Guthrie, but I don't wish students to run away with an erroneous idea that they will meet with any harsh or unjust treatment from him.

I blame the system of a hasty examination; but it is clear enough, while the system exists, examiners cannot allow much time for students' brains to go wool-gathering. They ought to be prepared to give a straightforward answer to a straightforward question, and that is all that is expected of them.

Mr. Guthrie is a man of action, and comes to the point with military abruptness. Is it not excusable if he, or any other examiner, chafes a little at receiving bungling, shuffling, undecided answers, when the question is, proper treatment or improper, life or death.

I believe the man who cannot collect his ideas before an examiner will be equally unable to collect them before and during an operation: he should prepare himself against both emergencies.

Raising an outcry of this kind does harm. No excuse more convenient for an idle, and, by consequence, rejected, student than, "Oh, I had Guthrie, and he frightened me."

I think, then, the "Surgeon to a Large Public Charity" might have been charitable enough to have taken in good part Mr. Guthrie's cheerful encouragement to "keep up his spirits," and while he registered his objections to the plan of examination adopted by the College, avoided all reference to individuals. It is in bad taste, and uncalled for.

I enclose my card, but not wishing to be charged with an attempt to curry favour,

I am, &c. PISISTRATUS.

Staffordshire.

[To the Editor of the Medical Times and Gazette.]

SIR,—"A Surgeon to a large Public Charity," in your last Number, would endeavour to make it appear to you that, out of an hour's examination at the College of Surgeons, ten, if not fifteen, minutes were occupied in bell-ringing. Now, however this may have been in 1838, (when he passed,) in 1852 the bell ringing was instantaneously performed, and certainly the change of tables never occupied a minute.

Why he should have been "disgusted when he got his diploma" it is difficult to say. Other men are generally pleased. Considering that, by his own statements, he had "worked hard" and was "well up," he might have given the examiners credit for seeing that, and been satisfied both with himself and them. He seems, however, to have been sufficiently satisfied with his own abilities, judging from his "chagrin" at not having had time and opportunity to display them at large; although the subjects of examination he names would allow most men to display ample "profundity in the answers," and, by the very "discursiveness of the questions," to show a wide range of reading.

But the striking point in his letter is, that he glories in having worked "without a grinder." Now, however hard a man has worked, and however well he is up, the assistance of those gentlemen called grinders is never thrown away upon him. It enables him so to arrange and concentrate his knowledge as to have it always ready upon any emergency of examination or of practice. Thus prepared for examination, he seeks for no "opportunities for collecting one's thoughts," for his require no collection, being already brought together; nor does he require time for "giving satisfactory utterance to them." For thoughts cannot exist without words expressing them, and in correct thought these are "satisfactory." If, too, as your Correspondent implies, there are points upon which those who have ground are alone prepared, he lost an opportunity of acquiring knowledge, and, therefore, unnecessarily detained himself and Mr. Guthrie while he "bothered him dreadfully." Had he, after his "hard work," been polished by a grinder, he might also have saved much of the time which he allots to "collecting his thoughts and giving satisfactory utterance to them;" and instead of "a few discursive questions," he might have had many more, calling forth a very extensive knowledge "on so many various subjects," while "the depth of the questions and the profundity of the answers" would have been much increased.

However rough Mr. Guthrie's treatment may have been, he was at any rate encouraging, which is an unusual kindness in an examiner; but he might well be "wondrously amused" at "a poor nervous candidate" who was "disgusted when he got his diploma."

I will only add, that my own examination was exceedingly fair and courteous, and much more extensive than could have been any written examination of much longer duration and greater anxiety.

I am, &c. A HOUSE-SURGEON.

Mr. Vawdrey.—On receiving the report we will publish it, if it appears worthy of publication; but cannot send for it, as Mr. Vawdrey proposes.

Dr. Foster.—Paper received.

Crito should send his name, and make official application to the Council.

Jonathan's letter is both obscene and unintelligible.

Iatros.—The Works of Churchill and Ramsbotham.

Messrs. Dawson.—The subject is not medical.

Ignotus.—The best plan would be to go to Copenhagen.

Professor Hoffman's Lecture has been unavoidably delayed, owing to the absence of the learned Lecturer in Germany.

The following has been forwarded to us as a specimen of the examination required to obtain a Scotch degree.

EXAMINATION OF ONE OF THE SUCCESSFUL CANDIDATES AT THE UNIVERSITY AND KING'S COLLEGE, ABERDEEN, AUGUST, 1853.

Chemistry—Dr. Fyfe.

Describe the composition of the blood.
In a thousand parts how much albumen and fibrine?
What salts are contained in the blood?
Describe the composition of healthy urine.
What is its specific gravity?
What is the character of urine in Bright's disease of the kidney? and what is its specific gravity?
What are the tests for albumen in the urine?
Describe the different kinds of urinary calculi.
Which are primary?
What are the tests for each variety?
Describe the composition of milk.
What is fermentation?
What does the vinous fermentation require for its fulfilment?
Name the different kinds of sugar, and their composition.
What sugar is found in the urine in diabetes?
Describe all the tests for arsenic.

Anatomy and Physiology—Dr. Redfern.

What is the structure of nerve matter?
Describe the contents of the lateral ventricles of the brain.
What separates the lateral ventricles?
What are the boundaries of the third ventricle?
How is the brain supplied with blood?
What is the peculiarity of the vessels of the brain?
What is the velum interpositum?
Describe the minute structure, situation, and relations of the right kidney.
How are the salts, and how the watery portion of the urine supposed to be secreted?
How does the ureter enter the bladder?
Describe the minute structure and situation of the liver.
How is bile supposed to be secreted?
What are the different kinds of epithelium?
What peculiarity is there in the muscular fibres of the heart?
What are the openings into the right auricle?
Describe the fœtal circulation.

Practice of Medicine—Dr. Williams.

What is ascites?
From what causes does it generally proceed?
Describe the general treatment.
What is Anasarca?
From what causes does it generally proceed?
Describe the general treatment.
What are the natural sounds of the heart, and on what are they supposed to depend?
What are the stethoscopic sounds in pericarditis, endocarditis, and disease of the semilunar and mitral valves?
What is the difference between empyema and emphysema?
What are the causes of empyema?

Surgery—Dr. Kerr.

Describe the different dislocations of the ankle joint, and how the ligaments and muscles are affected in each variety.
What are the diseases of the knee-joint?
Describe their causes and treatment.
What is Erysipelas?
How many kinds are there?
Describe the treatment applicable to each form.
What is Iritis?
What varieties are there?
Describe the treatment applicable to each.

Mr. G., Rickmansworth.—We thought it better to publish all the original matter in the paper in question as soon as possible. Our original communications are so numerous and valuable, that when a very long paper is received, we are occasionally obliged to extract its more interesting and important portions, and publish them only. Authors are sometimes disappointed, but we never find readers complain. The paper is left at the Publisher's.

COMMUNICATIONS have been received from—

Mr. GRAMSHAW, Tettenhall; H. J. FRANKS, Esq.; Dr. BENCE JONES; — FILLITER, Esq.; W. R. WILDE, Esq.; Dr. HOFFMAN, Munich; AN EIGHT YEARS' SUBSCRIBER; PISISTRATUS; A HOUSE SURGEON; Mr. VAWDREY; Messrs. DAWSON; Mr. GARLIKE; Staff-Surgeon ROBERTS; IATROS; CRITO; W. R. E. SMART, Esq., R.N.; IGNOTUS.

Medical Times & Gazette.

SATURDAY, SEPTEMBER 17, 1853.

ADDRESS TO STUDENTS.

For many years past it has been our custom, shortly before the commencement of the Winter Session of medical study, to devote one Number entirely to Medical Students, giving them precise information as to the rules and regulations enforced by the various Examining Bodies of Great Britain and Ireland, with a full account of the courses of instruction open at the various Hospitals and Medical Schools. It appears that the "Student's Number" is looked for with interest, not only by Students, but by those who, though no longer Students in name, still remain Students while practising their Profession;—that the grey-haired Surgeon in a remote country district consults it, if not for the guidance of his sons or pupils, at least to note the changes in medical education since the days of his youth, to trace the course of his fellow-pupils who have risen to lectureships and offices in the different hospitals, or seeing in the names which fill the places of his old teachers how one after another has passed into the world of shadows, and to compare the reputation of the rising with that of the departing generation.

These are sufficient grounds for following an old custom. We have, accordingly, given what we believe will be found a full and accurate account of the regulations of the Examining Bodies and of the various Hospitals and Medical Schools.

It has also been usual to add some such advice to Students who are entering upon or pursuing their studies as the experience of the past has taught us may prove useful to them. In doing so now, we disclaim entirely any intention of assisting any one in the choice of a School. If the choice have not been already made by parents or friends, the prospectuses of all are now made equally public, and their respective merits may be freely examined. Neither does it appear necessary to point out the order in which lectures should be attended, the time which should be allotted to them, to dissection, or to hospital practice. This is partly settled by the Examining Bodies, or, if not, may be safely left to the directions of the teachers at the different Schools. All that remains for us is to lay a few friendly hints of a general nature before our younger readers, which we trust may prove useful to them in the conduct of their studies.

In the first place, then, we would say, Do not be discouraged by apparent difficulties, and do not mistake real difficulties for impossibilities. Remember that it is by patient study alone that true excellence can be attained, and that he who would attain it must *labour* for it. That which costs us nothing is seldom worth having. The summit of the mountain is not to be gained without exertion and fatigue; but perseverance will be rewarded by the glorious view of the plains below, and by conscious superiority over the loiterer who has tarried behind. "A path opens among the hills to him who advances." It is not so much great talents that carry the day, as firm determination, vigour, energy, and resolution. "He who *will* conquer never fails."

II. Direct your industry to right ends. Fowell Buxton once said, that it might possibly require as much industry to be best billiard player as senior wrangler. There is a busy idleness ever active on unimportant matters, which is as much to be dreaded as the listless idleness of the man who fritters away existence waiting for golden opportunities of doing something great, which either never arrive, or, if they do, find him incapable of taking advantage of them. Lounging trifling and laborious trifling—*operose nihil agendo*—almost equally unfit a man for the duties of practical life. Avoid both, and let a manly determination to act to some good purpose influence your conduct.

III. Do what you have to do to the very best of your ability. What you would know, know thoroughly. It is better to accomplish a little perfectly, than to half-do ten times as much. The present Lord St. Leonards, when Sir E. Sugden, was once asked the secret of his success in life. He said:—"I resolved, when beginning to read law, to make everything I acquired perfectly my own, and never to go to a second thing till I had entirely accomplished the first. Many of my competitors read as much in a day as I read in a week; but, at the end of twelve months, my knowledge was as fresh as the day it was acquired, while theirs had glided away from recollection." It is infinitely better to observe from two to six cases thoroughly, follow them through, and read about them, than to make a superficial visit to ten times as many patients. The one tends to form a thoroughly sound, careful practitioner, the other a mere man of routine.

IV. Train the mind into habits of fixed attention. This may require effort at first, but the habit must be acquired. The mind, like the body, gains vigour by exercise, and the difficulty is sooner or later overcome. The object is not so much to train the mind up to make great efforts on great emergencies, but to have it always clear and ready to turn the day's work to the best advantage. The practice of taking short notes of lectures and cases, and transcribing them carefully in the evening, will materially assist in this process of mental training. Lord Bacon's aphorism, that reading makes a full man, conversation a ready man, and writing an exact man, should be borne in mind and acted up to in a spirit of determination that no temptation shall induce you to neglect what you have resolved to do. It is the spirit of punctuality, the resolution to do to-day's work to-day, which makes the accurate precise man of thought the vigorous, efficient, and successful man of action.

V. Follow another of Fowell Buxton's maxims,—Watch yourself. Notice when you fail, and keep some kind of journal of your failures. One who has attained to the highest position in the Profession—Sir Benjamin Brodie—says, that humility leads to the highest distinction, because it leads to self-improvement. He adds—and the advice cannot be too often repeated—"Study your own characters; endeavour to learn and to supply your own deficiencies; never assume to yourselves qualities which you do not possess; combine all this with energy and activity, and you cannot predicate of yourselves, nor can others predicate of you, at what point you may arrive at last." Endeavour to measure yourself candidly with your fellow-students. It is probably the first opportunity you have had since arriving at man's estate of judging of your own capabilities and attainments by that of your compeers. Your mind must be defective in some important particular if this comparison does not show you that you are among men who in some points are your superiors. This will not only lead to humility, and to a more just self-appreciation, but it will strengthen the mind where it is weak, and sharpen the intellect by contact with that of others.

VI. Remember that the character you bear as a student will follow you through life. In one of Macaulay's

latest orations, he paid a magnificent tribute to the benefits of emulation, and the permanent value of distinctions won in academic contests. He showed that whether the competition was in classics at Oxford, in mathematics at Cambridge, or in the earlier struggles at Eton or Harrow, the child was father of the man; and that the same active spirit of industry which carried off the prize in the youthful conflict led the man in after life to a continuous series of victories at the bar, the camp, the council, and the senate. The start gained in the early part of the course is retained to the end. "The men who were first in the competition of the schools have been the first in the competition of life." The reputation of Warren Hastings, Sir Charles Metcalfe, and Lord Wellesley, in India, was but the sequel of their success at Westminster, Eton, and Oxford. The contests of the English bar have shown the result of the strength and acuteness of intellect gained by exercise and competition in youth. The present Lord Chief Baron was Senior Wrangler, so were Mr. Baron Alderson and Mr. Justice Maule. Mr. Baron Pratt was a Wrangler, and Mr. Baron Parke and Mr. Justice Coleridge were both eminent in their respective Universities. The Lord Chancellor, Sir George Turner, and all the three Vice-Chancellors, were Wranglers. It is not to be supposed that accident or interest obtained these high positions for these men. No! they gained the start in youth, and they kept it in after life. In the Medical Profession, the prize system has not been established long enough to enable us to trace similar results to similar causes; but there can be no doubt that the same general rule would be found to hold, and that most of those now deservedly holding the highest positions in medicine and surgery, were as eminent among their College compeers as they now are among their brother practitioners. Doubtless, there may be some exceptional instances in which men of great mental power and physical endurance who have been idle in their youth, have made up afterwards for the time they had lost, and have sometimes surpassed those who had remained satisfied with their early success, and had not laboured to maintain their position. As Macaulay well observed, it is most desirable that there should be such exceptions, and that they "should be noted, in order to encourage men who, after having thrown away their youth from levity or love of pleasure, may be inclined to throw away their manhood after it in despair."

VII. Do not be disappointed if labour should not lead to immediate reward; the reward, if deserved, will come at last. If you have earned nothing more, you have earned happiness. No man is so miserable as an idle man. Read and ponder over a lecture by Sir John Forbes, on "Happiness in its Relations to Work and Knowledge." See how admirably he shows, that, as exercise brings health to the physical man, so it brings happiness to the intellectual; that "those years or months have been the happiest in which you have been most busy, and those the unhappiest in which you have been most idle;" that "many men are unhappy because they do not know that occupation would make them otherwise, but more so because they lack the resolution to use the remedy which they know would cure them;" that though you may fail to "achieve renown or to conquer fortune," yet work and knowledge, if rightly used, must win "the yet higher prize of HAPPINESS."

VIII. Do not be content with intellectual improvement, but keep a strict and severe watch upon your own moral conduct. Study your Profession as a noble science. Never let it be degraded by you into the vile trade it would become if the mercenary principles so perseveringly advocated by some of those who wish to be regarded as the organs of the medical public, were generally adopted. Endeavour to deserve the good opinion of others, not only as men of ability and skill, but as upright, honourable gentlemen. Hear Sir Benjamin Brodie again:—"Let there be no misunderstanding as to who is to be regarded as a gentleman. It is not he who is fashionable in his dress, expensive in his habits, fond of fine equipages, pushing himself into the society of those who are his superiors in their worldly station, who is entitled to that appellation. It is he who sympathises with others, and is careful not to hurt their feelings, even on trifling occasions; who in small things, as well as in great, observes that simple, but comprehensive maxim of our Christian faith, 'Do unto others as ye would they should do unto you;' who in his intercourse with society assumes nothing which does not belong to him, and yet respects himself; this is the kind of gentleman which a Medical Practitioner should wish to be." It is far better, as Plato said, to err in acts than in principles. The one is a mistake and is looked over, the other is a crime which, even if pardoned or forgotten, inflicts the greatest of all losses, that of self-respect. Preserve the right to respect yourself under all trials and temptations, and you will assuredly be amply repaid hereafter, not only by the respect of the community which forms your "world," but by the pride which those who have cradled and loved you take in your merit and success.

Lastly. Bear in mind the real end of all knowledge. If you pursue it with unworthy objects in view, you mistake your vocation. You may gain wealth, and all the means of gratifying your tastes which wealth can purchase; but, when gained, all this will pall and appear valueless, or lead but to desire for greater aggrandisement. You may sell the best years of your life seeking for the applause of your fellows; you may outlive their jealous rivalry, their selfish, unsympathising regard, their cold and half-forced praise; you may learn to despise all this, and may gain the high reputation you aim at; but the pursuit, and the efforts to obtain it, if ennobled by no higher aim, will end in jealous disquietude, restless vexation, and certain disappointment. The desire for applause will grow stronger and stronger, mortification, when it is withheld, deeper and deeper, and you, who would be above your fellows, become their slave. Such ends are unworthy of you. Seek rather "to give a true account of the gift of reason to the benefit and use of man." Do not look upon knowledge merely as a means of advancement, or as a path to happiness, but as "a rich storehouse for the glory of the Creator, and the relief of man's estate." This will place you above the petty vanities and distracting cares of the mere seeker for wealth or power. It will lead to contentment and peace of mind; it will develope the higher and nobler qualities of your nature; and if, after fighting the battle of life, you should not gain riches or worldly honours, you will reap a rich reward in the blessings of the widow and the fatherless, in the gratitude of the sick you have visited, the poor you have fed, the distressed you have relieved. And when at last the hoary head and the crown of glory are gathered to the home of your fathers, your memory will live, and those who inherit your name perpetuate your reward.

"Love thyself last; cherish those hearts that hate thee.
Corruption wins not more than honesty.
Still in thy right hand carry gentle peace,
To silence envious tongues. Be just, and fear not.
Let all the ends thou aim'st at be thy Country's,
Thy God's, and Truth's."

RULES AND REGULATIONS

OF

EXAMINING MEDICAL BODIES

IN

ENGLAND.

SESSION 1853—1854.

UNIVERSITY OF OXFORD.

Chancellor—The Earl of Derby.
High-Steward.—The Earl of Devon.
Vice-Chancellor.—R. Okes, D.D.
Registrar.—P. Bliss, D.C.L.
Professors—Regius Professor of Medicine, J. A. Ogle, M.D.
Tomlin's Prælector of Anatomy, J. A. Ogle, M.D.
Sherardian Professor of Botany, C. G. B. Daubeny, M.D.
Lichfield's Professor of Clinical Medicine, J. A. Ogle, M.D.
Aldrichian Professor of Anatomy, J. A. Ogle, M.D.
,, ,, Medicine, J. A. Ogle, M.D.
,, ,, Chemistry, C. G. B. Daubeny, M.D.
Lee's Lecturer in Anatomy, H. W. Acland, M.D.

1st. *To perform the exercise called Responsions*, that is, to answer questions publicly proposed by the Masters of the Schools, consisting of an examination in the Greek and Latin languages, in the rudiments of logic, or in Euclid's Elements of Geometry.

The time for the commencement of this exercise is in the Michaelmas Term, on the 26th Oct.; in Hilary Term, on the Wednesday after Septuagesima Sunday; and in Trinity Term, on the Monday after the first Sunday in that Term.

2nd. *To be publicly examined.* The public examinations are held twice a year, viz., in Michaelmas Term, beginning on the 2nd Nov.; and in Easter Term, beginning on the Friday which follows the second Sunday after Easter. The examination comprises.—1st. *The rudiments of religion;* 2nd. *The literæ humaniores;* 3rd. *The elements of the mathematical sciences and of physics.* In medicine, all students (besides undergoing the same examination appointed for bachelors of arts) are to be examined in the theory and practice of medicine, anatomy, physiology, and pathology; in materia medica, as well as in chemistry and botany, so far as they illustrate the science of medicine; and in two, at least, of the following ancient medical writers: —Hippocrates, Aretæus, Galen, and Celsus. For a Doctor's degree in Medicine, a dissertation upon some subject, to be approved of by the Professor of Medicine, is to be publicly recited in the schools, and a copy of it afterwards delivered to the professor. For the degree of Bachelor in Medicine, all students in that faculty are eligible when they have completed twenty-eight terms from the day of matriculation; and, for a Doctor's, three years must intervene from the time of the candidate's having taken his Bachelor's degree. Degrees are conferred once a year.

The Bodleian Library is open, between Lady-day and Michaelmas, from nine in the morning till four in the afternoon; between Michaelmas and Lady-day, from 10 in the morning till three in the afternoon. At the Ashmolean Museum there is a Laboratory for the use of the Professor of Chemistry.

There are four Terms in a year, viz.:—1. Michaelmas Term, which begins on the 10th of October, and ends on the 17th of December. 2. Hilary Term, which begins on the 14th of January, and ends the day before Palm-Sunday. But if the Saturday before Palm-Sunday should be a festival, in that case the Term does not end till the Monday following. 3. Easter Term, which begins on the tenth day after Easter-Sunday, and ends on the day before Whit-Sunday. 4. Trinity Term, which begins on the Wednesday after Whit-Sunday, and ends the Saturday after the Act, which is always on the first Tuesday in July.

UNIVERSITY OF CAMBRIDGE.

UNIVERSITY OFFICERS, 1853.

Chancellor.—His Royal Highness Prince Albert, LL D., Trinity.
High Steward.—Lord Lyndhurst, LL.D., Trinity.
Vice-Chancellor.—James Pulling, B.D., Corpus.
Representatives in Parliament. } Right Hon. H. Goulburn, M.A., Trinity. } Loftus T. Wigram, M.A., Trinity.
Librarian.—Joseph Power, M.A., Clare.
Registrar.—Joseph Romilly, M.A., Trinity.
ANNUAL OFFICER—CAPUT—*in Physic.*—William Henry Drosier, M.D., Caius.

HEADS OF COLLEGES.—MASTERS.

St. Peters.—Henry Wilkinson Cookson, D.D.
Clare Hall.—William Webb, D.D., F.L.S.
Pembroke.—Gilbert Ainslie, D.D.
Gon. & Caius.—Edwin Guest, M.A.
Trinity Hall.—Thomas Charles Geldart, LL.D.
Corpus Christi.—James Pulling, B.D.
King's.—Richard Okes, D.D.
Queen's.—Joshua King, LL.D.
St. Catherine's Hall.—Henry Philpott, D.D.
Jesus.—George Elwes Corrie, D.D.
Christ's.—James Cartmell, D.D.
St. John's.—Ralph Tatham, D.D.
Magdalene.—Hon. G. Neville Grenville, M.A.
Trinity.—William Whewell, D.D.
Emmanuel.—George Archdall, D.D.
Sidney Sussex.—Robert Phelps, D.D.
Downing.—Thomas Worsley, M.A.

PROFESSORS.

Regius of Physic.—Henry J. Hayles Bond, Corpus.
Chemistry.—J. Cumming, M.A., F.R.S., Trinity.
Anatomy.—William Clark, M.D., Trinity.
Botany.—J. S. Henslow, M.A., F.L.S., John's.
Downing of Medicine.—W. W. Fisher, M.D., Down.
Curator of the Botanic Garden.—James Stratton.

The Divinity, Law, and Physic Schools, are open during the whole of every term, and the keeping of all Acts, except the former, which are confined to every other Thursday, is entirely at the discretion of the respective Professors.

Regulations for the Natural Sciences Tripos.

1. That a New Honor Tripos be established, to be called "The Natural Sciences Tripos," the places in which shall be determined by an examination in the following subjects:—Human and Comparative Anatomy, Physiology, Chemistry, Mineralogy, excluding the Mathematical part of Crystallography, Botany, Geology.

2. That the Examiners for the "Natural Sciences Tripos" be the Regius Professor of Physic, the Professor of Chemistry, the Professor of Anatomy, the Professor of Botany, the Woodwardian Professor of Geology, the Professor of Mineralogy, together with one additional Examiner, to be nominated by the Vice-Chancellor, and appointed by grace of the Senate; and in case any of the above-mentioned Professors be prevented from examining in any year, deputies to examine instead of them shall be nominated by the Vice-Chancellor, and appointed by grace of the Senate.

3. That the examination for the "Natural Sciences Tripos" shall commence on the 6th Monday after the general admission *ad respondendum quæstioni*, and shall continue four days.

PROCEEDINGS IN PHYSIC.

BACHELOR OF MEDICINE (M.B.)

A student before he can become a Bachelor of Physic must have entered on his sixth year, computed from the date of his first admission at the University, have resided nine terms, and have passed the previous examination.

A Bachelor of Arts may become a Bachelor of Physic after having entered on his sixth year, computed from the date of his first admission at the University, provided that one year at least has intervened between his final determination in Arts, and his admission to the degree of Bachelor of Physic.

The exercises for this degree are one act and one opponency.

Candidates for the Degree of Bachelor of Physic must

previously to the performance of these exercises, in addition to the examination by the Regius Professor of Physic, be examined by the Professors of Anatomy, Chemistry, and Botany, and the Downing Professor of Medicine. The examinations by the Professors of Chemistry and Botany may take place in the fourth year after admission. The other part of the examination may take place in the fifth year after admission, but not earlier. They must have diligently attended the lectures of the Regius Professor of Physic for two terms, and must bring to him certificates of examination by the above Professors, and of attendance on their lectures, in case the course of lectures of the Professor of Botany consist of not less than twenty lectures, and the courses of lectures of the Professors of Anatomy and Chemistry, and of the Downing Professor of Medicine, of not less than fifty lectures each. They must also deliver to the Regius Professor of Physic certificates of having been diligently employed in attendance on medical lectures and the practice of some well-known hospital for two years, or for as long a time as they have been absent from the University during their Undergraduateship.

Every candidate for the M.B. degree pays the Professor 7*l.* for his Act.

If on or before the first of February in his fourth year, the candidate for LL.B. or M.B. does not declare, in writing, to the Master of his college, that it is not his intention to proceed to B.A., he forfeits 3*l.* to the University chest, over and above the usual fees; and if, *after* this declaration, he proceeds to B.A., he also pays 3*l.* extra to the Senior Proctor.

LICENTIATE IN MEDICINE.

A licence *ad practicandum in Medicini* may be granted to a Bachelor of Physic in the term subsequent to that in which he has taken the degree, or to a Master of Arts of two years' standing. Candidates for a licence *ad practicandum in Medicini*, being previously Bachelors of Physic, are required to produce to the Regius Professor of Physic certificates of their having attended on hospital practice for three years, exclusive of the nine terms which they kept by residence for the degree of Bachelor of Physic, and of their having attended lectures on the following subjects, namely:—Practice of physic and pathology, anatomy and physiology, chemistry and botany, medical jurisprudence, materia medica and pharmacy, principles of surgery, principles of midwifery, practical anatomy for two seasons. Candidates for a licence *ad practicandum in Medicina*, being previously Masters of Arts, are required to bring satisfactory evidence to the Regius Professor of Physic of their having been employed in the study of physic for five years after they became Bachelors of Arts, and to produce to him certificates of their having attended on hospital practice for three of the said five years, and of their having attended lectures on the subjects before mentioned. Every candidate for a licence *ad practicandum in Medicina* is required to pass an examination to the satisfaction of the Regius Professor of Physic, the Professor of Anatomy, the Downing Professor of Medicine, and a Doctor of Physic, to be nominated by the Vice-Chancellor, and approved by the Senate at the first congregation after the tenth of October in each year. There are two such examinations in every year; one in the week immediately preceding that in which the division of the Michaelmas term falls; the other in the week immediately preceding that in which the division of the Easter term falls. A candidate for a licence *ad practicandum in Medicina*, being previously Bachelor of Physic, cannot be examined for the said licence until the examination which shall occur next but one after his having passed the examination required for the degree of Bachelor of Physic. A student who has declared for law or physic, may put on a full-sleeved gown, when those of the same year, who go out at the regular time, have taken their degree of Bachelor of Arts. He is then styled a Harry-Soph (ἐρισοφος).

DOCTOR IN MEDICINE (M.D.)

The degree of Doctor of Physic is granted to a Bachelor of Physic of five years, or to a Master of Arts of seven years' standing. The exercises for this degree are two acts and one opponency. Every candidate for the degree of Doctor of Physic, who has not previously obtained a licence *ad practicandum in Medicina*, is required to produce to the Regius Professor of Physic the same certificates and pass the same examination as are required in the case of candidates for a licence *ad practicandum in Medicina*.

Table of College Fees for Degrees.

Colleges.	B.A.			M.A.			LL.B.			LL.D.			M.B.			M.D.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
St. Peter's	4	12	0	6	2	0	11	7	0	11	7	0	9	7	0	11	7	0
Clare	4	6	10	7	0	2	13	6	10	13	0	2	4	6	10	13	0	2
Pembroke	4	1	0	8	1	0	9	2	0	9	2	0	9	2	0	9	2	0
Caius	2	10	0	4	13	4	7	0	0	8	0	0	†7	0	0	8	0	0
Trinity Hall	2	0	0	15	0	0	15	0	0	10	0	0	15	0	0	20	0	0
Corpus Christi	4	0	0	6	0	0	6	0	0	10	0	0	6	6	0	10	0	0
‡King's	§0	13	4	3	10	6	4	1	0	6	4	0	4	1	0	6	4	0
Queens'	4	0	0	6	0	0	12	1	0	12	7	0	12	1	6	12	7	0
Catharine	3	7	4	4	17	4	10	17	4	15	0	0	10	17	4	15	0	0
Jesus	3	1	0	6	2	0	10	2	0	10	6	8	10	2	0	10	6	8
Christ's	3	14	6	6	2	0	6	2	0	8	2	0	6	2	0	8	2	0
St. John's	4	0	0	6	0	0	6	0	0	10	0	0	6	0	0	10	0	0
Magdalene	4	0	0	6	0	0	8	0	0	8	6	0	8	0	0	8	6	0
Trinity	1	12	0	7	13	6	26	12	0	27	13	0	13	17	0	14	18	0
Emmanuel	3	10	1	6	0	0	4	0	0	8	0	0	4	0	0	8	0	0
Sidney	3	15	0	5	2	0	10	7	0	10	7	0	10	7	0	16	12	0
Downing	4	4	0	4	4	0	8	8	0	8	8	0	8	8	0	8	8	0

Bachelors in the Civil Law, Physic, and Music, pay on admission to their degrees 10s. to the School-Keeper; and all Doctors £1 6s.; D.D., on creation pay £1 7s. to the Professor; and LL.D. and M.D., 7s. to each Doctor of the Faculty present.

† If previously B.A., the fee is £5.

‡ The statement of the Fees at this College supposes all to be Fellows.

§ The Father, likewise, £1 16s. jointly, and 2s. 6d. separately.

Note.—There are additional perquisites to servants, differing at the several Colleges. This, however, as a general Table of Fees is as accurate as can be given.

The following Table of Average Expense, regularly incurred by the Student, is calculated for one of the Colleges. The difference is not much at any other College:—

Annual.

	£	s.	d.
Tuition	10	0	0
Rooms, Rent	10	0	0
Attendance, Assessed Taxes, &c.	6	5	0
Coals	3	10	0
College Payments	5	7	4

Cost of Living.

Breakfast, Dinner, and Tea, at 16s. 6d. a week for twenty-five weeks, making the average three terms' residence in the year	20	12	6
Laundress	5	8	0
	£61	2	10

Rent of rooms varies in the several Colleges from 4*l.* to 30*l.* Price of lodgings, 8s. to 28s. per week; the most frequent payment is 14s. or 16s.; and half-price is paid in vacations. Entertainment in rooms, attendance of a gyp, orders in the hall, are extra and optional. Private tuition is for the most part 14*l.* or 7*l.* a term. Personal expenses and tradesmen's bills are independent of the place; they are paid by the student himself, or through the tutor, as may be found expedient.

REGIUS PROFESSOR OF PHYSIC.

Dr. Bond's Lectures.—The Regius Professor of Physic delivers a course of lectures, occupying two terms, on the Principles of Pathology, consisting of about fifty lectures. All candidates for the degree of B.M. are required to produce to the Caput a certificate of a diligent attendance on a complete course of these lectures. Members of the University, who have a general ticket of admission to the lectures of the Professors, may attend the first part of the course, and, by payment of two guineas additional, the entire course. The terms of attendance for those not provided with a general ticket are five guineas for the first course; afterwards gratis.

CHEMISTRY.

Professor Cumming's Lectures.—A course of lectures on the General Principles of Chemistry is given during the Lent term, in the schools in the Botanical Garden. The medical students are required to attend these lectures under the same regulations as those of the Anatomical Professor.

ANATOMY.

Dr. Clark's Lectures on Human Anatomy.

The course consists of at least fifty lectures, which are delivered in the Anatomical School in the Michaelmas and Lent terms, (after the division of each,) between the hours of one and two. The terms of attendance are five guineas

for each of two courses; afterwards gratis. These lectures (a certificate of attendance on which, provided they amount to fifty in number, is required by the Senate from candidates for medical degrees) explain the general and special anatomy of the human body, together with the principles of physiology. The pupils have the opportunity of dissecting in private.

Dr. Clark's Lectures on Comparative Anatomy and Physiology.

In accordance with the regulations of the "Natural Sciences Tripos" a course, consisting of twenty-four lectures, on Comparative Anatomy and Physiology, is delivered in the Anatomical School on Mondays, Wednesdays, and Fridays at one o'clock, during the October term. Members of the University who have not a general ticket of admission to the lectures of the Professors, may attend these lectures on payment of two guineas for each course.

BOTANY.

Professor Henslow's Lectures.

These lectures are delivered during the Easter term. The Professor occasionally makes herborizing excursions with his class, in the neighbourhood of Cambridge.

DOWNING PROFESSOR OF MEDICINE.

The Downing Professor of Medicine will give a course of fifty lectures on some medical subject. A certificate of attendance on these lectures is required of persons proceeding to the degree of M.B.

ADDENBROOKE'S HOSPITAL

was opened in the year 1776, and contains upwards of one hundred beds. Certificates of attendance on the practice in it are recognised by the University, by the Royal Colleges of Physicians and Surgeons, and by the Society of Apothecaries in London. During term clinical lectures are delivered weekly by the physicians, and a course of lectures on the Principles of Surgery by Mr. Humphry, the certificate of attendance on which is received of candidates for L.M.

Physicians.—Henry J. H. Bond, M.D.; G. E. Paget, M.D.; William W. Fisher, M.D.

Consulting Surgeon.—John Okes, Esq., F.R.C.S.

Surgeons.—Charles Lestourgeon, M.A., F.R.C.S.; Josiah Hammond, F.R.C.S.; George M. Humphry, F.R.C.S.

Fees.—For attendance on the medical and surgical practice and the lectures:—

For 6 months . . .	Eight guineas.
12 months . . .	Ten guineas.
An unlimited period . .	Fifteen guineas.

THE UNIVERSITY LIBRARY

contains about 170,000 volumes. It is open on Saturdays from ten till one; on January 30th, May 29th, and Saints' Days, from twelve till three; and on other days from ten till three.

THE ANATOMICAL MUSEUM.

This rich and interesting collection, now placed in commodious buildings lately erected at great cost by the University, is under the care and superintendence of the Professor of Anatomy for the time being. It is used by him and by the Regius Professor of Physic for the illustration of their respective lectures. The Museum is at all times open to the Regius Professor of Physic; to the other Professors of Medicine or Natural Science, to Doctors and Bachelors of Physic, and to all students attending the lectures of the Regius Professor of Physic, and of the Professor of Anatomy, or of any of the above-described Professors, from eleven to twelve every day, with the exception of Sundays, Christmas-day, and Good Friday. It is also open to all graduates introduced by any member of the Senate, from two till three on Tuesdays, Thursdays, and Saturdays.

THE LONDON UNIVERSITY.

Chancellor.—The Earl of Burlington, LL.D., F.R.S.

Vice-Chancellor.—John George Shaw Lefevre, Esq., C.B., M.A., F.R.S.

The Senate.—The Lord Bishop of Durham, D.D., F.R.S; the Lord Bishop of St. David's, D.D.; the Lord Monteagle, F.R.S.; the Lord Overstone; Andrew Amos, Esq., M.A.; Neil Arnott, Esq., M.D., F.R.S.; John Austin, Esq.; John Bacot, Esq.; Admiral Sir Francis Beaufort, K.C.B., F.R.S.; Archibald Billing, Esq., M.D., A.M., F.R.S.; Professor Brande, F.R.S.; Sir James Clark, Bart, M.D., F.R.S; Sir Philip Crampton, Bart., M.D.; Professor Faraday, D.C.L., F.R.S.; the Right Hon. Sir Jas. Robt. Geo. Graham, Bart., LL.D., M.P., F.R.S.; George Grote, Esq., M.A; Henry Hallam, Esq., M.A., F.R.S.; Sir Stephen Love Hammick, Bart.; the Rev. Professor Henslow, M.A.; Thos. Hodgkin, Esq., M.D.; Joseph Henry Jerrard, Esq., LL.D.; Francis Kiernan, Esq., F.R.S.; George Cornewall Lewis, Esq., M.A.; Charles Locock, Esq., M.D.; Sir John William Lubbock, Bart., M.A., F.R.S.; the Right Hon. Thomas Babington Macaulay, M.A., M.P., F.R.S.; Sir James M'Grigor, Bart., M.D., K.C.B., F.R.S.; Jones Quain, Esq., M.D.; John Ridout, Esq.; Peter Mark Roget, Esq., M.D., F.R.S.; Nassau William Senior, Esq., M.A.; James Walker, Esq., LL.D., F.R.S.; Henry Warburton, Esq., M.A., F.R.S.

Registrar.—Richard Wellesley Rothman, Esq., M.D.

EXAMINERS.

Medicine.—Archibald Billing, Esq., M.D., M.A., F.R.S., and Alexander Tweedie, Esq., M.D., F.R.S.

Surgery.—Sir Stephen Love Hammick, Bart., and Joseph Hodgson, Esq., F.R.S.

Anatomy and Physiology.—Francis Kiernan, Esq., F.R.S., and Professor Sharpey, M.D., F.R.S.

Physiology and Comparative Anatomy.—Professor Carpenter, M.D., F.R.S.

Midwifery.—Edward Rigby, Esq., M.D.

Chemistry.—Professor Brande, F.R.S.

Botany.—The Rev. Professor Henslow, M.A.

Materia Medica and Pharmacy.

BACHELOR OF MEDICINE.

Candidates for the degree of Bachelor of Medicine shall be required—1. To have been engaged during four years in their professional studies, at one or more of the Institutions or Schools recognised by this University. 2. To have spent one year at least of the four in one or more of the recognised Institutions or Schools in the United Kingdom. 3. To pass two examinations.

First Examination.—The first examination shall take place once a year, and commence on the first Monday in August. No candidate shall be admitted to this examination, unless he have produced certificates to the following effect:—1. Of having completed his nineteenth year. 2. Of having taken a Degree in Arts in this University, or in a University, the Degrees granted by which are recognised by the Senate of this University; (a) or of having passed the Matriculation Examination. (b) 3. Of having been a student during two years, at one or more of the Medical Institutions or Schools recognised by this University, subsequently to having taken a Degree in Arts, or passed the matriculation examination. 4. Of having attended a course of lectures on each of the four subjects in the following list:—Descriptive and surgical anatomy, general anatomy and physiology, comparative anatomy, pathological anatomy, chemistry, botany, materia medica and pharmacy, general pathology, general therapeutics, forensic medicine, hygiene, midwifery and diseases peculiar to women and infants, surgery, medicine. 5. Of having dissected during nine months. 6. Of having attended a course of practical chemistry, comprehending practical exercises in conducting the more important processes of general and pharmaceutical chemistry; in applying tests for discovering the adulteration of articles of the materia medica, and the presence and nature of poisons; and in the examination of mineral waters, animal secretions, urinary deposits, calculi, &c. 7. Of having attended to practical pharmacy during a sufficient length of time to enable him to acquire a practical knowledge in the preparation of medicines. These certificates shall be presented to the registrar at least fourteen days before the examination begins. The fee for this examination shall be five pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be afterwards admissible to the first examination without the payment of any additional fee. Candidates

(a) The Degrees in Arts of all Universities in the United Kingdom are recognised by the Senate for this purpose.

(b) The Matriculation Examination is the same for Students in Arts and for Students in Medicine.

shall be examined in the following subjects:—Anatomy, Physiology, Chemistry, Botany, Materia Medica and Pharmacy. The candidate shall also be required to translate passages from the Latin Pharmacopœia.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the first examination may be examined for honours in any or all of the following subjects:—Anatomy and Physiology, (Candidates may illustrate their answers by sketching the parts they describe,) Chemistry, Materia Medica and Pharmaceutical Chemistry, Structural and Physiological Botany. The examinations shall take place in the week following the commencement of the first examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the candidates when they appear to require explanation.

Second Examination.

The second examination shall take place once a year, and commence on the first Monday in November. No candidate shall be admitted to this examination within two academical years of the time of his passing the first examination, nor unless he have produced certificates to the following effect:—1. Of having passed the first examination. 2. Of having, subsequently to having passed the first examination, attended a course of lectures on each of two of the subjects comprehended in the list above, and for which the candidate had not presented certificates at the first examination. 3. Of having, subsequently to having passed the first examination, dissected during six months. 4. Of having conducted at least six labours. (Certificates on this subject will be received from any legally-qualified practitioner in medicine.) 5. Of having attended the surgical practice of a recognised hospital, or hospitals, during twelve months, and lectures on clinical surgery. 6. Of having attended the medical practice of a recognised hospital, or hospitals, during other twelve months, and lectures on clinical medicine. 7. Of having, subsequently to the completion of his attendance on surgical and medical hospital practice, attended to practical medicine in a recognised hospital, infirmary, or dispensary, during six months. (Certificates on this subject will be received from any legally qualified practitioner having the care of the poor of a parish.) The candidate shall also produce a certificate of moral character from a teacher in the last school or institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. These certificates shall be transmitted to the registrar at least fourteen days before the examination begins. The fee for this examination shall be 5*l*. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be afterwards admissible to the second examination without the payment of any additional fee. Candidates shall be examined in the following subjects:—Physiology, (the papers in Physiology shall include questions in Comparative Anatomy;) General Pathology, General Therapeutics, Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine. The candidate shall also be required to translate passages of the Latin Pharmacopœia into English and of the English Pharmacopœia into Latin.

EXAMINATION FOR HONOURS.

Any candidate who has been placed in the first division at the second examination may be examined for honours in any or all of the following subjects: Physiology and Comparative Anatomy (candidates may illustrate their answers by sketching the parts they describe), Surgery, Medicine, Midwifery. The examinations shall take place in the week following the second examination. They shall be conducted by means of printed papers; but the examiners shall not be precluded from putting *vivâ voce* questions upon the written answers of the candidates when they appear to require explanation.

DOCTOR OF MEDICINE.

The examination for the degree of Doctor of Medicine shall take place once a-year, and commence on the fourth Monday in November. No candidate shall be admitted to this examination unless he have produced certificates to the following effect.—1. Of having taken the degree of Bachelor of Medicine in this University, or a degree in Medicine or in Surgery at a University, the degrees granted by which are recognised by the Senate of this University.(a) Those candidates who have not taken the degree in this University shall produce a certificate of having completed their 23rd year. 2. Of having attended—subsequently to having taken one of the above degrees in medicine—*a*. To clinical or practical medicine during two years in an hospital or medical institution recognised by this University. *b*. Or to clinical or practical medicine during one year in an hospital or medical institution recognised by this University, and of having been engaged during three years in the practice of his profession. *c*. Or, if he have taken the degree of Bachelor of Medicine in this University, of having been engaged during five years in the practice of his profession. One year of attendance on clinical or practical medicine, or two years of practice, will be dispensed with in the case of those candidates who at the second examination have been placed in the first division. 3. Of moral character, signed by two persons of respectability. These certificates shall be transmitted to the registrar at least fourteen days before the examination begins. The fee for the degree of Doctor of Medicine shall be 10*l*. No candidate shall be admitted to the examination unless he have previously paid this fee to the registrar. If a candidate fail to pass the examination, the fee shall not be returned to him; but he shall be admissible to any subsequent examination for the same degree without the payment of any additional fee. The examination shall be conducted by means of printed papers and *vivâ voce* interrogation. Candidates shall be examined in the following subjects:—Elements of Intellectual Philosophy, Logic, and Moral Philosophy; Medicine.

REGULATIONS RELATING TO STUDENTS WHO COMMENCED THEIR MEDICAL STUDIES IN OR BEFORE JANUARY, 1839.

Bachelor of Medicine.—Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the first examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during two years in their professional studies. 2. Of having attended a course of lectures on each of four of the subjects comprehended in the list. (First Exam. B.M.) 3. Of having dissected during nine months. 4. Of having attended to practical pharmacy during a sufficient length of time to enable them to acquire a practical knowledge in the preparation of medicines. Candidates who commenced their professional studies in or before January, 1839, shall be admitted to the second examination for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been engaged during four years in their professional studies. 2. Of having passed the first examination. 3. Of having attended a course of lectures on each of two of the subjects comprehended in the list. (First Exam. B.M.) 4. Of having dissected during twelve months. 5. Of having attended to practical pharmacy during a sufficient length of time to enable the pupil to acquire a practical knowledge in the preparation of medicines. 6. Of having conducted at least six labours. 7. Of having attended the surgical practice of a recognised hospital or hospitals during twelve months. 8. Of having attended the medical practice of a recognised hospital or hospitals during other twelve months. 9. Of having completed the twenty-second year of their age. 10. Of moral character from a teacher in the last school or institution at which they have studied, as far as the teacher's opportunity of knowledge has extended. Candidates who have not taken a degree in Arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

REGULATIONS RELATING TO PRACTITIONERS IN MEDICINE OR SURGERY DESIROUS OF OBTAINING DEGREES IN MEDICINE.

Bachelor of Medicine.—Candidates shall be admitted to the two examinations for the degree of Bachelor of Medicine on producing certificates to the following effect:—1. Of having been admitted, prior to the year 1840, members of one of the legally-constituted bodies in the United Kingdom for licensing practitioners in medicine or surgery; or, of

(a) At present, all candidates for the degree of Doctor of Medicine must have previously obtained the degree of Bachelor of Medicine in this University.

having served, previously to 1840, as surgeons or assistant-surgeons in Her Majesty's Army, Ordnance, or Navy, or in the service of the Honourable the East India Company. 2. Of having received a part of their education at a recognised institution or school, as required by the charter of the University. 3. Of moral character, signed by two persons of respectability. Candidates who have not taken a degree in Arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

Doctor of Medicine.—Candidates who have been engaged during five years in the practice of their profession shall be admitted to the examination for this degree on producing certificates to the following effect:—1. Of having been engaged during five years in the practice of their profession. 2. Of having taken the degree of Bachelor of Medicine in this University. Candidates who have not taken a degree in Arts, or passed the matriculation examination in this University, will be required to translate a portion of Celsus *de Re Medicâ*.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

President.—John Ayrton Paris.

Censors.—Robert Bentley Todd, Mervyn Archdall Nott Crawford, John Webster, George Owen Rees.

Curators of the Museum.—The President, the Censors, James Arthur Wilson, James Alderson, Golding Bird.

According to the regulations of this College, no one will be admitted as a candidate for the licence or extra-licence, unless he shall have attained the age of six-and-twenty, and shall present a certificate of good moral conduct. His medical education must comprise anatomy, the theory and practice of medicine, forensic medicine, chemistry, materia medica, natural history, (particularly botany,) midwifery, and the principles of surgery, and must extend over the period of five years. Practical medicine must be studied for three years in an hospital containing at least 100 beds, and having a complete staff of physicians and surgeons. Those who have studied abroad, in addition to giving proof of five years' medical education according to the usual course of study, are required to present testimonials of a twelvemonth's attendance on medical practice at any hospital in Great Britain, having the qualifications as above.

No one will be admitted as a licentiate *(permissus)* who is accustomed to use any secret medicine or nostrum in the treatment of disease, unless previously to his first examination he make known to the President and Censors its composition and the manner in which it is employed. Every candidate must undergo three examinations before the President and Censors. The first examination comprises physiology, the second pathology, and the third therapeutics. At the commencement of the first examination, the President may inquire of the candidate where he studied polite literature and the principles of science, and what honours he has obtained, whether in philosophy, arts, or medicine, in order that the answers may be recorded by the registrar. The candidate may also be examined in Greek works on medicine,—to wit, Hippocrates, Galen, or Aretæus. Passages from the Aphorisms of Hippocrates or Galen will be brought forward during the first examination; and, during the second and third, passages from Hippocrates, Galen, or Aretæus, which must be translated into Latin, and illustrated with a brief commentary. If the candidate decline examination in Greek, he will be required to translate parts of Celsus or Sydenham, or some other Latin work on medicine, into English. The examinations are conducted in Latin or English, at the pleasure of the Censors.

Whenever a candidate has passed the prescribed examinations, and has been approved, he will be proposed at the next *comitia majora* (or meeting of the fellows at large) to be admitted as a licentiate; and, if the majority present consent, he will be admitted accordingly. If, however, the candidate be rejected, he cannot present himself for re-examination for a twelvemonth.

Before the licentiate is admitted, he is required to plight his faith to the College that he will obey its statutes, or pay the penalties imposed; and consult the honour of the College and the good of the public in all his medical practice.

If any one holding the licence of the College practise pharmacy afterwards, or engage in merchandise, he is liable to expulsion; and any person practising medicine in London, or within seven miles thereof, without having previously obtained the College licence, is to be admonished by letter to cease his practice until after he has passed the required examinations; and if he continue to practise, despite this admonition, then *legibus regni obnoxius erit*.

Persons who have attained their fortieth year, seeking to become licentiates of the College, but whose medical education is not altogether in accordance with the regulations already stated, must present very high testimonials of professional knowledge and good moral conduct, and, if these are satisfactory to the Censors, after a very strict scrutiny, the Censors may recommend to the College that they should be admitted to examination the same as for licentiates in general.

The old regulation restricting the fellowship ordinarily to the graduates of Oxford and Cambridge, was repealed in the latter part of 1835; and after Easter, 1836, all candidates were declared to be admissible as licentiates only, from which class, when duly qualified, a certain number are to be annually elected fellows in *comitia majora;* none being eligible who have not been four years in the number of licentiates.

The President of the College is *ex-officio* President of the Vaccine Board, a Trustee of the British and Hunterian Museums, and an elector to the Tancred scholarships. The College also appoints the Sherardian Professor of Botany to the University of Oxford.

The examinations for the licence are conducted by the President and Censors. The periods at which they take place are Michaelmas, Christmas, Easter, and Midsummer. The new Censors are elected on the 25th of June. The lectures are delivered in the early part of the year. There are about fifteen delivered: three Gulstonian, three Croonian, and three Lumleian, so called from the names of those who left endowments to the College for the purpose; and six lectures on materia medica. The museum and library are the property of the fellows; but licentiates may, if they desire it, be admitted to the use of the library, on payment of a small subscription.

The College fees are 56*l.* 17s. for the licence; fellowship, 55*l.* 1s.; extra licence, 25*l.*

If any fellow or licentiate should be convicted before the President and Censors of having accused any other fellow or licentiate of professional ignorance, etc., unless it be before a legally-constituted tribunal, he shall be fined 4*l.* for the first offence, and 8*l.* for the second; if he offend a third time, if a fellow, he shall be expelled, and if a licentiate, fined 10*l.* This last fine is to be enforced every time afterwards the licentiate shall so offend. If any fellow or licentiate shall offer his professional assistance to any patient whom he shall know to be under the care of another physician, whether fellow or licentiate, without having been called in to see the patient professionally, he shall be fined 40s.

If any fellow be proved to have made any arrangement with a druggist, to share with him the proceeds in his prescriptions, he shall be expelled; if a licentiate have entered into a similar arrangement, he shall be fined 10*l.* every time he shall so offend.

Every physician, whether fellow or licentiate, shall attach to each prescription which he writes, the day of the month, the name of the sick person, and his own initials. When a consultation takes place, it is to be carried on with modesty, not in the presence of the sick; and if any difference of opinion occurs, it is to be stated with prudence and moderation, so as to be as little distressing as possible to the patient or the friends, by the ordinary medical attendant. Whoever infringes these regulations will be fined 5*l.* by the President and Censors.

No fellow or licentiate may consult in London, or within seven miles thereof, with a physician who does not belong to the College, under a penalty of 5*l.*

All fines are to be paid immediately.

The President and Court of the College have the power of committing individuals contemning their authority to Newgate. This power has been exercised by the Court, but not of late years.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

COUNCIL.

President—James Luke.

Vice-Presidents—George James Guthrie, William Lawrence, Robert Keate, Thomas Copeland, Sir Benjamin Collins Brodie, Bart., Benjamin Travers, Joseph Swan, Edward Stanley, Joseph Henry Green, James Moncrieff Arnott, John Flint South, Cæsar Henry Hawkins, Frederic Carpenter Skey, Joseph Hodgson, Thomas Wormald, George Pilcher, John Bishop, Gilbert Wakefield Mackmurdo, Francis Kiernan, William Coulson, George Gulliver, Richard Partridge.

PROFESSORS.

Anatomy and Surgery—Frederic Carpenter Skey.

Hunterian—Richard Owen.

Histological—John Thomas Quekett.

Conservators of the Museum—Richard Owen, John Thomas Quekett.

Librarian—John Chatto.

Secretary—Edmund Belfour.

Clerk—Thomas Madden Stone.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma of Member of the College:—

I. Candidates will be required to produce the following certificates, viz.:—

1. Of being twenty-one years of age.

2. Of having been engaged during four years in the acquirement of professional knowledge.

3. Of having studied practical pharmacy during six months.

4. Of having attended at a recognised hospital or hospitals in the United Kingdom the practice of physic during one winter (a) and one summer (b) session.

5. Of having attended, during three winter and two summer sessions, the practice of surgery at a recognised hospital or hospitals in the United Kingdom.

6. Of having studied anatomy and physiology, by attendance on lectures and demonstrations, and by dissections, during three winter sessions.

7. Of having attended, during two winter sessions, lectures on the principles and practice of surgery.

8. Of having attended, during one summer session, lectures on materia medica, and lectures on midwifery; practical midwifery to be attended at any time after the conclusion of the session.

9. And of having attended one course of lectures on the practice of physic and one course on chemistry.

The course of study hereby prescribed is required to be observed by candidates who shall have pursued their studies in hospitals and schools in England. Those candidates who shall have studied in Scotland are required to bring certificates of having attended lectures on the institutes of medicine during one winter session, and on anatomy during two other winter sessions, and on demonstrations and dissections during three winter sessions (the foregoing regulations being in all other respects observed). Candidates who shall have attended lectures on materia medica in the University of Dublin will be allowed to bring certificates of such attendance during the winter session.

II. Members or licentiates of any legally-constituted College of Surgeons in the United Kingdom, and graduates in surgery of any University requiring residence to obtain degrees, will be admitted for examination on producing their diploma, licence, or degree, together with proof of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in medicine of any legally-constituted College or University requiring residence to obtain degrees, will be admitted for examination, on adducing, together with their diploma or degree, proof of having completed the anatomical and surgical education required by the foregoing regulations, either at the school and hospital of the University where they shall have graduated, or at one or more of the recognised schools and hospitals in the United Kingdom.

IV. Candidates, who shall have attended at recognised colonial hospitals and schools, (a) the medical and surgical practice, and the several courses of lectures, with the demonstrations and dissections required by the foregoing regulations, will be admitted for examination, upon producing certificates of such attendance, together with certificates of having attended in London, during one winter session, the surgical practice of a recognised hospital, and lectures on anatomy, physiology, and surgery, with demonstrations and dissections.

V. Certificates will not be recognised from any hospital, unless the surgeons thereto be members of one of the legally-constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such school be members of some legally-constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such school be members of one of the legally-constituted Colleges of Surgeons in the United Kingdom.

VI. Certificates will not be received on more than one branch of science from one and the same lecturer; but anatomy and physiology—demonstrations and dissections—will be respectively considered as one branch of science; and in those schools in Scotland or Ireland in which such division of those subjects is sanctioned by the College of Surgeons in each kingdom, the Institutes of Medicine,—anatomy, demonstrations, and dissections,—may be separately certified.

VII. Certificates will not be received from candidates who have studied in London, unless they shall have registered their tickets at the College, as required by the regulations, during the last ten days of January, March, and October, in each year; nor from candidates who have studied elsewhere, unless their names shall duly appear in the registers transmitted during such studies from their respective schools.

N.B. In the certificates of attendance on hospital practice and on lectures, it is required that the dates of commencement and termination be clearly expressed; and no interlineation, erasure, or alteration will be allowed.

Blank forms of the required certificates may be obtained on application to the Secretary, to whom they must be delivered, properly filled up, ten days before the candidate can be admitted to examination; and all such certificates are retained at the College.

The following are the subjects of the examination of the candidates for the fellowship of this College in classics, mathematics, and French, during the year 1854, viz.:—

Classics.—Xenophon, Memorabilia, Book I. (omitting Cap. III.); Homer, Iliad, Book XII.; Virgil, Æneid, Book XI.; Livy, Book XXI. The candidate has the option of either of the above prose authors, and of either of the above poets, but may not select both the poets as the subjects of his examination.

Mathematics.—Arithmetic; algebra, as far as to include the doctrine of proportions and simple equations with one or two unknown quantities; Euclid, Books 1, 2, and 3; statics, hydrostatics, acoustics, and optics, it being understood that the questions on these subjects shall not require, in their answers, the use of a higher branch of mathematics than simple equations.

French.—The translation into English of a passage in one of the French classical writers.

Candidates are admitted to this examination upon having completed the eighteenth year of their age, and on payment of the fee of ten guineas.

(a) The winter session comprises a period of six months, and, in England, commences on the 1st of October and terminates on the 31st of March.

(b) The summer session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July.

NOTE.—No provincial hospital will be recognised by this College which contains less than 100 patients; and no metropolitan hospital which contains less than 150 patients.

(a) The recognition of colonial hospitals and schools is governed by the same regulations, with respect to number of patients, to courses of lectures, and to physicians, surgeons, and lecturers, as apply to the recognition of provincial hospitals and schools in England.

THE SOCIETY OF APOTHECARIES.

Master.—John Parratt, Esq.

Wardens.—N. B. Ward, Esq.; R. C. Griffith, Esq.

Court of Examiners.—Edward Tegart, Chairman; H. Combe, A. M. Randall, Richard Hopkins Robertson, Robert Norton, R. King, Thomas Peregrine, Robert Druitt, C. R. Walsh, Robert Hunter Semple, William George Thiselton Dyer, S. H. Ward.

Secretary to the Court of Examiners.—Henry Blatch.

Every candidate for a certificate of qualification to practise as an apothecary, will be required to produce testimonials,—1. Of having served an apprenticeship of not less than five years to an apothecary. No gentleman practising as an apothecary in England or Wales can give his apprentice a legal title to examination, unless he is himself legally qualified himself to practise as an apothecary, either by having been in practice prior to or on August 1, 1815, or by having received a certificate of his qualification from the Court of Examiners. An apprenticeship for not less than five years to surgeons practising as apothecaries in Ireland and Scotland, gives to the apprentice a title to be admitted to examination. 2. Of having attained the full age of twenty-one years. As evidence of age, a copy of the baptismal register will be required in every case where it can possibly be procured. 3. Of good moral conduct. A testimonial of moral character from the gentleman to whom the candidate has been an apprentice, will always be more satisfactory than from any other person. 4. And of having pursued a course of medical study in conformity with the regulations of the Court.

Course of Study.

Every candidate whose attendance on lectures shall commence on or after the 1st of October, 1849, must attend the following lectures and medical practice during not less than three winter and two summer sessions: each winter session to consist of not less than six months, and to commence not sooner than the 1st nor later than the 15th of October; and each summer session to extend from the 1st of May to the 31st of July.

First Year: Winter Session.—Chemistry, Anatomy and Physiology, Anatomical Demonstrations. Summer Session: Materia Medica and Therapeutics, Botany and Vegetable Physiology, Midwifery and Diseases of Women and Children. Second Year: Winter Session.—Anatomy and Physiology, Anatomical Demonstrations and Dissections, Principles and Practice of Medicine, Medical Practice.(a) Summer Session: Medical Practice, (a) Midwifery and Diseases of Women and Children, Forensic Medicine, Practical Chemistry;(b) Clinical Medicine. Third Year: Winter Session.—Dissections, Principles and Practice of Medicine, Medical Practice,(a) Clinical Medicine and Morbid Anatomy. Practical Midwifery at any time after the conclusion of the first course of midwifery lectures.

The above course of study may be extended over a longer period than three winter and two summer sessions, provided the lectures and medical practice are attended in the order prescribed. Those gentlemen whose attendance on lectures commenced before the 1st of October, 1849, will be allowed to complete their studies in conformity with the previous regulations of the Court.

Recognition of Lecturers and Schools.

No member of the Court of Examiners will be recognised as a lecturer on any branch of medical science. No lecturer will be recognised by the Court who is not connected with a recognised medical school; or who teaches on more than two branches of medical science; nor until he has produced very satisfactory testimonials of his attainments in the science he purposes to teach, and of his ability as a teacher thereof, from at least two persons of acknowledged talents and distinguished acquirements in the particular branch of science in question; and has also given a public course of lectures on the subject he purposes to teach; but if, after such preliminary course, the lecturer shall be recognised, certificates of attendance on that course will be received. Satisfactory assurance must also be given that the teacher is in possession of the means requisite for the full illustration of his lectures, viz., that he has, if lecturing on chemistry, a laboratory and competent apparatus; on materia medica, a museum sufficiently extensive; on botany, a hortus siccus, plates or drawings, and recent plants; on midwifery, a museum, and such appointment in a public institution as may afford the means of practical instruction to the pupils. Lectures on anatomy, and physiology, and anatomical demonstrations, must be in conformity with the regulations of the Royal College of Surgeons. The lecturer on the principles and practice of medicine, if he lectures in London, must be a member of the Royal College of Physicians of London; and if in a provincial town, either a member of the Royal College of Physicians of London, or a graduated doctor of medicine of a British University of four years' standing, unless, prior to his graduation, he had been for four years a licentiate of this court. The lecturer on materia medica and therapeutics must be a member of the Royal College of Physicians, or a graduated doctor of medicine of a British University of four years' standing; or he must have been a licentiate of this Court for the same period. The lecturer on midwifery must be a member of one of the legally constituted Colleges of Physicians or Surgeons in the United Kingdom of four years' standing; or he must have been a licentiate of this Court for the same period. The names of the lecturers recognised by the Court may be known on application to the Secretary at the Hall of the Society. The certificates of teachers recognised by the constituted medical authorities in Ireland and Scotland, as also those of the medical professors in foreign universities, are received by the Court. Much inconvenience having arisen from the presentation of schedules signed by lecturers unknown to the Court, it is particularly requested that the registrars of the medical schools will furnish a correct list of their recognised teachers to the Secretary of this Court at the commencement of every winter session.

Hospitals and Dispensaries.

No hospital will be recognised by the court unless—1. It contain at least 100 beds. 2. It be under the care of two or more physicians, members of the Royal College of Physicians of London, or graduated doctors of medicine of a British University. 3. The physicians give lectures on clinical medicine, and instruction in morbid anatomy. 4. The apothecary be legally qualified, either by having been in practice prior to the 1st of August, 1815, or by having received a certificate of qualification from this Court. No dispensary will be recognised by the Court unless it be situated in some town where there is a recognised medical school, and be under the care of at least two physicians and an apothecary legally qualified. No medical practice will be available unless it be attended in conformity with the course of study prescribed for pupils.

Registration of Testimonials.

All testimonials must be given on a printed schedule, and the blanks therein must be filled up by the lecturers themselves. Students will be supplied with schedules at the time of their first registration: In London, at the Hall. In the provincial towns, from the gentlemen who keep the registers of the medical schools; and whose names may be known by application to the Secretary of this Court. All students, in London, are required personally to register the several classes for which they have taken tickets, and those only will be considered as complying with the regulations of the Court, whose names and classes in the register correspond with their schedules. Tickets of admission to lectures and medical practice must be registered in the months of October and May; but no ticket will be registered unless it be dated within seven days from the commencement of the course: and certificates of attendance must be registered in the months of April and August. Due notice of the days and hours of such Registrations will be given from time to time. The Court also require students at the provincial medical schools to register their names in their own handwriting, with the registrar of each respective school, within the first twenty-one days of October, and first fourteen days of May; and to register their certificates of having duly attended lectures or medical

(a) Medical practice must be attended during the full term of eighteen months; twelve months at an hospital connected with a recognised medical school, and six months either at a recognised hospital or dispensary, if more convenient.

(b) By practical chemistry is intended, a specific course of instruction in the laboratory, with an opportunity of personal manipulation in the ordinary processes of chemistry, and of acquiring a knowledge of the various re-agents for poisons.

NOTE.—In place of the second course of lectures on the theory and practice of medicine, the Court will admit a certificate of attendance on a course of clinical lectures, delivered in a recognised hospital by a distinct professor, consisting of not less than seventy five lectures; attended by the student after the first systematic course upon the theory and practice of medicine.

practice within fourteen days of the completion of such attendance. The registrars are requested to furnish the Court of Examiners with a copy of each registration immediately after its close, as those students only will be admitted to examination, whose registrations have been duly communicated to the Court.

Junior Preliminary Examination in Classics and Mathematics.

An examination in classics and mathematics will be held at the Hall three times in the year; viz., on the third Tuesday in the months of March, July, and November. Medical students will be admitted to this examination at any period from the date of their apprenticeship to the commencement of the second winter session of their curriculum; and those who pass it, will not be subject to any subsequent examination in Latin, except in the Pharmacopœia Londinensis and prescriptions. The subjects of examination will be announced in the medical journals three months before each examination. Candidates for this examination will be required to enter their names in a book kept at the beadle's office, not less than one month before the day of examination; and those gentlemen who fail to pass this examination will have to undergo the preliminary Latin examination.

Preliminary Latin Examination.

On the first Saturday in the months of October, Decemcember, January, February, April, May, and June, those gentlemen who have completed two winter sessions of their medical studies may be admitted to an examination in Celsus and Gregory, provided there be twenty names on the list. Candidates will be required to enter their names in a book kept at the beadle's office, on or before the preceding Monday, and to attend at half-past three o'clock p.m. on the day of examination. Those gentlemen who fail to pass this examination satisfactorily, will not be re-admitted until they appear for their general examination.

Examination.

The Court of Examiners meet in the Hall every Thursday, where candidates are required to attend at a quarter before four o'clock. Every person intending to offer himself for examination must give notice in writing to the Clerk of the Society on or before the Monday previously to the day of examination, and must at the same time deposit all the required testimonials at the office of the beadle, where attendance is given every day, except Sunday, from ten until four o'clock. The examination of the candidate for a certificate of qualification to practise as an apothecary, will be as follows:—In translating portions of the first four books of Celsus de Medicinâ, and of the first twenty-three chapters of Gregory's Conspectus Medicinæ Theoreticæ; in physicians' prescriptions, and the Pharmacopœia Londinensis; in chemistry; in practical chemistry; in materia medica and therapeutics; in botany; in anatomy; in physiology; in the principles and practice of medicine, including midwifery and the diseases of children. The examination of the candidate for a certificate of qualification to act as assistant to an apothecary, in compounding and dispensing medicines, will be as follows:—In translating physicians' prescriptions, and the Pharmacopœia Londinensis; in pharmacy and materia medica. By the 22nd section of the Act of Parliament, no rejected candidate for a certificate to practise as an apothecary can be re-examined until the expiration of six months from his former examination; and no rejected candidate as an assistant until the expiration of three months. The Act directs the following sums to be paid for certificates:—For London, and within ten miles thereof, tea guineas; for all other parts of England and Wales, six guineas. Persons having paid the latter sum become entitled to practise in London, and within ten miles thereof, by paying four guineas in addition. For an assistant's certificate, two guineas.

NAVY MEDICAL DEPARTMENT.

Director-General of the Medical Department of the Navy.—Sir William Burnett, Kt., M.D., K.C.B., K.C.H., F.R.S.

Inspectors of Hospitals and Fleets.—Sir John Richardson, Kt., M.D.; John Wilson, M.D., F.R.S.; Sir John Liddell, M.D., F.R.S.; Gilbert King, M.D.; Robert Armstrong, M.D.; William Rae, M.D.

REGULATIONS FOR CANDIDATES FOR THE OFFICE OF ASSISTANT-SURGEON IN THE ROYAL NAVY.

Admiralty, March 1, 1853.

The Right Honourable the Lords Commissioners of the Admiralty are pleased to direct that the following regulations relative to the examination of candidates for the appointment of Assistant-surgeon in the Royal Navy, shall in future be adopted:—

That a candidate for entry into the Royal Navy shall make a written application to that effect, addressed to the Secretary of the Admiralty; on the receipt of which application he will be furnished with the regulations, and a printed form to be filled up by him, to show if he possess the required qualifications.

As vacancies occur, the number of candidates required will be ordered to attend at the Admiralty Office, bringing with them the requisite certificates, showing that they are fully qualified by age, professional ability, etc., when they will be examined by a Board of Medical Officers, to be named by their Lordships.

Such candidates as shall have been found in all respects competent for the appointment of Assistant-surgeon, will be forthwith nominated to one of the naval hospitals at home, to await appointments to any of Her Majesty's ships; or should their services not be immediately required, their names will be duly registered for early appointments, as vacancies may occur.

That no person be admitted as an Assistant-surgeon in the Royal Navy, who shall not produce a certificate from one of the Royal Colleges of Surgeons of England, Edinburgh, or Dublin, or from the Faculty of Physicians and Surgeons of Glasgow, of his fitness for that office; nor, as a Surgeon, unless he shall produce a diploma, or certificate from one of the said Royal Colleges or Faculty, founded on an examination to be passed subsequently to his appointment of Assistant-surgeon as to his fitness for the situation of Surgeon in the Navy; and in every case the candidate producing such certificate, or diploma, shall also undergo a further examination, touching his qualifications in all the necessary branches and points of medicine and surgery for each of the steps in the Navy Medical Service; and that previously to the admission of Assistant-surgeons into the Navy, it will be required that they produce proof of having received a preliminary classical education, and that they possess in particular a competent knowledge of Latin; also,

That they are of good moral character, the certificate of which must be signed by the clergyman of the parish, or by a magistrate of the district.

That they have served an apprenticeship, or have been engaged for not less than six months in practical pharmacy.

That their age be not less than 20 years nor more than 26 years; and that they are unmarried.

That they have actually attended an hospital in London, Edinburgh, Dublin, Glasgow, Aberdeen, Manchester, or Bristol, for eighteen months subsequently to the age of 18, in which hospital the average number of patients is not less than 100.

That they have been engaged in actual dissections of the human body twelve months; the certificate of which from the teacher must state the number of subjects or parts dissected by the candidate.

That they have attended lectures, etc., on the following subjects, at established schools of eminence, by physicians or surgeons of the recognised Colleges of Physicians and Surgeons in the United Kingdom, for periods not less than hereunder stated; observing, however, that such lectures will not be admitted if the teacher shall lecture on more than one branch of science, or if the lectures on anatomy, surgery, and medicine be not attended during three distinct winter sessions of six months each.

Anatomy	Or General Anatomy, 12 Months and Comparative Anatomy, 6 Months	18 months.
Surgery	Or General Surgery, 12 Months and Military Surgery, 6 Months	18 ,,

Theory of Medicine...	If the Lectures on the Theory and Practice of Medicine be given in conjunction, then the period required is 18 Months	6	,,
Practice of ditto(a) ...		12	,,
Clinical Lectures ..... (at an Hospital as above).....	On the Practice of Medicine.....	6	,,
	On the Practice of Surgery	6	,,
Chemistry	Or Lectures on Chemistry 3 Months ..... and Practical Chemistry, 3 Months	6	,,
Materia Medica		6	,,
Midwifery	Accompanied by Certificates stating the number of Midwifery cases personally attended	6	,,
Botany		3	,,

In addition to the tickets for the lectures, certificates must be produced from the professors, etc., by whom the lectures were given, stating the periods (in months) actually attended by the candidates. The time also of actual attendance at an hospital or infirmary must be certified; and the tickets as well as certificates of attendance, age, moral character, etc., must be produced by the candidate previously to his examination.

Although the above are the only qualifications which are absolutely required in candidates for the appointment of Assistant-surgeon, a favourable consideration will be given to the cases of those who have obtained the degree of M.D. at either of the Universities of Oxford, Cambridge, Edinburgh, Dublin, Glasgow, London, or Aberdeen; or who by possessing a knowledge of diseases of the eye, and of any branch of science connected with the profession, such as Medical Jurisprudence, Natural History, Natural Philosophy, etc., appear to be more peculiarly eligible for admission into the service, observing, however, that lectures on these or any other subjects cannot be admitted as compensating for any deficiency in those required by the Regulations.

By the rules of the Service, no Assistant-surgeon can be promoted to the rank of Surgeon until he shall have served three years, (one year of which must be in a ship actually employed at sea,) and can produce a diploma from one of the before-mentioned Royal Colleges or the Faculty of Physicians and Surgeons, and it is resolved that not any diploma or certificate of examination from either of the aforesaid Royal Colleges shall be admitted towards the qualification for surgeon, unless the diploma or certificate shall be obtained on an examination passed after a period of not less than three years' actual service, observing that no one can be admitted to an examination for surgeon unless as hereinbefore mentioned he can produce a diploma, together with the most satisfactory certificates, that he has performed, on the dead body, under the superintendence of a professor or teacher of known eminence, all the capital operations of surgery, and is perfectly competent to perform any operation with skill and dexterity, and thoroughly acquainted with the anatomy of the parts involved in such operation; without which qualification, no one hereafter can be promoted to the higher branches of the Service; and whenever assistant-surgeons already in the Service (whose professional education may not be in accordance with the above) obtain leave to study previously to their passing for Surgeon, they will be required on their examination to produce testimonials of their having availed themselves of the period of leave to complete their education agreeably to these regulations generally.

It is also to be observed, that candidates who may be admitted into the Naval Medical Service, must serve in whatever ships, etc., they may be appointed to; and that, in the event of their being unable to do so from sea sickness, their names cannot be continued on the Naval Medical List, nor can they, of course, be allowed half-pay.

Full Pay.—Medical Inspector of Hospitals, on first appointment, 1*l.* 13s. per diem; after 10 years' service, 2*l.* 2s.; Deputy Medical Inspector of Hospitals, on appointment, 1*l.* 7s. 6d.; Surgeons of Hospitals, on appointment with less than 20 years' service, 16s. 6d.; above 20 years service, 1*l.* 0s. 6d. Medical Inspector of Hospitals and Fleets, above 10 years' service as such, 2*l.* 2s.; under 10 years' service as such, 1*l.* 11s. 6d.; Deputy Medical Inspector of Hospitals and Fleets, 1*l.* 11s. 6d., with such further allowance when employed in hospitals on shore as their Lordships may think proper. Surgeon, if employed on the 1st July, 1840, or on the completion of 3 years' service from 1st January, 1838, of an hospital ship, 18s.; above 20 years' full pay service, including service as Assistant-surgeon. 18s.; above 10 years' ditto, 14s.; above 6, 12s.; under 6, 11s. If unemployed on the 1st July, 1840, until the completion of 3 years' service from 1st January, 1838, above 20 years' full pay service, including 3 years' service only as Assistant-surgeon, 18s.; above 10 years', 14s.; above 6, 11s.; under 6, 10s.

Relative Rank of Officers of the Army and Navy.—Medical Inspectors of Hospitals and Fleets with Lieutenant-Colonels; Deputy-Medical Inspectors of Hospitals and Fleets with Majors; Surgeons with Captains; and Assistant-surgeons with Lieutenants.

(a) Six Months' Lectures on Pathology, if given at a University where there may be a Professorship on that branch of science, will be admitted in lieu of six months' lectures on the Practice of Medicine.

ARMY MEDICAL SERVICE,
12, ST. JAMES'S-PLACE.

Inspector-General of Hospitals, and Superintendent of the Medical Department.—Dr. Andrew Smith.

Professional Assistant.—Dr. Thomas Spence, Staff-surgeon of the First Class.

Inspector of Medicines and Instruments.—Staff-surgeon Pilleau, Second Class.

Apothecary to the Forces.—F. M. Bassano, Esq.

Candidates are required to produce the diploma of the College of Surgeons of London, Edinburgh, or Dublin, and the following testimonials:—

Eighteen months' attendance at an hospital of celebrity, where the average number of in-patients is not less than one hundred; twelve months' anatomy; twelve months' practical anatomy; six months' physiology; twelve months' surgery, or (what is preferred) six months' surgery and six months' military surgery; eight months' clinical surgery, a complete course of two or three lectures during the week; twelve months' practice of physic, or six months' practice of physic and six of general pathology; eight months' clinical lectures on ditto, the same as required in surgery; twelve months' chemistry; six months' practical chemistry; three months' botany; three months' materia medica; three months' practical pharmacy or apprenticeship; three months' natural history; three months' midwifery; three months' practical midwifery; one course natural philosophy; one course logic.

The candidates must be unmarried, not beyond twenty-five years of age, nor under twenty-one years.

Candidates who have had a University education, and have the degree of A.B. or A.M., as well as that of M.D., will be preferred; but a liberal education, and a competent knowledge of the Greek and Latin languages, are indispensably requisite in every candidate.

The greater the attainments of the candidates, the more eligible will they subsequently be deemed for promotion, as selections to fill vacancies will be guided more by reference to such acquirements, especially in the higher ranks, than to mere seniority.

Although the British schools are specified, it is to be understood that candidates who have received regular education in approved foreign universities or schools will be admitted to examination.

With the exception of practice of physic and clinical medicine by one teacher, candidates must have attended separate lecturers for each branch of science.

Before promotion from the rank of assistant-surgeon to any higher rank, every gentleman must be prepared for such other examination as may be ordered before a Board of medical officers.

Diplomas, tickets of attendance on lectures, and certificates of regular attendance by each professor or lecturer, must be lodged at this office for examination and registry, at least one week before the candidate appears for examination; likewise certificates of moral conduct and character, one of them by the parochial minister, if possible. Baptismal certificates are required at the same time; and, if the parish register cannot be resorted to, an affidavit from one of the parents, or some near relative who can attest the fact, will be accepted.

The certificate of the teacher of practical anatomy must state the number of subjects or parts dissected by the pupil.

Certificates of lectures and attendance must be from physicians or surgeons of the recognised colleges of the United Kingdom, or of foreign universities.

All candidates for medical appointments are required to be conversant with Cullen's Nosology.

Blank forms to the following effect must be filled up and forwarded, one clear week before the candidate can be admitted for examination :—

"Form of Certificate.—I (Christian and surname at full length) am years of age, and a candidate for employment in the medical department of the army. I do hereby attest my readiness to engage for general service, whether at home or abroad, and to proceed on duty immediately on being gazetted. I declare my age not to exceed twenty-six years; that I am unmarried; and that I labour under no mental nor constitutional disease, nor physical debility, that can interfere with the most efficient discharge of the duties of a medical officer."

(Signature.)

"I have pursued the under-mentioned course of study, of which I am ready to produce the vouchers for registry, and also a certificate of my age,—namely, I possess certificates of regular attendance at the under-mentioned hospitals and course of lectures for the number of months stated" (specifying as to hospitals after the following form)

The hospital or infirmary for months.
The Hospital for Mental Derangement, for months.
The Hospital for Diseases of the Eye, for months.
The Lying-in-Hospital, for months.

And in reference to certificates specifying the lectures, name of the lecturer, place where the lectures were delivered, and period of months in attendance, of all the courses required by regulations, with any others in addition which he may possess. If in possession of a degree, state the college, university, etc., and date of graduation.

Note.—All communications to be pre-paid, or, if not, to be forwarded, addressed outside to "The Right Honourable the Secretary at War," with the words "Army Medical Department" at the left hand corner.

Army Medical Department.—Full-pay, per diem, after actual service (in years)—Inspector-General, twenty-five years, 2*l.*; twenty years, 1*l.* 18s.; ten years, 1*l.* 16s. Deputy-Inspector, according to the same gradations of service, 1*l.* 10s., 1*l.* 8s., and 1*l.* 4s. Staff-Surgeon, first class, ditto, 1*l.* 4s., 1*l.* 2s., 19s. Regimental-Surgeon and Staff-Surgeon, second class, ditto, 1*l.* 2s., 19s., 15s.; under ten years, 13s. Assistant-Surgeons, ditto, 10s. and 7s. Assistant-Surgeons, serving in the Horse, Life, or Dragoon Guards, receive about 1s. per diem in addition to the above rates. Half-pay per diem, after service (in years)—Inspector-General, thirty years, 1*l.*; twenty-five years, 15s.; twenty years, 12s. Deputy-Inspector, thirty years, 18s.; twenty-five years, 14s.; twenty years, 10s.; ten years, 8s.; under ten years, 7s. Staff-Surgeons, thirty years, 16s.; twenty-five years, 13s.; twenty years, 9s. 6d.; ten years, 7s. 6d.; under ten years, 6s. 6d. Regimental-Surgeons and Staff-Surgeons, second class, thirty years, 15s.; twenty-five years, 11s. 6d.; twenty years, 8s.; ten years, 6s.; under ten years, 5s. 6d. Assistant-Surgeons, thirty years, 7s.; twenty-five years, 6s.; twenty years, 5s. 6d.; ten years, 4s.; under ten years, 3s.

ORDNANCE MEDICAL DEPARTMENT.

63, PALL MALL.

Master-General.—Lord Raglan.
Inspector-General.—Mr. James Stewart.
Deputy Inspector-General.—Dr. Verling.

Provisional List.—Medical students who have completed their twentieth year, who have been well instructed in Latin and Greek, the elements of mathematics and natural philosophy, and who can produce satisfactory proofs of being diligent in the study of their profession, and the sciences connected with it, may be entered in the provisional list of gentlemen desirous of being admitted candidates for the ordnance medical department. A knowledge of modern languages, though not indispensable at the time of provisional reception, is highly desirable, and will be duly appreciated.

Candidates.—No applicant is to be received on the list of candidates before he is twenty-two, nor retained on it after he is twenty-five years of age. The age of every individual must be verified by a certificate of his baptism, if it can be procured; but if not, by a solemn declaration of one of his parents, or of some other person who can attest the date of his birth.

Qualifications.—Every candidate must bring proof of having diligently served five years to a surgeon and apothecary, if educated in England; but if not, qualification in the practice of medicine and pharmacy equivalent thereto. Of having attended the practice of surgery in a recognised hospital or hospitals, where clinical instruction is constantly given for three years, three months being allowed for a vacation in each year. Of having attended anatomical lectures, demonstrations, dissections; three anatomical seasons or sessions. Morbid anatomy and pathology; one course. Lectures on the principles and practice of surgery, delivered in two distinct periods or sessions; two courses, each comprising seventy lectures, or one course of surgery and one of military surgery. Natural history or comparative anatomy; one course. Chemistry, one course of 100 lectures. Botany; one course. Materia medica and therapeutics; one course of 100 lectures. Lectures on the principles and practice of medicine; two courses, each 100 lectures, second and third winters. Medical practice, with clinical lectures, eighteen months, commencing the second session; namely, twelve months in a recognised hospital, and the remaining six months either in a recognised hospital or a dispensary. Medical jurisprudence, with toxicology; one course of fifty lectures. Midwifery, two courses, each of sixty lectures, second and third sessions. Practical midwifery, (not less than thirty cases); after the conclusion of the first course on midwifery lectures, a certificate of having passed the usual examination is to be produced. Diseases of the eye (with attendance on patients of that class); one course. He must produce a diploma from either of the Colleges of London, Edinburgh, or Dublin; and, if not a graduated M.D. of Scotland or Ireland, after having actually passed an examination in the University where he has obtained his degree; a certificate also of qualification from the Society of Apothecaries in London. It is likewise expected that candidates shall have attended establishments for the cure of diseases of the ear and skin, and for the treatment of patients affected with mental derangement. The moral conduct and character of each individual must be certified, also that he is unmarried, and has no disease unfitting him for his duties.

EAST INDIA COMPANY'S MEDICAL SERVICE.

President.—The Right Hon. Sir Charles Wood, Bart., M.P.
Secretaries.—Robert Lowe, Esq., M.P.; Sir Thomas Redington, K.C.B.
Assistant Secretary and Senior Clerk in the Revenue Department.—Hugh Stark, Esq.
Military Department.—Arthur Easton, Esq.
Register and Keeper of the Papers.—Mr. Thomas Sharp.
Clerk for Passing Cadets and Assistant-Surgeons.—Thomas Robert Clarke, Esq.
Examining Physician.—Dr. John Scott.
Surgeon, Poplar Hospital.—Thomas Gray, Esq.
Inspector-Surgeon for Invalid Seamen and Soldiers.—William G. Merrett, Esq.
Inspector-Surgeon for Invalid Soldiers at Gravesend.—Chas. J. Pinching, Esq.

ASSISTANT-SURGEONS.

REGULATIONS FOR THEIR ADMISSION INTO COMPANY'S SERVICE.

Age.—The Assistant-surgeon must not be under 22 years, in proof of which he must produce an extract from the register of the parish in which he was born, or his own declaration pursuant to the Act 5th and 6th Gulielmi IV., c. lxii., and other certificates, agreeably to forms to be obtained in the office for cadets and assistant-surgeons.

Qualification in Surgery.—The Assistant-surgeon, upon receiving a nomination, will be furnished with a letter to the Court of Examiners of the Royal College of Surgeons, to be examined in surgery, and their certificate will be deemed a satisfactory testimonial of his qualification; but, should the Assistant-surgeon be previously in possession of a diploma from the Royal College of Surgeons of London, or of the Colleges of Surgeons of Dublin or Edinburgh, or of the College and University of Glasgow, or of the Faculty of Phy-

sicians and Surgeons of Glasgow, either of them will be deemed satisfactory as to his knowledge of surgery, without any further examination. He is also required to produce a certificate from the cupper of a public hospital in London of having acquired and being capable of practising, with proper dexterity, the art of cupping.

Qualification in Physic.—The Assistant-surgeon will also be required to pass an examination by the Company's examining physician in the practice of physic, in which examination will be included as much anatomy and physiology as is necessary for understanding the causes and treatment of internal diseases, as well as the art of prescribing and compounding medicines; and Dr. Scott will then require him to produce satisfactory proof of his having attended at least two courses of lectures on the practice of physic; and, above all, that he should produce a certificate of having attended diligently the practice and clinical instruction of the physicians at some general hospital in London for six months; or at some general hospital in the country (within the United Kingdom) for six months, provided such provincial hospital contain at least, on an average, 100 in-patients, and have attached to it a regular establishment of physicians as well as surgeons. It is also expected that the Assistant-surgeon shall produce a certificate of having diligently attended, for at least three months, the practical instruction given at one of the asylums for the treatment of the insane, and at one of the institutions or wards of an hospital especially dedicated to the treatment of ophthalmic disease. He will also be required to attend a course of lectures on the principles and practice of military surgery, if such a course shall be given at the place at which he has been educated. No attendance on the practice of a physician at any dispensary will be admitted.

All cadets and Assistant-surgeons are required to subscribe to the military and medical funds at their respective Presidencies.

All cadets and Assistant-surgeons who shall fail to apply for their orders within three months from the date of their being passed and sworn, or shall not actually proceed under such orders, will be considered as having forfeited their appointments, unless special circumstances shall justify the Court's departure from this regulation.

A subaltern officer or Assistant-surgeon, having served six years in India, is permitted to retire on the half-pay of ensign, if his constitution should be so impaired as to prevent the possibility of his continuing in India.

SURGEONS.

					Retire on
After 20 years' service,	3 years' furlough	included,			191*l.* a year
24	,,	,,	,,	,,	250*l.* ,,
28	,,	,,	,,	,,	300*l.* ,,
32	,,	,,	,,	,,	365*l.* ,,
35	,,	,,	,,	,,	500*l.* ,,
38	,,	,,	,,	,,	700*l.* ,,

The present regulations by which superintending surgeons are entitled as such to retiring pensions of 300*l.* and 365*l.* a-year, and members of the medical board to pensions of 500*l.* and 700*l.* a-year, according to period of service in those ranks respectively, will cease to be the rule of the service for medical officers after the 16th July, 1842; but individuals then in the service, and who may be appointed to the offices of superintending surgeon and member of the board within ten years from that date, will be allowed the option of retiring upon pensions upon the old scale of length of service in those ranks, instead of the new scale of length of service in India.

RELATIVE RANK IN THE EAST INDIES.

Physicians-General, Surgeons-General, and Inspectors-General of Hospitals, rank with Brigadier-Generals.

Superintending Surgeons rank with Lieutenant-Colonels; Senior-Surgeons with Majors; Surgeons with Captains; and Assistant-Surgeons with Lieutenants.

KING'S COLLEGE.

MEDICAL DEPARTMENT.

The next winter session will commence on Monday, October 3, 1853, with an Introductory Lecture, at 2 o'clock, by Dr. Guy.

The next summer session will commence on Monday, May 1, 1854.

The students received into this department are:—

Matriculated students, or those who receive their entire medical education at King's College. Each candidate for matriculation must produce a testimonial of good moral character, and, when admitted by the Principal, must subscribe his name to a declaration that he will conform to all such rules and regulations as may from time to time be made for the good government of the College, under the sanction and authority of the Council. Matriculated students wear a cap and gown; are alone eligible as clinical clerks, dressers, physicians' assistants, or house-surgeons to the hospital; can alone contend for the medical scholarships, the Leathes and Warneford prizes; and they pay a lower amount of fees to the hospital than non-matriculated students.

2. Occasional students, or those who enter to one or more particular classes. Every class is open to such students on payment of the prescribed amount of fees.

The year is divided into two sessions. The winter session, beginning October 1, terminates at the end of March. The summer session, beginning about May 1, terminates at the end of July.

[*For particulars as to Lecturers, etc., see Tables, pp.* 311-12.]

Resident Medical Tutor.—William Brinton, M.D. The duty of the medical tutor is to assist the students living in the College, as well as the non-resident students, in the subjects of the lectures of their first and second years.

TABLE OF FEES, AND DAYS AND HOURS OF ATTENDANCE.

Medical Students are expected to attend Chapel every day, at Ten o'clock, a.m.

WINTER SESSION.

Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Hours.
Anatomy	*	—	—	—	—	—	9 —10 a.m.
The Chaplain's Lectures					—		10½—11
The Principal's Lectures			—				11½— 2
Hospital Attendance	—	—	—	—	—	—	1½
Chemistry			—	—			3 — 4
Physiology	—		—	—	—		4 — 5
Medicine		—		—		—	5 — 6
Surgery	—		—		—		5 — 6

* Examination by the Demonstrator.

SUMMER SESSION.

Botany		—	—	—		—	9 —10
Materia Medica		—	—	—	—		10½—11½
Comparative Anatomy	—		—		—		10½—11½
Forensic Medicine	—	—	—		—		12½— 1½
Practical Chemistry	—	—		—	—	—	10½—12
The Principal's Lectures			—				1½— 2
Midwifery	—		—	—	—		4 — 5

The College fees for matriculation amount to 4*l.* 15s. 6d., and must be paid upon entrance.

It is strongly recommended that the fee for attendance on the medical tutor's class for one year be added:—Fee to resident students, 2*l.* 2s.; to non-resident students, 3*l.* 3s. All resident students are required to attend the medical tutor during their first year.

The fees for perpetual admission to every course, (except the class of analytical chemistry and the medical tutor,) including the hospital, amount to 107*l.* 2s.

Payment of fees may be made either in one sum upon matriculation, or in two equal sums; the one at the commencement of the first winter or summer session, and the other after the first Christmas vacation, not later than the 21st January, unless other arrangements are made at the time of entrance.

Analytical and Experimental Chemistry.

In addition to the chemical course, and to the summer class of practical chemistry, accommodation is provided for those students who may wish to acquire a more minute acquaintance with certain subdivisions of the science than can be conveyed in a regular course of lectures.

The class formed for this purpose is conducted in the laboratory, under the superintendence of the professors and demonstrator. By this means, each student will be enabled to familiarise himself with the methods of analysis and the operations of research.

Attention is particularly given to analytical and agricultural chemistry, and processes of manufacturing art.

The fees for admission to the laboratory class are, for one month, 4*l.* 4s.; for three months, 10*l.* 10s.; for six months, 18*l.* 18s., &c.

Pathological Chemistry.—Demonstrations on the Urine.

Dr. Beale, Professor of Physiology, has a laboratory adjoining King's College Hospital, arranged especially for the prosecution of microscopical researches in connexion with pathology and chemical medicine. Fee, 5*l.* 5s. per month.

He gives also practical demonstrations on the chemical and microscopical character of the urine. Fee for the course of seven demonstrations, 2*l.* 2s. For further particulars, see the "King's College Calendar."

SCHOLARSHIPS.

A. *Warneford Scholarships.*—The sum of 200*l.* is set apart annually, in consideration of 5,000*l.* presented to the College by the Rev. S. W. Warneford, LL.D., for scholarships to students of this department.

B. *College Scholarships.*—The Council of King's College give, at the close of each winter session, the following scholarships to matriculated students of the medical department:—

1. One of 40*l.* per annum for three years, open to students of the third and fourth years.

2. One of 30*l.* per annum, for two years, open to students of the second year.

3. Three of 20*l.* per annum, for two years, open to students of the first year.

The subjects for these examinations, with the exception of certain specified portions of divinity (and Latin in the case of the junior scholarships), are wholly medical.

C. *Daniell Scholarship.*—This scholarship has been founded in honour of the late Professor Daniell, and is open to every student of the College, whether matriculated or occasional. It is of the annual value of 20*l.*, tenable for two years, and is given every second year for the best series of researches in chemistry made in the laboratory of the College since the last award.

D. *Divinity Scholarship.*—This scholarship of 30*l.* is also open to matriculated students of this department.

PRIZES.

A. *Leathes Prizes.*—The interest of 300*l.*, bequeathed by the late P. H. Leathes, Esq., is applied to the purchase of a Bible and Prayer-book, as annual prizes to the two medical students who shall be found most worthy of the same, for their proficiency in religious knowledge, and for their general good conduct.

B. *Warneford Prizes.*—The sum of 40*l.* is set apart annually in consideration of 1,000*l.* presented to the College by the Rev. S. W. Warneford, LL.D., and is expended in the purchase of medals and books, as prizes to the two medical students who shall most distinguish themselves at an examination consisting of questions in—1. Any two branches of Medical science taught in the College, to be selected by the candidates. 2. The Holy Scriptures. 3. Butler's Analogy. The first prize is of the value of 25*l.*; and the second, of 15*l.* Matriculated students only can become candidates for the prizes A and B, the examination for which takes place in October of each year.

C. *Class Prizes, and Certificates of Honour.*—Prizes are awarded annually for proficiency in the several subjects of anatomy, physiology, chemistry, materia medica, surgery, medicine, midwifery, botany, forensic medicine, comparative anatomy, and practical chemistry. These consist of books of the value of 3*l.*

Certificates of honour are given to such students in each class, as the respective professors shall consider entitled to receive them.

Two Medical Clinical prizes—one of 3*l.* for the winter session, and the other of 2*l.* for the summer session—and two Surgical Clinical prizes of the same value, are given for the best examination upon the cases treated of in the hospital, and upon the subjects discussed in the Clinical Lectures delivered during the winter and summer sessions respectively. All students, occasional as well as matriculated, will be admitted to contend for the class prizes C, under rules laid down as to the number of courses of lectures.

Associates of King's College.—At the end of each winter session, the professors lay before the Council the names of those medical students whom they recommend to be elected Associates of King's College, London, on account of general good conduct, regularity of attendance at the classes in the College and at the Hospital, and professional acquirements.

Degrees.—Students of this College are admitted to degrees in arts and medicine, and for the honours, exhibitions, and scholarships conferred by the Senate of the University of London.

By a regulation of the University of Edinburgh, three out of the four years of study required by that University for its degree of M.D. may be passed at King's College.

Residence of Students.—Rooms are provided within the walls of the College for the residence of a limited number of matriculated students. The censor of the College lives within its walls, and to him is committed, by the Council, the superintendence of all resident students under academical discipline.

Some of the professors receive pupils into their houses.

The Council have also sanctioned a limited number of medical gentlemen residing in London, or its immediate neighbourhood, to receive pupils into their houses.

The parents or guardians of students are earnestly requested to communicate with the dean of the medical department before fixing their place of residence.

Dining-hall.—There is a dining-hall in the College, for the accommodation of the resident students, and for such other students as may desire to avail themselves of it.

Further particulars may be obtained from the King's College Calendar (which may be procured at the Secretary's Office, price 2s. 6d., or sent by post, 3s.;) or by application to Professor Guy, the Dean of the Medical Department; or to J. W. Cunningham, Esq., Secretary.

The Dean of the Medical Department attends in the Marsden Library every morning, from a quarter-past 10 to 11 o'clock.

Rules for the Guidance of Resident Students.

Quiet, order, decorum, and peaceful conduct must be strictly observed.

Each student is required to be at home by 10 o'clock at night, unless absent by leave of the Censor.

No person can be allowed to enter the College for the purpose of visiting a student after 10 o'clock.

Friends visiting students are required to leave the College before 11 o'clock. In case of this rule being, under any circumstances, infringed, the student must accompany his friends to the gate, and enter his own and their names, together with their address, in a book kept for the purpose by the porter. Each student is held responsible for the orderly and quiet conduct of all friends while leaving his rooms, as well as during their visit there.

Resident students must dine in the College hall (in their academical dress) every day, except absent by leave of the Censor.

UNIVERSITY COLLEGE, LONDON.

FACULTY OF MEDICINE.

The session is divided into two terms,—a winter and a summer term. The winter term begins on Monday, 3rd of October, and ends on the 15th of April. The summer term begins on the 1st of May, and ends on the 31st of July.

Frequent examinations are held in every class. Medals and certificates of honour are given in every class at the end of each term; but those pupils only who have regularly attended the examinations will be admitted to contend for them.

At the end of every session, the "Longridge" exhibition of 40*l.* is awarded as a prize for general proficiency.

The payments stated for each class are made by students nominated by proprietors; 5s. additional for every pound, until this extra payment amounts to 4*l.* 10s., are paid by those not nominated.

A College fee of 10s. for one class, and 1*l.* for two or more classes, is paid by each student every session; where, however, the course is of short duration, this fee is diminished. The matriculation fee of 2*l.* relieves the student, during the whole course of his study, from the College fee.

All fees are paid at the office of the College, where the student receives his tickets, which he afterwards takes to be signed by the Professor. The office is open from 9 o'clock till 4, except on Saturdays, when it closes at 2.

The general library is open daily from 9 to 5 during the session; the medical library from 9 to 6 during the winter term, from 9 to 5 during the summer term, and from 9 to 4 during the vacations. On Saturdays the libraries close at 2. The Museum of Anatomy and the Museum of Chemistry and Materia Medica are open daily.

Several of the Professors receive students to reside with

them; and in the office of the College there is kept a register of parties unconnected with the College who receive boarders into their families; among these are several medical gentlemen. The register will afford information as to terms and other particulars.

Degrees in Medicine.—The examinations for degrees in medicine, and for honours, exhibitions, and scholarships, conferred by the University,(a) take place annually, as follows:—For Matriculation, in July; for M.B., the first in August, the second in November; for M.D., in November.

The courses of the Medical Faculty of this College are recognised by the Universities of Scotland as academical courses.

WINTER TERM.

From 3rd of October to 15th of April.

The classes are placed in the order in which the lectures are delivered during the day.

[*For Lecturers, etc., see Tables, pp.* 311-12.]

Anatomy.—Lectures, daily, from 9 to 10. The lectures include descriptive and surgical anatomy.

Descriptive Anatomy.—This department will comprise a systematic examination of the various parts of the body. The osseous system, the ligaments, muscles, vessels, nerves, and the organs contained in the head, thorax, and abdomen will be fully described.

Surgical Anatomy will form a separate section at the end of the course. It will consist of a series of demonstrations of the more important "regions" of the body, viewed in their practical relation to operative surgery.

Examinations.—Examinations will be held on Saturdays. During the first half of the term there will be an additional examination every Wednesday from 12 to 1, which will be specially adapted to students beginning the study of anatomy. Besides the examination for honours corresponding with those in other classes, there will be at the close of the term a separate examination (with honours) for students of the first year.

Practical Anatomy.—In the dissecting-room the pupils will be directed in their studies during several hours daily by Mr. Ellis, and by Mr. F. W. Sayer, demonstrator.

Anatomy and Physiology.—Daily, from 10 to 11.

Chemistry.—Daily, except Saturday, from 11 to 12 a.m., beginning on the 3rd of October.

Comparative Anatomy and Zoology.—Daily, except Saturday, from 3 to 4. Comparative Anatomy, from the beginning of October to the end of January. Zoology, from the 1st of February to the 1st of May. Payment to the College, for comparative anatomy, 4*l.*; for zoology, 3*l.*; perpetual, 9*l.*

Attendance on Dr. Grant's courses of comparative anatomy and zoology at this College is recognised by the Army Medical Board as equivalent to the course of natural history required as a qualification for Army Surgeons.

Principles and Practice of Surgery.—Monday, Tuesday, Thursday, and Friday, from 4 to 5 p.m.

Principles and Practice of Medicine.—Daily, except Saturday, from 5 to 6 p.m. On Saturdays at an earlier hour.

SUMMER TERM.

From 1st of May to 31st of July.

Botany.—Junior Class, daily, from 8 to 9 a.m. until the end of April. A silver medal and certificates of honour are given in this class. Senior Class, daily, except Mondays, from 8 to 9 a.m., with the exception of one Saturday in each of the months of May, June, and July. A gold and a silver medal and certificates of honour are given in this class.

Pathological Anatomy.—Tuesday and Friday, from 9 to 10 a.m., and Wednesday, from 9½ to 10½ a.m. Fee, 3*l.* Perpetual, 4*l.* A gold medal and certificates of honour are given in this class.

Comparative Anatomy and Zoology.—Elementary Course, daily, except Saturdays, from 3 to 4. Fee, 2*l.* The course continues to the 1st of July.

Practical Chemistry.—Mondays, Tuesdays, Wednesdays, and Thursdays, from 11 to 12. The fee includes all cost of materials, apparatus, etc.

Midwifery and Diseases of Women and Children.—Daily, except Saturdays, from 12 to 1. 1st Division: Parturition. A. Natural labours. B. Difficult and instrumental labours. C. Præternatural and assisted labours. D. Complex labours. 2nd Division: Lactation. A. Secretion of milk. B. Post-partum inflammations. C. Post-partum fevers. D. Secondary diseases. 3rd Division: Diseases of children. A. Management of Infants. B. Diseases of organs of assimilation. C. Diseases of respiratory organs. D. Diseases of nervous system. E. Diseases of skin. A gold and two silver medals and certificates of honour are given in this class.

Medical Jurisprudence.—Mondays, Tuesdays, Thursdays, and Fridays, at 10 a.m. A gold medal and certificates of honour are given in this class.

Palæo-Zoology.—Daily, except Saturdays, from 3 to 4, commencing on the second Monday of April. The course continues to the 1st of May.

Ophthalmic Medicine and Surgery.—Mondays, Wednesdays, and Fridays, from 3 to 4 p.m. A silver medal and certificates of honour are given in this class.

Materia Medica and Therapeutics.—Daily, except Saturdays, from 4 to 5 p.m. A gold and two silver medals and certificates of honour are given in this class.

Clinical Instruction.—Clinical instruction is given by the physicians and surgeons of the hospital in their daily visits, and also by means of lectures and examinations upon the cases. Payment included in the hospital fee.

Clinical Medicine.—Lectures once a fortnight by Dr. Walshe, twice a week by Dr. Parkes, and once a fortnight by Dr. Garrod. Dr. Parkes, whose special duty it is to train the pupils in the practical study of disease, gives a series of practical lessons and examinations on the physical phenomena and diagnosis of disease to classes consisting of limited numbers and meeting at separate hours. This instruction is conducted in the wards, and is made as systematic as the cases available for illustration will permit.

TABLE OF MEDICAL CLASSES.

WINTER TERM.

Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Hours.
Anatomy	—	—	—	—	—	—	9—10
Anatomy and Physiology	—	—	—	—	—	—	10—11
Chemistry	—	—	—	—	—		11—12
Hospital Practice	—	—	—	—	—	—	1— 3
Medical Clinical Lectures	—			—	—		
Surgical Clinical Lectures		—	—			—	
Comparative Anatomy	—	—	—	—	—		3— 4
Zoology	—	—	—	—	—		
Surgery	—	—		—	—		4— 5
Medicine	—	—	—	—	—	—	5— 6
Dental Surgery							

SUMMER TERM.

Botany, Junior, in April	—	—	—	—	—	—	8— 9
Botany, Senior		—	—	—	—	—	8— 9
Pathological Anatomy		—	†		—		9—10
Medical Jurisprudence	—	—		—	—		10—11
Practical Chemistry	—	—	—	—			11—12
Midwifery	—	—	—	—	—		12— 1
Hospital Practice	—	—	—	—	—	—	1— 3
Medical Clinical Lectures	—			—	—		
Surgical Clinical Lectures		—	—			—	
Comparative Anatomy and Zoology, May and June	—	—	—	—	—		3— 4
Ophthalmic Medicine and Surgery	—		—		—		3— 4
Palæo-Zoology, in April	—	—	—	—	—		3— 4
Materia Medica	—	—	—	—			4— 5

* On Saturdays at an earlier hour.
† On Wednesdays 9½ to 10½.

Fellowes' Clinical Medals.—Fellowes' clinical medals, one gold and one silver, and further certificates of honour, will be awarded, at the end of each term, to the pupils who shall have most distinguished themselves by reports and observations on the medical cases in the hospital. Competitors must be students of the College, and have complied with the regulations for competition.

Clinical Surgery.—Lectures twice a week by Mr. Quain, and once a fortnight by Mr. Erichsen.

Liston Medal.—The Liston gold medal and further certificates of honour will be awarded, at the end of the session, to the pupils who shall have most distinguished themselves by reports and observations on the surgical cases in the hospital. Competitors must be students of the College, and have complied with the regulations for competition.

(a) The Regulations of the University may be had of Messrs. Walton and Maberly, booksellers to the College, 28, Upper Gower-street; or of the publishers, Taylor and Francis, Red Lion-court, Fleet-street.

Analytical Chemistry.—The laboratory is open daily, from 9 a.m. to 4 p.m., from the 1st of October until the end of July, with a short recess at Christmas and Easter. The professor is aided in the direction of the students by Henry Watts, B.A. Fee, exclusive of the expense of materials, 25 guineas; for three months, 10 guineas; for a single month, 4 guineas.

Natural Philosophy.—An experimental course of lectures on natural philosophy is delivered from 4¼ to 5¼ on Mondays, Wednesdays, and Fridays, from the 15th of October to the 15th of April. Fee, 4*l.*

Philosophy of the Mind and Logic.—Professor, the Rev. John Hoppus, Ph.D., F.R.S. Commencing on Friday, the 9th December, at 10¼ a.m., and continuing on Tuesdays, Wednesdays, and Fridays, till the close of the winter term.

French and German Languages.—Classes for medical students, to continue during the summer term, will be opened in the first week of May by the professors of French and German. Fee for each subject, 2*l.*

MEDICAL SCHOOLS ATTACHED TO COLLEGES AND HOSPITALS.

GUY'S HOSPITAL.—*In consequence of the lamented decease of Mr. Bransby B. Cooper, no Prospectus has yet been issued as to the arrangements at the school for the ensuing session. When the necessary appointments are made we shall give full particulars; meanwhile, we publish the regulations as they stood for the past session.*

ST. MARY'S HOSPITAL.—*Although this Institution has applied for the recognition of the College, no Prospectus of the School can be obtained.*

ROYAL FREE HOSPITAL.—*It having been widely advertised that a school would be opened for the coming session at this hospital, we applied for the particulars, but up to this time have received none; and we understand, also, that no application has yet been made to the College of Surgeons for their recognition of such school.*

KING'S COLLEGE HOSPITAL.

This hospital is situate in the immediate neighbourhood of the College.

Consulting Physicians: Thomas Watson, M.D., Robert Ferguson, M.D. Physicians: George Budd, M.D., F.R.S., R. B. Todd, M.D., F.R.S. Physician for Diseases of Women and Children, and Physician Accoucheur: Arthur Farre, M.D., F.R.S. Physician to Out-Patients: W. A. Guy, M.B. Assistant-Physician: George Johnson, M.D. Surgeons: W. Fergusson, F.R.S., Richard Partridge, F.R.S.: Assistant-Surgeons: William Bowman, F.R.S., Henry Lee, F.R.C.S. Surgeon-Dentist: S. Cartwright, jun.

The physicians' assistant and clinical clerks, the house-surgeon and dressers, are selected by examination from among those matriculated students of the College who are pupils of the hospital. No fee is paid for any of these appointments.

(*For further particulars see Tables pp.* 311-12.)

UNIVERSITY COLLEGE HOSPITAL.

[*For particulars of Lecturers, etc., see Tables, pp.* 311-12.]

Physicians: Dr. Walshe, Dr. Parkes, Dr. Garrod. Obstetric Physician: Dr. Murphy. Assistant-Physicians: Dr. Jenner, Dr. Hare. Surgeons: Mr. Quain, Mr. Erichsen. Consulting Surgeon to the Eye Infirmary: Mr. Quain. Ophthalmic Surgeon: Mr. Wharton Jones. Assistant-Surgeons: Mr. Marshall, Mr. Statham.

The fees to be paid at the office of the College.

NOTE.—The fees are devoted to the maintenance of the hospital, the physicians and surgeons having relinquished their proportion of them for its benefit.

Every pupil pays, in addition to the fees, 10s. apothecary's, and 5s. office fee.

Physicians' assistants, house-surgeons, midwifery assistants, physicians' clerks, surgeons' dressers, and ophthalmic surgeons' assistants, are selected from pupils, being students of the College, and of unexceptionable moral character, without additional payments. In case of the qualifications of the candidates for the respective offices being equal, preference will be given to those who have obtained the highest honours in the medical classes of the College. The Physicians' assistants and house-surgeons reside in the hospital, paying for their board.

Obstetric Department.—Dr. Murphy attends three times a week to see patients affected with uterine diseases, and children; and, on alternate days, to receive applications from women who wish to be attended in their confinement.

Ophthalmic Department.—Mr. Wharton Jones attends three times a week to see patients affected with diseases of the eye; and will occasionally deliver lectures at the hospital on the cases under his charge.

Bandaging.—A course of practical instruction in the application of bandages and other surgical apparatus is given by Mr. Marshall, assistant-surgeon.

An assistant-physician and an assistant-surgeon attend four days in the week for the care of out-patients.

Scholarships.—One Andrews' scholarship of 70*l.*, and two of 45*l.*, will be awarded in October, 1853, to proficients in Latin, Greek, mathematics, and natural philosophy. Candidates must have been, during the academical year immediately preceding, students in the College, or pupils in the school. The examination will commence between the 1st and 6th of October, and be conducted by examiners appointed by the Council. Printed copies of the regulations concerning these scholarships may be had on application at the office. After the next examination, the existing arrangements respecting the number and value of the Andrews' Scholarships will be reconsidered by the Council.

ST. BARTHOLOMEW'S HOSPITAL.

WINTER SESSION, 1853.

[*For particulars of Lecturers, etc., see Tables, pp.* 311-12.]

The Introductory Address will be delivered by Mr. Stanley, on Monday, October 3, at seven o'clock in the evening.

Physicians: Dr. Hue, Dr. Roupell, Dr. Burrows. Assistant-Physicians: Dr. F. Farre, Dr. Jeaffreson, Dr. Black. Physician-Accoucheur: Dr. West. Surgeons: Mr. Lawrence Mr. Stanley, Mr. Lloyd. Assistant-Surgeons: Mr. Skey, Mr. Wormald, Mr. Paget.

Principles and Practice of Medicine.—One extended course will be given during the winter session. The lectures will be delivered on Mondays, Wednesdays, and Fridays, at half-past three o'clock, with occasional examinations and practical lectures on Tuesdays at the same hour.

Surgery.—The Introductory Lecture will be delivered on Wednesday, the 5th of October, at seven in the evening, and the course will be continued every Monday, Wednesday, and Thursday evening at the same hour.

Descriptive and Surgical Anatomy.—Daily at half-past two, Saturdays excepted, these days being occasionally devoted to examination of the students on the subjects treated of in the previous part of the week.

Practical Anatomy.—The Demonstrators attend daily, from half-past ten till half-past two o'clock, to direct the students in their dissections. The dissecting-rooms are open to the students who have entered to either the anatomical or the physiological lectures, from seven o'clock till four o'clock. Subjects for dissection are provided, at a moderate expense, during the whole of the winter and summer sessions.

General and Morbid Anatomy and Physiology.—The lectures will be commenced on Tuesday, the 4th of October, at nine o'clock, and will be continued daily at the same time. Usually, one morning in each week will be devoted to demonstrations with the microscope, or to experiments.

Chemistry.—The lectures will be delivered on Mondays, Wednesdays, and Fridays, at ten. Examinations of the students of the class on Friday mornings at eleven.

SUMMER SESSION, 1854.

Materia Medica and Therapeutics.—The lectures will be delivered on Tuesdays, Wednesdays, Thursdays, and Fridays, at half-past two o'clock.

Botany.—The museum, containing a general herbarium, and a collection of officinal plants, fruits, seeds, etc., will be open daily during the course. Tuesdays, Thursdays, and Saturdays, at nine o'clock.

Midwifery and the Diseases of Women and Children.—Daily, except Saturday, at half-past three o'clock.

Forensic Medicine.—Mondays, Wednesdays, and Fridays, at nine o'clock.

Comparative Anatomy.—On Mondays, Wednesdays, and Fridays, at ten o'clock.

Practical Chemistry.—The hours of meeting are from a quarter past ten till one o'clock, on Mondays, Tuesdays, Thursdays, and Fridays.

The Laboratory is open daily from ten o'clock till four; but, on Saturdays, from ten o'clock till one, throughout the year. Each laboratory-student works independently, all operations being superintended by the Professor and his assistants. Fee for a student working every day—two guineas per month.

Experimental and Descriptive Natural Philosophy.—On Wednesdays and Saturdays, at twelve o'clock.

Clinical Lectures.—In addition to the clinical instruction given by all the medical officers at their visits, courses of clinical lectures are delivered weekly, during both the winter and summer sessions; on medicine, by Dr. Roupell and Dr. Burrows; on surgery, by Mr. Lawrence, Mr. Stanley, and Mr. Lloyd.

Practical Pathology.—Inspections of morbid anatomy in the Pathological Theatre, as opportunities occur, at twelve o'clock. Of the medical cases, by Dr. Kirkes, Registrar of the hospital; of the surgical cases, by the House-Surgeons, under the superintendence of the Surgeons.

The fees may be paid in two or in three portions, in the first weeks of October, 1853, and of May and October, 1854. Students having entered for any period to the hospital practice or lectures, may prolong their attendance on paying the difference between their first entrance-fee and that for any longer period.

All students of the first year are examined weekly in the several subjects of their studies, by the tutor, Mr. Savory.

HOSPITAL PRACTICE.

Assistant Physicians: Dr. F. J. Farre, Dr. Jeaffreson, Dr. Black.—One of the assistant physicians attends daily, between the hours of eleven and two, at the medical out-patients' room, to prescribe for the medical out-patients.

Assistant Surgeons: Mr. Skey, Mr. Wormald, Mr. Paget.—One of the assistant surgeons attends daily, between the hours of twelve and two, at the surgical out-patients' room, to prescribe for the surgical out-patients.

Physician-Accoucheur: Dr. West.—Dr. West sees the in-patients with uterine diseases on Mondays and Thursdays, at one; and the out-patients on Saturdays, at nine.

The surgical casualty patients are seen at all hours in the surgery by the house-surgeons and dressers.

Surgical operations, except in cases of emergency, are performed on Saturdays at half-past one o'clock.

COLLEGIATE ESTABLISHMENT.

Warden.—P. Black, M.D.

Rules of Admission and Residence.—Students attending the practice of the hospital, or the lectures in the Medical College, will be admitted to residence in the Collegiate Establishment on the recommendation of a medical officer of the hospital. Students commencing their attendance at the hospital or College may obtain such recommendations on adducing satisfactory evidence of good moral character. Each student shall pay an entrance-fee of two guineas, and subscribe his readiness to submit to all the regulations of the Collegiate Establishment and of the hospital. Resident students are expected to dine in the hall every day. Non-resident students may dine in the hall, if they give notice of their intention before eleven o'clock in the morning. Students shall not be absent from their rooms after twelve o'clock at night, without giving notice to the Warden. Friends visiting students shall leave the rooms by twelve o'clock at night. No student shall absent himself for a night without permission of the Warden. The whole expenses of rent, provisions, attendance, coals, and candles, are from thirty to thirty-three shillings per week. A student may engage rooms for any number of terms and vacations, but may not, without the consent of the Warden, give up his rooms in the course of a term. (The terms are three in each year; namely, one extending from the commencement of the Winter Session in October to the commencement of the Christmas vacation; another, from the conclusion of the same vacation to the conclusion of the Winter Session at the end of March; and the third from the commencement of the Summer Session in May to the conclusion of the same in July.) Students shall quit and deliver up possession of their rooms at any period of their engagement, upon receiving from the Warden one week's previous notice, or upon a shorter notice, if the Treasurer of the Hospital shall require it.

Museums.—The Anatomical Museum is open daily to the students of the anatomical classes, from ten o'clock to half-past two. The Museums of Materia Medica and of Botany are open to the students of the classes, from eleven till half-past two o'clock daily, during the summer session.

Library.—Terms of subscription: for one year, one guinea; for three years, one guinea and a-half; for four years, two guineas. Each subscriber is allowed to retain in his possession three volumes at a time. Any further information may be obtained by application to the librarian, who attends daily at the reading-room.

Reading Room.—This room is devoted exclusively to the purpose of study. It is open for the use of the students of the College every day—during the winter session, from ten until five, and from six until seven o'clock; during the summer session, from nine until three o'clock; and, during the vacations, from ten until half-past two. Gentlemen who have entered to the Medical or Surgical practice of the hospital, or to any course of lectures delivered in the College, are admitted to the use of the Medical Journals in the reading-room, for three years, for half a guinea.

ST. THOMAS'S HOSPITAL.

[*For particulars of Lecturers, etc., see Tables, pp.* 311-12.]

A General Introductory Address will be delivered by Dr. J. Risdon Bennett, in the hall of the hospital, on Saturday, the 1st October, at eight o'clock in the evening.

Consulting Physician: Dr. Roots. Consulting Surgeon: Mr. Green. Physicians: Dr. Barker, Dr. J. Risdon Bennett, and Dr. Goolden. Surgeons: Mr. South, Mr. Mackmurdo, Mr. Solly, Mr. Le Gros Clark, and Mr. Simon. Assistant-Physicians: Dr. Cohen, Dr. Peacock. Obstetric-Physicians: Dr. Waller and Dr. Griffith.

Gentlemen proposing to become students of St. Thomas's Hospital are required to produce satisfactory testimonials of moral character and general education. The admission fee to hospital practice and all the lectures, is 40*l.* for the first year, a similar sum for the second, and 10*l.* for each succeeding year, or 90*l.* at one payment for an unlimited attendance. Special entries to any course of lectures, or to hospital practice, may be made. The library, museum, and microscope-room, are open to the students without extra payment. A laboratory and chemical museum, under the direction of the chemical lecturer, is provided for the students. The Students' Physical Society meets on alternate Thursdays, at seven p.m. during term. Examinations are held at Christmas, and at the end of the winter and summer terms. The Christmas recess will commence December 24, and the lectures will be resumed Tuesday, January 3. The winter session will terminate at the end of March. The summer session will commence on May 1, and terminate at the end of July.

The scholarships and annual prizes will be distributed at the commencement of the summer session.

Gentlemen wishing to enter are requested to apply to Mr. Whitfield, Medical Secretary, of whom the terms of admission and regulations may be obtained.

Clinical Lectures by the medical and surgical officers.

The Governors having established a special chair of Clinical Medicine, to which Dr. Barker has been appointed, he will deliver two clinical lectures, in addition to the above, every week throughout the winter and summer session, and give instruction in the clinical wards at least three days in each week, at a fixed hour.

The wards are visited daily, between twelve and three; the out-patients are seen at 9 a.m.

Winter Lectures.—Physiology and general anatomy, Monday, Tuesday, Wednesday, and Thursday, at 10 a.m.; microscopical anatomy, Friday, at 10 a.m.; the teeth, their structure, and diseases, during the course of physiology, at 10 a.m.; chemistry, Monday, Wednesday, and Friday, at 11 a.m.; surgery, Tuesday, Thursday, and Saturday, at 11 a.m.; ophthalmic surgery, Tuesday, Thursday, and Friday, at 9 a.m.; descriptive and surgical anatomy, Tuesday, Thursday, Friday, and Saturday, at 3 p.m.; anatomical demonstrations, daily, from 9 a.m. to 3 p.m.; clinical medicine, Monday and Wednesday, at 3 p.m.; theory and practice of medicine, Monday, Wednesday, and Friday, at 4 p.m.; general pathology, course of twelve lectures (during

January), Tuesday, Thursday, and Saturday, at 4 p.m.; clinical lectures in midwifery.

Summer Lectures.—Materia medica, Monday, Wednesday, and Friday, at 8 a.m.; forensic medicine, Tuesday, Thursday, and Saturday, at 8 a.m.; midwifery, Monday, Wednesday, Thursday, and Friday, at 9 a.m.; comparative anatomy and natural history, Tuesday and Saturday, at 9 a.m.; Botany, Tuesday, Thursday, and Saturday, at 10 a.m.; practical chemistry, Monday, Wednesday, and Friday, at 11 a.m.; clinical medicine, Monday, and Thursday, at 3 p.m.

GUY'S HOSPITAL.

Consulting Physician: Dr. Bright. Physicians: Dr. Addison, Dr. Babington, Dr. Barlow. Assistant-Physicians: Dr. Hughes, Dr. G. Owen Rees, Dr. Golding Bird, Dr. Gull. Surgeons: ——, Mr. Cock, Mr. Hilton. Assistant-Surgeons: Mr. Birkett, Mr. Alfred Poland. Obtetric Physicians. Dr. Lever, Dr. Oldham. Surgeon Dentist: T. Bell, Esq. Surgeon of the Eye Infirmary: Mr. France. Apothecary: Mr. Stocker.

The Medical Session commences on the 1st of October.

Gentlemen desirous of becoming students must produce satisfactory testimony as to their education and conduct. They are required to pay 40*l.* for the first year, 40*l.* for the second year, and 10*l.* for every succeeding year of attendance. One payment of 100*l.* entitles a student to a perpetual ticket. The payment for the year admits to the lectures, practice, and all the privileges of a student for that year only.

Clinical clerks, dressers, ward clerks, dressers' reporters, obstetric residents, and ophthalmic clerks, are selected according to merit from those students who have attended a second year.

The privileges of a student will be withdrawn in the event of neglect or misconduct. Certificates will not be given for lectures and practice unless duly attended.

The Christmas recess commences December 24. The lectures are resumed January 4. The winter session terminates March 31. The summer course commences May 2, and concludes July 30.

LECTURES, ETC.

Winter Courses.—Medicine: Mondays, Wednesdays, and Fridays, at half-past three. Surgery: Tuesdays, Thursdays, and Saturdays, at half-past three. Anatomy: daily, at two. Physiology and General Pathology: Mondays, Wednesdays, Thursdays, and Saturdays, at nine. Demonstrations on Anatomy: daily. Demonstrations on Morbid Anatomy: daily, at half-past two. Clinical Lectures on Midwifery and Diseases of Women:
Chemistry: Tuesdays, Thursdays, and Saturdays, at eleven.
Natural Philosophy: Tuesdays, at seven.

Summer Courses.—Demonstrations on Cutaneous Diseases: Mondays, at one. Materia Medica: Tuesdays, Thursdays, and Saturdays, at two. Midwifery: daily, at a quarter to nine. Pathological Anatomy: Tuesdays and Saturdays, at three. Medical Jurisprudence: Tuesdays, Thursdays, and Saturdays, at ten. Comparative Anatomy: Wednesdays and Fridays, at ten. Ophthalmic Surgery: Wednesdays and Fridays, at three. Botany: Tuesdays, Thursdays, and Saturdays, at half-past eleven. Practical Chemistry: Mondays, Wednesdays, and Fridays, eleven to three.

The clinical wards will open the first week in October. Lying-in Charity: Dr. Lever and Dr. Oldham. Curator of the Museum: Dr. Birkett.

The Library, museums, and model-rooms are open daily to the students.

Mr. Stocker, apothecary to Guy's Hospital, is authorised to enter the names of students.

WESTMINSTER HOSPITAL.

SCHOOL OF MEDICINE.

The session will commence on Monday, October 3, 1853, with an introductory lecture by Mr. Guthrie, at four o'clock p.m.

Consulting Physician: Dr. Bright. Physicians: Dr. Hamilton Roe, Dr. Kingston, Dr. Basham. Assistant-Physicians: Dr. Fincham, Dr. Radcliffe. Consulting Surgeons: Mr. Guthrie, F.R.S., Mr. Hale Thomson, Mr. Phillips, F.R.S., Mr. Lynn. Surgeons: Mr. Barnard Holt, Mr. Chas. G. Guthrie, Mr. Brooke, F.R.S. Assistant-Surgeons: Mr. Holthouse, Mr. Hillman. Surgeon-Dentist: Mr. Clendon.

Hospital Practice.—Daily, from half-past twelve to two.

Clinical lectures are delivered regularly twice a week by the physicians and surgeons during the winter and summer sessions.

Post-mortem examinations and demonstrations of morbid anatomy will be conducted by Mr. Power, under the superintendence of the physicians and surgeons.

LECTURES.

General Anatomy and Physiology.—Monday, Wednesday, and Friday, at two p.m.

Descriptive and Surgical Anatomy.—Daily, except Saturdays, at three p.m.

Surgery.—Tuesdays, Thursdays, and Saturdays, at half-past nine a.m.

Principles and Practice of Medicine.—Tuesday, Thursday, and Friday, at four p.m.

Chemistry.—Mondays, Wednesdays, and Fridays, at nine a.m.

Dental Surgery.—Wednesdays, at ten a.m. This course is free to pupils who enter to the hospital practice. Instruction is given in dental operations three times a week.

Materia Medica and Therapeutics.—Monday, Wednesday, and Thursday, at two p.m.

Midwifery and Diseases of Women and Children.—Tuesday, Thursday, and Friday, at four p.m.

Forensic Medicine.—Monday, Tuesday, Thursday, and Friday, at three p.m.

Botany.—Tuesday, Friday, and Saturday, at two p.m.

Natural Philosophy.—Wednesday, at three p.m.

LECTURES.

Winter Session.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Hours.
Anatomy and Physiology—Mr. Hillman	—		—		—		2 p.m.
Chemistry—Mr. Lewis	—		—		—		9 a.m.
Dental Surgery—Mr. Clendon			—				10 a.m.
Hospital Practice	—	—	—	—	—	—	half past 12—2
Surgery—Mr. Holt and Mr. C. G. Guthrie		—		—		—	half-past 9 a.m.
Anatomy, Descriptive and Surgical—Mr. Holthouse.	—	—	—	—	—		3 p.m.
Medicine—Dr. H. Roe and Dr. Basham		—		—	—		4 p.m.
Summer Session.							
Materia Medica—Dr. Basham	—		—	—			2 p.m.
Midwifery—Dr. F. Bird		—		—	—		4 p.m.
Forensic Medicine—Dr. Fincham	—	—		—	—		3 p.m.
Botany—Dr. Radcliffe		—			—	—	2 p.m.
Practical Chemistry							
Natural Philosophy			—				3 p.m.

ST. GEORGE'S HOSPITAL.

The winter course of instruction will commence on Monday, October 3.

Hospital Practice.—Attendance of the physicians and surgeons daily at 1 o'clock.

Physicians.—Dr. Wilson; Dr. Nairne; Dr. Page; and Dr. Bence Jones, F.R.S.

Obstetric Physician.—Dr. Robert Lee, F.R.S.

Assistant-Physicians.—Dr. Pitman and Dr. Fuller.

Surgeons.—Mr. Cæsar Hawkins; Mr. Cutler; Mr. Tatum; and Mr. H. C. Johnson.

Assistant-Surgeons.—Mr. Prescott Hewett and Mr. G. D. Pollock.

Gentlemen becoming pupils of the hospital may attend all the lectures, and the medical and surgical practice necessary for those who desire to become members of the Royal College of Surgeons, or licentiates of the Society of Apothecaries, on paying 40 guineas at the commencement of the first year, 40 guineas at the commencement of the second year, and 12 guineas at the commencement of the third

year. The payment for the year will admit the pupil to all the lectures, and to the hospital practice required, for that year only. Special entries to hospital practice, or to any separate course of lectures, may be made as heretofore.

A Maternity Department, for the delivery of married lying-in women at their own homes, is established at the hospital, under the superintendence of the Obstetric Physician.

Practical Pharmacy.—Gentlemen may be instructed in pharmacy, in the laboratory and dispensary of the hospital, on the following terms: Six months, 12 guineas; one year, 15 guineas.

Clinical Lectures are given by the physicians and surgeons of the hospital, during the winter and summer sessions, on Tuesday and Saturday, at ¼ before 2 p.m.

Clinical Clerks.—The pupils attending the medical practice may become, when qualified, clinical clerks to the several physicians. The pupils attending the surgical practice may become, when qualified, clinical clerks to the several surgeons.

House Surgeons.—The perpetual pupils are eligible to be assistant house-surgeons for six months, and house-surgeon for twelve months (without additional fee), when properly qualified for the office.

The Library and Reading-room are open during the greater part of the day. Subscription for the first year, 1 guinea; and 5s. for every subsequent year.

The Museum is open daily to the pupils of the hospital.

Lectures.—Theory and Practice of Physic, on Monday, Wednesday, and Friday, at 9 in the morning. Theory and Practice of Surgery, on Monday, Wednesday, and Friday, at 12 o'clock. Chemistry, on Tuesday, Thursday, and Saturday, at 11 a.m. Descriptive and Surgical Anatomy, daily (except Saturday), at ¼ before 3 p.m. Physiology and General Anatomy, on Monday, Tuesday, Thursday, and Friday, at 10 a.m. Practical Anatomy, during several hours daily.

The *Summer Course* will commence on the 1st of May:—Materia Medica, daily (except Saturday) at 11 a.m. Midwifery and Diseases of Women and Children, daily, at 9 a.m. Medical Jurisprudence, Monday, Wednesday, Thursday, and Friday, at 12 o'clock. Botany, daily (except Saturday), at 10 a.m. Practical Chemistry, daily at half-past two p.m.

Scholarships, Prizes, etc.—Examinations of those students who are candidates for prizes and certificates of merit will take place at the end of each course. There will be examinations for three scholarships in July, 1854, of the value of 30*l.*, 20*l.* and 10*l.* respectively, and tenable for two years; the subjects of examination will be anatomy, chemistry, and materia medica. Sir Benjamin Brodie's clinical prize will be awarded to the matriculated surgeon's pupil of the hospital who shall have delivered to the surgeons the best report of not fewer than twelve surgical cases which have occurred in the hospital during the preceding twelve months, each case being accompanied with notes illustrative of the pathology, diagnosis, and treatment. Dr. Chambers's clinical prize will be awarded to the matriculated physician's pupil of the hospital who shall produce the best report of not fewer than twelve medical cases which have occurred in the hospital during the preceding twelve months. The Thompson Medal will be awarded for the best clinical report of medical and surgical cases observed in the hospital during the preceding twelve months. Sir Charles Clark's prize for good conduct will be awarded to the student of the hospital whose general good conduct most entitles him to this distinction.

Curator of the Pathological Museum.—A curator is appointed annually by the weekly board, on the recommendation of the Medical School Council, with a salary of 50*l.* per annum.

Registrars.—Two registrars are appointed annually by the weekly board, on the recommendation of the Medical School Council, each with a salary of 20*l.* per annum.

Regulations respecting Students.—A register is kept, in which the names of all students in St. George's Hospital Medical School, the lectures which they attend, and the certificates which they obtain, may be registered.

The fee for registration is one guinea.

Students who wish to be matriculated students are required to receive the entire medical education ordered by the College of Surgeons and Society of Apothecaries in the medical school of the hospital, and to be registered in the Hospital Medical School Register. But other students are also strongly recommended to have their names registered, as the advantage is obvious in being able at any time to obtain certificates, should they be entitled to them.

The attention of students is particularly directed to the following regulations:—

1. Every student must, at the beginning of every session, take out tickets from the Treasurer of the hospital school, Dr. Pitman, or, in his absence, from the apothecary of the hospital, (to whom all fees may be paid,) for the lectures which he proposes to attend. After the tickets have been registered, they must be taken to the respective lecturers, for their signatures.
2. All certificates must be obtained from the Treasurer.
3. Towards the close of the winter and summer sessions, certificates of attendance on the lectures will be prepared for those students who are entitled to them, and will be delivered to them by the apothecary, signed by the respective lecturers of the Hospital Medical School.
4. Students are particularly requested to give their schedules to the apothecary as soon as they procure them from the College and the Hall.
5. Certificates will not be granted to those students who neglect to comply with these regulations.

Some of the lecturers and other gentlemen connected with the hospital receive students to reside with them.

The Christmas vacation will commence December 24, and terminate January 3. The winter session will terminate March 31.

Further information may be obtained from any of the lecturers, or from Mr. Hammerton, the apothecary of the hospital, who is authorised to enter the names of students.

LONDON HOSPITAL MEDICAL AND SURGICAL COLLEGE.

The Winter Session will commence on Monday, October 3, 1853, when an introductory lecture will be delivered by Dr. Parker, at half-past two o'clock. Lectures on anatomy, physiology, chemistry, medicine, and surgery, are delivered during this session.

The Summer Session will commence on the 1st of May, 1854. Lectures on midwifery, materia medica, botany, forensic medicine, and practical chemistry, will be given during this period.

Physicians.—Dr. Cobb, Dr. Little, and Dr. Fraser.

Surgeons.—Mr. Luke, Mr. Adams, and Mr. Curling.

Assistant-Physicians.—Dr. Davies, Dr. Parker, and Dr. Gibbon.

Assistant-Surgeons.—Mr. Critchett, Mr. N. Ward, and Mr. Wordsworth.

General fee for attendance on the medical and surgical practice, qualifying for the examinations at the London University, Royal College of Surgeons, and Apothecaries' Hall, and for perpetual attendance on all the lectures, eighty-four guineas, payable in two instalments of forty-two guineas each, at the commencement of the two first sessions of attendance. Perpetual fee to the lectures alone, 50*l.* Students can make special entries for lectures or practice, as heretofore.

LECTURES,—WINTER SESSION.

Medicine.—Days and hours of lecture: Mondays, Wednesdays, Thursdays, and Saturdays, at half-past eight a.m.

Surgery.—The lectures will be delivered on Mondays, Wednesdays, and Fridays, at a quarter before three o'clock p.m.

Descriptive and Surgical Anatomy.—Daily (except Thursdays) at a quarter past nine o'clock a.m. Examinations on Saturdays.

General Anatomy and Physiology.—This course will consist of fifty lectures; the first part will be delivered on Thursdays at three o'clock p.m., and on Tuesdays at half-past seven p.m.

Practical Anatomy.—Attendance in the dissecting-room daily, from ten o'clock till half-past two. Demonstrations will be given on Tuesdays, Thursdays, and Saturdays, at a quarter past eleven.

Chemistry.—The days of lecture are Mondays, Wednesdays, Fridays, and Saturdays, at half-past ten o'clock.

Anatomy and Pathology of the Teeth, and Dental Surgery.—This course consists of twelve lectures, and will be delivered at seven p.m.

SUMMER SESSION.

Midwifery and Diseases of Women and Children.—The days of lecture are Mondays, Tuesdays, Thursdays, and Fridays, at a quarter before three p.m.

Forensic Medicine.—These lectures are delivered daily, except Saturday, at half-past nine a.m.

Materia Medica and General Therapeutics.—The days of lecture are Mondays, Wednesdays, Thursdays, and Saturdays, at half-past eight o'clock a.m. A cabinet of materia medica is open to students.

Practical Chemistry.—The meetings are held during the months of May, June, and July, on the mornings of Tuesdays, Thursdays, and Saturdays, at half-past ten o'clock a.m. *Extra Fee.*—To students of the hospital, for apparatus, etc., one course, 2*l.* 2s.; others, 3*l.* 3s.

Botany.—The days of lecture are Mondays, Wednesdays, and Fridays during the months of May, June, and July, at eleven o'clock a.m. It is also proposed to devote the Saturdays in the earlier part of the course to examinations, and, during the latter, to herborizing excursions in the neighbourhood of London, and exercises in practical botany.

Consulting Physician in Obstetric Cases, Dr. Ramsbotham, who attends on Wednesdays, at one p.m.

Clinical Lectures.—Clinical lectures will be given by the physicians and surgeons.

Museum and Library.—The Anatomical Museum is open daily to the students, from eleven a.m. to two p.m. Curator, Dr. Andrew Clark. The Reading-room is open daily from ten a.m. to four p.m. Gentlemen who have entered to the medical or surgical practice, or to two or more courses of lectures, will be admitted without any fee to the reading-room; and to the privileges of the library, on depositing 1*l.*, to be returned at the termination of the period of study at the hospital. A cabinet of materia medica is open to the students.

Prizes and Honorary Distinctions.—Medals and certificates of merit will be offered for competition in all the classes.

Hospital Prizes.—Two gold medals will be annually awarded by the Governors to such students, attending the medical and surgical practice, as shall have most distinguished themselves in the performance of their duties at the hospital.

The pupils enter and dress under all the surgeons. Two in rotation remain in the hospital day and night for a week, and are provided with commons.

The privilege of dressing for twelve months is given annually to three pupils of the school, each pupil being previously required to dress the out-patients for one year.

Two house-surgeons are elected every three months, without any additional fee. They reside in the hospital, and are provided with commons.

Several of the lecturers receive resident pupils.

Further information may be obtained from Mr. Adams or Mr. Curling, or on application to Dr. Letheby, at the Anatomical Museum.

MIDDLESEX HOSPITAL SCHOOL OF MEDICINE.

The Introductory Address will be delivered on Monday, October 3rd, 1853, by Dr. Frere, at 8 o'clock p.m.

In consequence of the bequest of the late Sir Joseph de Courcy Laffan, Bart., the number of beds will be again increased, and the hospital will receive upwards of 300 in-patients. Wards are specially appropriated to cases of syphilis, and to persons suffering from uterine disease. A large establishment is also set apart for the reception of cases of cancer.

Clinical clerks and dressers are selected by the physicians and surgeons from the most deserving pupils, without additional fee. Pupils are eligible to become dressers to the in-door patients after having practised dressing and bandaging in the out-patient room and surgery.

The house-surgeons are elected half-yearly from the dressers: fee, 21*l.* They are provided with board and residence in the hospital, free of expense.

The in-patients are visited daily at one o'clock. Surgical operations are performed on Fridays at half-past twelve.

Clinical lectures are given twice a-week, or oftener, by the physicians and surgeons respectively.

The medical and surgical out-patients are attended on four mornings in the week by the assistant-physicians and assistant-surgeon, and every opportunity is taken to render this department available to the pupils for the ready investigation of disease.

Midwifery and the Diseases of Women and Children.—Upwards of 800 cases of labour were attended under the direction of the physician-accoucheur during the last year, and the students are at all times furnished with an ample supply of cases under his superintendence. Out-patients with uterine and infantile diseases are seen by the physician-accoucheur on Wednesdays and Saturdays at twelve o'clock.

Ophthalmic Department.—Patients with diseases of the eye are attended on Tuesdays, Thursdays, and Saturdays, at nine o'clock.

Dental Surgery.—Pupils receive instruction on Diseases of the teeth, and the operations connected with them, on Tuesdays, Thursdays, and Saturdays, at nine o'clock.

Fee for the entire period of attendance required by the College of Surgeons and Apothecaries' Company, (viz., for eighteen months of medical, and three years of surgical, practice,) 30*l.* This payment includes the fees of the apothecary and Secretary.

Instruction in practical pharmacy, with opportunities of dispensing, is given by the apothecary. Fee for six months, eight guineas; for twelve months, twelve guineas.

Instruction in pharmacy, in the drug-room, without dispensing; for three months, six guineas.

LECTURES.

WINTER SESSION,—Commencing Oct. 1.

Principles and Practice of Medicine.—The lectures are illustrated by recent morbid specimens, preparations, drawings, etc.

Principles and Practice of Surgery.—This course is illustrated by preparations, recent specimens, models, drawings, etc. At the end of the course the principal operations of surgery are exhibited on the dead body.

Physiology and General Anatomy.—In these lectures are explained the intimate structure and functions of the organs of the body. They are illustrated by preparations, diagrams, microscopic examinations, etc.

Descriptive and Surgical Anatomy.—These lectures are designed to furnish a complete account of the structure of the human body, as well in its general scientific import as in its bearing upon the explanation and investigation of disease and injury, and the performance of surgical operations.

Practical Anatomy and Demonstrations.—The dissecting-room is open daily from 8 o'clock a.m., to 5 o'clock p.m. Attendance is given in the dissecting-room for six hours daily, and the hours of lecture, etc., are so arranged as to enable the student to devote a large portion of his time to dissection. Admission to the dissections for those who are not pupils of the anatomical class,—one session, two guineas; perpetual, three guineas.

Demonstrations on Practical Histology, and the use of the Microscope.—A pathological laboratory will be fitted up, in which the students will have an opportunity of practically engaging themselves in the examination of healthy and morbid structures, under the superintendence of Dr. Van der Byl.

Morbid Anatomy.—These lectures will be delivered every week, and will be illustrated by recent specimens of morbid parts, by preparations, and drawings.

Chemistry.—The laboratory is open throughout the year to medical students and other gentlemen who may be desirous of receiving private instruction in analytical chemistry, or in other branches of the science.

SUMMER SESSION,—Commencing May 1, 1854.

Midwifery and Diseases of Women and Children.—Instruction in practical midwifery is given to the students, and cases are amply provided.

Materia Medica and Therapeutics.—The museum of materia medica has been greatly enlarged, and contains ample means of illustrating the lectures. A cabinet of specimens is provided for the use of the students.

Forensic Medicine.—Three days in each week in the session are devoted to lectures, and two days to examinations on subjects selected from the class-book.

Botany.—In the systematic part of this course opportunities will be afforded to the students of obtaining a practical acquaintance with plants by herborising excursions in the vicinity of London, and particular attention will be given to those plants used in medicine, the arts, and domestic economy.

Comparative Anatomy.—These lectures are open to all general pupils of the school. Fee to occasional students, two guineas.

Practical Chemistry.—In this course the student will have the opportunity of acquiring, by personal experiment, a practical knowledge of the application of chemistry to the purposes of medico-legal inquiries, and of medical diagnosis. Fee for the course, for general pupils, two guineas; for occasional pupils, three guineas. (All students attending this course will be required to pay the additional fee.)

Practical Histology and the Use of the Microscope.—Each pupil will be provided with a microscope and necessary instruments. The class will meet for two hours twice a-week. Fee, two guineas.

During the past year, the school-buildings have been greatly enlarged. To afford space for the valuable additions recently presented to the hospital, the area of the Anatomical Museum has been doubled; and a new Museum of Materia Medica and Library have been provided.

Museum.—Curator, Mr. Flower. The Museum is open to students daily, and bones and models are supplied to them for study during the intervals of lecture.

Library.—Librarian, Mr. Teague. Admission to the library and reading-room is included in the fees paid by general students. Occasional students, who desire to make use of the library, may do so on payment of half-a-guinea. The library contains an extensive collection of medical works, with the various medical periodicals. The books are allowed to be taken out from the library under proper regulations.

Medical Society.—A Medical Society is established, under regulations sanctioned by the governing body of the hospital.

Terms of Attendance on Hospital Practice, Lectures, etc.—General fee for attendance on the hospital practice and lectures required by the College of Surgeons and Apothecaries' Company, exclusive of practical chemistry, 75*l.* This sum may be paid by instalments of 30*l.* at the beginning of the first session; 30*l.* at the beginning of the second session; and 15*l.* at the beginning of the third session. For every additional session, 5*l.*

TABLE OF DAYS AND HOURS OF LECTURES, & HOSPITAL PRACTICE.

WINTER SESSION.

Classes.	Monday.	Tuesday.	Wednesday	Thursday.	Friday.	Saturday.	Hours.
Medicine	—		—		—		9
Surgery		—		—		—	9
Chemistry	—		—		—		11
Morbid Anatomy	—		—		—		10
Anatomy	—	—	—	—	—	—	12
Clinical Lectures	—		—	—	—		1
Hospital Attendance & *Post-mortem* Examinations	—	—	—	—	—	—	1
Demonstrations		—		—			3
Practical Histology							
Physiology	—		—		—		3

SUMMER SESSION.

Forensic Medicine		—	—	—	—	—	9
Midwifery		—	—	—	—	—	10
Botany	—	—	—	—	—		11
Practical Chemistry	—		—		—		11
Clinical Lectures	—		—		—		1
Hospital Attendance	—	—	—	—	—	—	1
Materia Medica	—	—	—	—	—		3
Comparative Anatomy		—			—		5
Practical Histology							

The authorities of the hospital have made arrangements, by which students have liberty to dine with the resident officers at the Board-room table, and to take luncheon in the pupils' room. The clinical clerk and dresser of the week dine at the Board-room table. Some of the Medical officers receive a limited number of resident pupils into their houses.

Parents and guardians, who propose sending pupils to the hospital, may communicate with Mr. De Morgan, treasurer to the school, at the hospital, daily from one to three o'clock; or information may be obtained on application to any of the lecturers, or to Dr. Corfe, the resident Medical officer.

PRIZES.

Examinations for honours in the various classes are held at the end of each session.

Clinical Prizes.—With a view to encourage the habit of investigating and recording at the bedside the phenomena of disease, the physicians and surgeons have instituted two prizes, of the value of ten guineas each, which will be awarded, at the annual distribution, to the students who shall present the most approved reports of cases that have occurred in the hospital during the preceding winter session.

Treasurers' Prize.—The annual prize of the value of ten guineas will be presented by the treasurers of the hospital.

CHARING-CROSS HOSPITAL.
MEDICAL SCHOOL, LONDON.

The Physicians and Surgeons visit the wards on their respective days between one and two o'clock.

The cases in the out-patients' department are seen and prescribed for at the hospital daily between twelve and two o'clock.

Clinical Lectures.—Medical and surgical clinical lectures are given weekly by the Physicians and Surgeons of the hospital.

Practical Pathology.—*Post-mortem* examinations are made in available cases.

The Museum contains numerous instructive preparations of morbid and natural structure; together with a cabinet of materia medica, models, casts, drawings, diagrams, etc.; for illustrating the various lectures.

Certificates of attendance at this hospital and school are received as qualifying for examination on the respective subjects by the University of London, College of Surgeons, and Society of Apothecaries.

LECTURES.

WINTER SESSION, 1853-54.

COMMENCING THE 1ST OF OCTOBER, AND ENDING IN MARCH.

—	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Hours.
Anatomy—Mr. E. Canton	—	—	—	—	—		8½—9½
Chemistry—H. H. Lewis, A.M.		—		—		—	9½—10½
Demonstrations and Dissections—Mr. Goldsbro...	—	—	—	—	—		—
Hospital Practice	—	—	—	—	—		
Principles and Practice of Surgery—Mr. Hancock		—		—	—		2½—3½
Physiology and Pathology —Mr. E. Canton	—	—	—	—	—		3½—4½
Principles and Practice of Medicine — Dr. Chowne and Dr. Rowland	—		—		—		4½—5½

SUMMER SESSION, 1854.

FROM THE 1ST OF MAY TO THE END OF JULY.

Materia Medica and Therapeutics—Dr. Steggall and Dr. Willshire		—	—	—		—	9—10
Botany—F. W. Headland, A.B.	—	—	—	—	—	—	10—11
Principles and Practice of Midwifery and the Medical Treatment of Women and Children—Dr. Chowne and Mr. Hird	—	—		—	—		2—3
Medical Jurisprudence — Dr. G. Birkett and Mr. Hird	—		—		—		3—4
Practical Chemistry—H. H. Lewis, A.M.		—		—		—	

Demonstrations in operative surgery, applications of bandages, splints, and other mechanical means of cure, by Mr. Hancock. Attendance is given in the dissecting-room by the Teacher of Anatomy and the Demonstrator, Mr. Goldsbro.

*** General fee for all the lectures required by the College of Surgeons and Society of Apothecaries, and in the order of attendance prescribed by the latter 45*l.* (exclusive of practical chemistry 2*l.* 2*s.*)

WINTER SESSION.

Principles and Practice of Medicine.—These lectures consist of an exposition of the principles of medicine, deduced from a consideration of the established laws of the physiology and pathology of the human system; and of the practical

application of these principles in the management and cure of diseases. Ample illustration is afforded by drawings, preparations, and *post-mortem* inspection of cases of fatal disease.

Physiology and Pathology.—These lectures comprise a systematic view of the structure and functions of the human body, with illustrations drawn from comparative anatomy and physiology, and from pathological anatomy and general pathology.

Anatomy.—This course of lectures, embracing a complete system of anatomy, is arranged in the following order:—1. Osseous system; 2. Articulations; 3. Muscular system; 4. Arterial system; 5. Viscera; 6. Nervous system; 7. Organs of sense. An examination of the class takes place weekly.

Surgery.—This course includes the whole circle of surgical science, except midwifery. Most of the subjects, in the progress of the course, are illustrated clinically from cases under treatment in the wards of the hospital; and towards the conclusion of the course, the operations of surgery are demonstrated upon the dead body.

Chemistry.—The course on chemistry will be divided into eight sections.

SUMMER SESSION.

Midwifery and the Medical Treatment of Women and Children.—These lectures treat of the anatomy, physiology, and pathology, included in the subject of obstetrics. Abundant opportunities are afforded to the advanced students of attending obstetrical cases.

Materia Medica and Therapeutics.—On each day of lecture, subsequent to the first, the class is examined upon the previous lecture, with the intention of fixing the subject more upon the mind, and affording an opportunity of adding some fresh facts and explaining them more familiarly.

Forensic Medicine.—This course comprises lectures on medical evidence; on the different causes of sudden natural death, and the modes of distinguishing between them and death, from external violence, poisoning, etc., etc.; death from various kinds of external violence, from hanging, drowning, etc.; on toxicology, insanity, survivorship, the natual period of utero-gestation, assaults, procured abortion, concealed and pretended delivery, infanticide, etc., etc.

Botany.—The lectures of the course are divided under three heads,—1. Structural; 2. Functional; and, 3. Systematic.

Practical Chemistry.—This is a laboratory course; the students themselves performing the principal operations—the preparation of the acids, alkalies, etc. They will also practise the tests and manipulatory processes for the detection of the chief poisons, etc. etc.

Free Scholarships.—Candidates for the free scholarships at this Institution are required to send in their applications and testimonials before the 1st August in every year, the regulations respecting which are to be obtained by application to the Secretary of the hospital.

THE MEDALS AND TESTIMONIALS OF HONOUR

Are awarded in conformity with the following arrangements:—

The competitors for the gold medal and also for the Governors' general proficiency medal, are to be in the last session of their attendance on the medical and surgical practice of the hospital, and all the classes of the Medical School, for the full period required to qualify for examination by the College of Surgeons and Society of Apothecaries.

Competitors for these two medals, or for the Governors' clinical medal, are not to compete for the class medals; nor are the competitors for the gold medal and Governors' general proficiency medal, to compete for the clinical medical, the qualifications required for each being practically similar.

Competitors for the Governors' clinical medal are to have attended for the full period, the medical and surgical practice of the hospital, with or without attendance on the various classes of the school.

Competitors for the silver class medals, and testimonials of honour of the senior classes, are to be in the second or third session of their attendance in the classes for the medal or testimonials for which they are competitors.

Competitors for the bronze medals, and testimonials of honour of the junior classes, are to have completed when the current session shall be ended one session of attendance in the classes for the medal or testimonials for which they are competitors.

In those classes, of which only one session is required by the College of Surgeons and Society of Apothecaries, a silver medal is offered for competition instead of a bronze medal.

ST. MARY'S HOSPITAL, CAMBRIDGE-PLACE, PADDINGTON.

Physicians: Dr. Alderson, Dr. Chambers, and Dr. Sibson. Surgeons: Mr. Coulson, Mr. Lane, and Mr. Ure. Physician-Accoucheur: Dr. Tyler Smith. Surgeon-accoucheur: Mr. I. Baker Brown. Ophthalmic Surgeon: Mr. White Cooper. Aural Surgeon: Mr. Toynbee. Assistant-Physicians: Dr. Handfield Jones, Dr. Sieveking, and Dr. Markham. Assistant-Surgeons: Mr. Smith, Mr. Haynes Walton, and Mr. James Lane. Dentist: Mr. Nasmyth. Resident medical officers: Mr. Trotter, Mr. Bullock, and Mr. Lawrence.

Clinical lectures will be given upon medical and surgical cases in the hospital by the physicians and surgeons, and upon the diseases of women and children, ophthalmic surgery, and aural surgery, by the special officers.

There are three resident medical officers who board in the hospital, and are appointed for eighteen months, two non-resident medical officers, a curator, and a medical and surgical registrar, who are appointed by the Weekly Board on the recommendation of the Medical Committee; these offices are open to competition among the qualified pupils of the hospital. Clinical clerks and dressers will be selected from the best qualified students without extra fee.

Further information may be obtained from any of the medical officers, or from the Secretary of the hospital, who is authorised to enter the names of pupils.

THEATRE OF ANATOMY AND MEDICINE,

1, GROSVENOR-PLACE, ADJOINING ST. GEORGE'S HOSPITAL.

Prizes and honorary certificates will be presented on Saturday, October 1, at half-past two o'clock.

[*For Lectures and Subjects of Lecture, see Table, pp.* 311-12.]

Clinical Prizes.—The lecturers of this school will receive reports of medical and surgical cases occurring in the wards of the hospital at which the student attends. Printed regulations relative to these prizes may be obtained on application at the school.

The microscope will be used to illustrate particular subjects in the lectures upon anatomy, chemistry, and botany; and microscopical specimens will be exhibited daily in the dissecting-room.

The dissecting-room and museum are open to the students during daylight, where their studies will be superintended by the lecturers on anatomy, and by the anatomical tutors, from ten to four o'clock.

Further information respecting the school may be obtained at the theatre, 1, Grosvenor-place, or at the residences of the different lecturers.

TABLE OF FEES AND HOURS OF ATTENDANCE UPON THE LECTURES.

LECTURES.	DAYS.	HOURS.	Complete Course.	Unlimited.
			£ s.	£ s.
Chemistry	Mon. Wednes. Fri.	9 a.m.	5 5	6 6
Surgery	Tues. Thurs. Sat.	9 a.m.	3 3	5 5
Anatomy and Physiology	Daily.	10½ a.m.	6 6	8 8
Hospital Practice	Daily.	1 p.m.	...	...
Descriptive Anatomy	Daily.	3 p.m.	6 6	8 8
Medicine	Mon. Wednes. Fri.	4½ p.m.	5 5	6 6
Medical Jurisprudence	Mon. Wednes. Fri.	9 a.m.	3 3	4 4
Practical Chemistry	Tues. Thurs. Sat.	9½ a.m.	3 3	...
Botany	Mon. Wednes. Fri.	11½ a.m.	3 3	4 4
Materia Medica	Daily, except Sat.	10½ a.m.	5 5	6 6
Midwifery	Daily, except Sat.	2½ p.m.	3 3	5 5

General fee to the whole course required by the Royal College of Surgeons of England, and the Society of Apothecaries, including one course of practical chemistry, forty-two guineas; half of which may be paid on the entrance of pupils, and the remaining half in January, at the commencement of the second division of the course.

ROYAL COLLEGE OF CHEMISTRY.

President.—His Royal Highness Prince Albert.

Chairman of the Council.—The Right Hon. Lord Ashburton.

Professor.—A. W. Hofmann, Ph.D., F.R.S.

The chemical instruction in this Institution consists of—1. A course of practical analysis in the laboratory. 2. A series of lectures on general chemistry.

1. *Practical Analysis in the Laboratory.*—The laboratory instruction is necessarily adapted to the previous knowledge of the student. The course usually commences with experimental exercises, calculated to make the pupil acquainted with the general properties of the simple substances. The next subjects of his study are the analytical properties of the elements, and of their most important compounds. The knowledge thus acquired is subsequently put into practice in the performance of a series of analyses, so arranged as to lead the student, step by step, from the simplest to the most complicated cases, both of qualitative and quantitative analysis. The fundamental studies in practical chemistry are the same for all pupils, however different the future pursuit may be to which the knowledge obtained will be applied. It is only after having mastered the most important methods of distinguishing, separating, and estimating chemical substances, and after having acquired sufficient skill and practice in experiment, that the course of each student diverges into some special line. This will, of course, vary with his abilities and his ultimate objects. Each laboratory-student works independently. There are no classes. All operations are superintended by the professor and his assistants. A table, with drawers, cupboard, and shelves, is appropriated to every pupil. The Institution supplies gas, fuel, and reagents. Larger and more expensive instruments, such as air-pumps, thermometers, barometers, condensers, large evaporating dishes, etc., may be had on loan from the College. The student has to provide himself only with the apparatus specified in the Prospectus.

2. *Course of Lectures on General Chemistry.*—This course consists of about one hundred lectures, illustrated with experiments; it embraces an exposition of the theory of chemical science, and a full account of the individual substances, with especial consideration of the processes subservient to the arts and manufactures. These lectures are intended to form a complement to the practical instruction in the laboratory.

Regulations regarding Attendance, Fees, etc.—The collegiate year is divided into two sessions, each of twenty weeks; the winter session commencing in the first week of October, and terminating in the third week of February, the summer session beginning in the second week of March, and ending with the month of July. The attendance is from nine in the morning till five in the afternoon, except on Saturdays, when the laboratories are closed at two o'clock. The course of lectures extends over two sessions; it commences in the third week of October, and continues, interrupted only by the fortnight's vacation in March, to the end of July. The lectures are delivered every Monday, Wednesday, and Friday, from ten to eleven o'clock. When the pupil leaves the Institution, he receives a certificate of attendance, stating the length of time he has been a laboratory-student, and specifying the number of days, weekly, on which he has worked in the College. If his skill in chemical analysis be of a sufficiently high order, he receives also a "Testimonial of Proficiency." To entitle a pupil to this honorary testimonial, he must have conducted, in the laboratory of the College, at least one original chemical investigation which has been deemed worthy of publication in the Journal of the Chemical Society, and in the reports of the Institution. A pupil who has received this testimonial is considered capable of conducting a series of chemical analyses.

The following is the scale of fees:—For students working every day during the session, 15*l.*; four days in the week, 12*l.*; three days, 10*l.*; two days, 8*l.*; one day, 5*l.* For students every day during four months, 14*l.*; four days in the week, 12*l.*; three days, 10*l.* For students working every day during three months, 12*l.*; four days in the week, 10*l.*; three days, 8*l.* For students working every day during two months, 10*l.*; four days in the week, 8*l.*; three days, 6*l.* For students working every day during one month, 6*l.*; four days in the week, 4*l.*; three days, 3*l.*

(For list of apparatus required by students commencing the study of analytical chemistry, see College Prospectus.)

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN,

17, BLOOMSBURY-SQUARE.

INCORPORATED BY ROYAL CHARTER, A.D. 1843.

School of Pharmacy, 1853.—The lectures and practical instruction in the laboratory, will commence for the ensuing season on Tuesday, the 4th of October, as follows:—

Chemistry and Pharmacy.—By Mr. Redwood.—The course will be divided into three parts:—1. Physics in relation to Chemistry and Pharmacy. 2. Chemistry of Inorganic Bodies. 3. Chemistry of Organic Bodies. The lectures will be delivered three times a week, on Tuesday, Wednesday, and Friday mornings, at half-past eight o'clock.

Botany and the Natural History of Drugs.—By Mr. Bentley.—This course will also be divided into three parts:—1. Structural and Physiological Botany. 2. The Natural History of Drugs. 3. Systematic Botany. The lectures will be delivered twice a week, on Saturday and Monday mornings, at half-past eight o'clock.

Members, registered apprentices, and associates of the Society have free admission to the lectures.

The laboratory for practical instruction in pharmaceutical chemistry, under Professor Redwood, will be opened on Monday, the 3rd of October. The course of instruction through which the pupils are conducted is,—1. Synthetical, comprising the preparation of all the chemical compounds employed in medicine, together with pharmaceutical manipulations and processes. 2. Analytical, comprehending qualitative and quantitative analysis, with special applications to the determination of the strength and purity of medicines, the detection of poisons, and the means of determining the composition of the compounds prepared during the first part of the course.

The season extends from the 1st of October to the end of July, and pupils may enter at any period during the season.

Five months, 15*l.* 15s.; four months, 13*l.* 13s.; three months, 11*l.* 11s.; two months, 9*l.* 9s.; one month, 6*l.* 6s.

Students who are not registered in connexion with the Society, are required to pay a fee of one guinea for attendance at each of the courses of lectures.

Latin Class.—Mr. Braithwaite, principal assistant in the laboratory, will give instruction to an evening class for two hours twice a week, in the reading of prescriptions and the Pharmacopœia. Fee, half-a-guinea a month.

ST. LUKE'S HOSPITAL FOR LUNATICS.

OLD-STREET.

Physicians.—Alex. Jn. Sutherland, Esq., M.D., F.R.S., F.G.S.; Francis Richard Philp, Esq., M.D.

Surgeon.—James Luke, Esq., President, R.C.S.

Resident Medical Officer.—Henry Stevens, Esq.

The practice of this hospital is open to a limited number of pupils. Sessions of three months each commence on the 1st October, 1st January, and 1st May in every year. Fee for one session 3*l.* 3s.

PROVINCIAL SCHOOLS.

SYDENHAM COLLEGE.

12, ST. PAUL'S SQUARE, BIRMINGHAM.

Principal.—Bell Fletcher, M.D.

Treasurer.—James Russell, M.D.

Honorary Secretaries.—Alfred Baker and Alfred Hill.

The winter session will commence on Monday, the 3rd of October, and will terminate on the last day of March. The summer session will commence on the first day of May, and terminate on the last day of July.

[*For particulars of Lecturers, see Table, p.* 311-12]

The students have the use of a reading-room, where all the standard medical and surgical journals are provided. They also have free access to the museums of anatomy, physiology, and pathology, as well as those of chemistry and materia medica. The diagrams, models, and plates, illustrative of the various courses of lectures, may be used by them, under certain rules, with which they will be made acquainted.

In addition to the obstetric preparations in the museum, the collection belonging to the Lying-in Hospital will be made accessible to the students, under suitable regulations.

The dissecting rooms are open from eight in the morning

until five at night, and the pupils have the benefit of a constant superintendence in their dissections.

Clinical courses will be given by those lecturers who are attached to the various public institutions of the town.

It will be seen that the lectures are so arranged, that no interference with attendance upon hospital practice will be caused by them.

Prizes will be awarded in each course under fixed regulations, and a prize will also be given for general proficiency.

For the benefit of the students, examinations will be held by the lecturers to test their qualifications for matriculating at the University of London.

Some of the lecturers will receive students into their houses; and parents or guardians are requested to communicate with the principal before placing students in lodgings.

HOURS OF LECTURES.

Winter Course.—Medicine, 8 to 9; demonstrations, 12 to 1; anatomy, physiology, etc., 1 to 2; chemistry, 4 to 5; surgery, 5 to 6.

Summer Course.—Midwifery, 8 to 9; forensic medicine, 12 to 1; materia medica, 2 to 3; botany, 3 to 4.

Practical instruction in chemistry will be given in the laboratory at an hour which will suit the convenience of the students.

LECTURERS' FEES, ETC.

	One Session. £	s.	d.	Perpetual. £	s.	d.
WINTER.						
Anatomy, Physiology, and Pathology ...	4	4	0	9	9	0
Practical Anatomy and Demonstrations	4	4	0	7	7	0
Principles and Practice of Medicine	4	4	0	7	7	0
Principles and Practice of Surgery	4	4	0	7	7	0
Chemistry	4	4	0	7	7	0
SUMMER.						
Materia Medica and Therapeutics	4	4	0	7	7	0
Midwifery	3	3	0	4	4	0
Practical Chemistry	2	2	0	0	0	0
Botany	3	3	0	4	4	0
Forensic Medicine	3	3	0	4	4	0
	£36	15	0	£58	16	0

Composition fee for all the lectures required by the College and Hall, 42*l.*; matriculation fee, 1*l.* 1s.; reading-room and museum fee (annually), 1*l.* 1s.; porter's fee for each class, 2s. 6d.

All fees must be paid to the Treasurer before registration.

Further particulars may be obtained by application to the Principal, or to any of the lecturers.

NEWCASTLE-UPON-TYNE COLLEGE OF MEDICINE,

IN CONNEXION WITH THE UNIVERSITY OF DURHAM.

SESSION 1853-4.

The winter session will commence on Monday, October 3rd, 1853, when an introductory address will be delivered by Dr. Charlton, at two o'clock.

The students received into this College are,—1, Matriculated students, who are enabled to proceed in the first place to a licence in medicine, and then to the degrees of Bachelor and Doctor of Medicine in the University of Durham. The course required is as follows:—One year's residence in the University of Durham, and attendance on lectures similar to those given to students in arts in their first year. At the end of this year, all students in medicine are required to pass an examination in the rudiments of religion, literature, and science. Students of medicine who have passed their first examination must afterwards pursue their studies for three years in the College of Medicine at Newcastle, and then, preparatory to obtaining a licence in medicine, pass at Durham the final examination, which will be directed to the medical sciences. Licentiates in medicine may proceed to the degrees of Bachelor and Doctor of Medicine, by performing such exercises as the Warden and Senate of the University of Durham shall appoint. Such licentiates being of the standing of twenty-one terms from the date of matriculation for the degree of Bachelor, and of thirty-three terms for the degree of Doctor of Medicine. Any student who was admitted at the Newcastle College of Medicine, at or before Michaelmas, 1851, and has continued to study there, may, by licence of the Warden and Senate, proceed as a medical student of the second year. 2. Other students:—The courses of lectures delivered in this College are open equally to students intending to present themselves for examination at Apothecaries' Hall, or at the Royal College of Surgeons of England, or who desire to graduate at the University of London or at the University of Durham, and whether resident or not at the College in Newcastle, on payment of the fees.

The resident medical tutor and demonstrator of anatomy assists the students living in the College, as well as the non-resident students, in the subjects of the lectures, and to superintend the dissecting-rooms.

WINTER SESSION.

Class.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Hours.	Fee for the Course. £	s.	d.
Anatomy and Physiology ...						—	9—8 a.m.	4	4	0
Surgical anatomy and Demonstrations		—	—		—	—	6—7 p.m.	3	3	0
Medicine	—	—	—	—	—	—	5—6 p.m.	3	3	0
Surgery	—		—	—	—	—	7—8 p.m.	3	3	0
Chemistry	—		—	—	—	—	9—10 a.m.	4	4	0
Hospital Practice	—	—	—	—	—	—	10 a.m.			
SUMMER SESSION.										
Midwifery	—	—	—	—	—	—	8—9 a.m.	3	3	0
Botany	—		—	—	—		9—10 a.m.	3	3	0
Medical Jurisprudence	—	—		—	—		4—5 p.m.	3	3	0
Materia Medica	—	—	—	—	—		3—4 p.m.	3	3	0
Practical Chemistry	—	—	—	—	—	—	10 a.m.; 5 p.m.	4	4	0
Pathological Anatomy			—				4—4 p.m.			
Operative Surgery	—	—	—	—	—	—	2—3 p.m.			

[*For particulars of Lecturers, see Table, p.* 311-12.]

The course of study required by the College of Surgeons and the Society of Apothecaries, comprises the following lectures, of which the terms are annexed:—Anatomy and Physiology, 12*l.* 12s.; Anatomical Demonstrations, 9*l.* 9s.; Medicine, 6*l.* 6s.; Surgery, 6*l.* 6s.; Chemistry, 4*l.* 4s.; Botany, 3*l.* 3s.; Materia Medica, 3*l.* 3s.; Midwifery, 6*l.* 6s.; Forensic Medicine, 3*l.* 3s.; Practical Chemistry, 4*l.* 4s.: total, 58*l.* 16s. Perpetual ticket to all the lectures, (exclusive of Practical Chemistry,) forty guineas. The required hospital practice can be attended at the Newcastle Infirmary, which is duly recognised, and in which clinical lectures are regularly delivered. The Infirmary contains 180 beds. According to last Annual Report the number of in-patients was 1637; of out-patients, 2169; and of casual patients, 4858. Fees for Medical and Surgical Practice: Twelve months, seven guineas; perpetual ticket, seventeen guineas.

The book of registration will be closed on the 21st October, and the 14th of May. Extensive libraries in the College and Infirmary are open to all the students. The Museums of Anatomy, Pathology, and Materia Medica, and the laboratories, are also open daily. Arthur Umphelby, M.R.C.S., Curator of the Museums. An exhibition, amounting to 15*l.* per annum, tenable for two years, and open to all the students of the College, was awarded, after an examination held July 24, 1852, to George Stewardson Brady, of Gateshead. Another exhibition, of the same value and on the same terms, was awarded at the termination of the Winter Session, 1852-3, to George Lowrey, of Corbridge. Another exhibition, of the same value and on the same terms, will be awarded at the termination of the Summer Session, 1854. Students who are members of the University of Durham are eligible to scholarships in the University. Further particulars may be learned from any of the Lecturers, and tickets obtained from the Registrar.

NEVILLE HALL, NEWCASTLE-UPON-TYNE.

Principal.—The Rev. Wm. Greenwell, M.A.

This Hall was opened in October, 1852, by the University, for the reception of such students in medicine as intend to avail themselves of the privileges offered by this connexion, residence being required in all such cases, unless special licence to reside elsewhere has been obtained from the Warden of the University. Other students may be received as residents, who must conform to the regulations of the Hall. The Hall is under the charge of a Resident Principal, to whom the general superintendence of the students is entrusted, and to whom applications may be addressed.

Expenses at Durham.—Entrance Expenses.—Admission fee to University, 2*l.*; caution money, 15*l.*(a) *Terminal Expenses at Bishop Hatfield and Bishop Cosin's Hall. Three Terms in the Year.*—A set of rooms furnished, (with the exception of linen), 5*l.* 5s.; commons or board, including servants and all domestic charges (except washing) for 8½ weeks, at 18s. a week, 7*l.* 13s.; tuition fees, library, &c., 6*l.*: total, 18*l.* 18s.

Expenses at Neville Hall.—Rooms furnished (except linen), board, servants, and all other domestic charges (except washing) for 40 weeks, 42*l.*; censor's fees, 3*l.*: total, 45*l.* Examination fee at end of first year, 10s.; ditto for a licence in medicine, 2*l.*; fee for a licence in medicine, 3*l.*; ditto Bachelor of Medicine, 6*l.*; ditto Doctor of Medicine, 6*l.*

CHATHAM-STREET SCHOOL OF MEDICINE, MANCHESTER.

The session for 1853-54 will commence on Monday, Oct. 3, when the introductory address will be delivered by Mr. Southam, at four p.m.

The school offers the great desideratum of the presence of demonstrators in the dissecting-room, whose special office will be to direct the pupils in their dissections.

A summer course of analytical chemistry will be given, and the pupils will then have the opportunity of making themselves practically familiar with the details of chemical analysis.

Instruction in microscopy will be given, and the pupils practised in the application of the microscope to anatomical, physiological, pathological, and diagnostic uses.

The museum has been greatly increased, and contains an extensive series of anatomical and pathological preparations, casts, drawings, and diagrams. The dissecting-room has been enlarged, and especial care has been taken to perfect the lighting and ventilation.

During the winter term, lectures on anatomy, physiology, chemistry, medicine, and surgery, will be given. These lectures are so arranged that first year's students will be enabled to attend all their lectures and hospital practice in the forenoon.

The summer term commences on the 1st of May, during which, lectures on midwifery, materia medica, forensic medicine, botany, practical chemistry, pathology, psychological medicine, histiology, ophthalmic and surgery, will be delivered.

[*For particulars of Lecturers see Table, p.* .]

Perpetual fee for attendance on all the lectures, forty guineas.

Hospital Practice at the Royal Infirmary, where clinical lectures on medicine and surgery are regularly delivered by the physicians and surgeons of the Institution.

Scholarships.—In addition to the usual medals, prizes, and certificates of merit, three scholarships will be offered for competition, at the termination of the session, as follow:—One of 20*l.*, for third year's students; one of 15*l.*, for second year's students; one of 10*l.* for first year's students.

Clinical Prize of Twenty Guineas.—The lecturers have had placed at their disposal, by a friend of the school, twenty guineas, to be awarded to the student who distinguishes himself for reports and observations of not less than twenty medical and surgical cases which may occur in the hospital.

In accordance with the regulations of the Apothecaries' Society, the books for registration will be closed on the 21st of October, and on the 14th of May.

Further particulars may be obtained from the Registrar, Mr. Southam, Salford; or from any of the lecturers.

THE MANCHESTER ROYAL SCHOOL OF MEDICINE AND SURGERY, PINE-STREET. (BEHIND THE ROYAL INFIRMARY.)

WINTER SESSION.

The winter session of this school will open on Monday, the 3rd of October, when an introductory address will be delivered by Mr. Wm. Smith.

Clinical medicine and surgery, at the Royal Infirmary, by the physicians and surgeons to the hospital.

(a) This is absolutely returned to a student on leaving the University, and is a guarantee fund against loss by terminal defalcation.

The winter session commences on the 3rd of October, and terminates at the end of March. The summer session begins on the 1st of May, and terminates at the end of July.

Connected with this school are museums of human and comparative anatomy and materia medica, a chemical laboratory, a library, and a Medical Society.

At the conclusion of the session, medals and certificates of honour will be awarded to the most distinguished students.

At the conclusion of the summer session, 1854, three scholarships will be open for competition to the students of the school, of the value, respectively, of 20*l.*, tenable for two years; 15*l.*, tenable for one year; 10*l.*, tenable for one year.

Certificates of the lectures qualify for examination at the London University; at the Royal College of Physicians, London; at the Royal College of Surgeons; and at Apothecaries' Hall.

The register of tickets for the winter courses is open from October 3 to October 15, 1853, and for the summer courses from May 1 to May 15, 1854.

HOURS OF THE DELIVERY OF LECTURES, ETC.

Winter Session.—Anatomy, etc., daily, at twelve; one course, 4*l.* 4s. Demonstrations, daily, at three-quarters past eight a.m.; one course, 2*l.* 2s. Chemistry, daily (except Saturday), at ten a.m.; one course, 4*l.* 4s. Practice of medicine, daily (except Saturday), at five; one course, 4*l.* 4s. Surgery, Monday, Wednesday, and Friday, at four; one course, 4*l.* 4s.

Attendance in the dissecting-room (daily), by Mr. Lund, ten to twelve a.m. and two to four p.m.

Hospital practice daily, from half-past nine to twelve.

Summer Session.—Midwifery, one course, 4*l.* 4s.; materia medica, one course, 4*l.* 4s.; lectures on the eye, one course, 1*l.* 1s.; forensic medicine, one course, 3*l.* 3*l.*; botany, one course, 3*l.* 3s.; practical chemistry, one course, 3*l.* 3s.; pathology, one course, 2*l.* 2s.

Perpetual fee to the whole of the lectures required to qualify for examination at the London University, the Royal College of Surgeons, and the Apothecaries' Company, forty guineas.

YORK SCHOOL OF MEDICINE.

The Introductory Lecture will be delivered by Dr. Simpson, on the 1st of October, at 2 o'clock p.m.

The winter term begins on the 1st of October, and ends on the 15th of April. The summer term begins on the 1st of May, and ends on the 31st of July.

Frequent examinations are held in every class. Medals or prizes will be given at the end of the terms; but those pupils only who have regularly attended the examinations will be admitted to contend for them.

Residence of Students.—Several of the lecturers receive students to reside with them; and the Secretary will afford information as to lodgings and other particulars.

Anatomy, physiology, and pathological anatomy, daily, at 3 p.m. Demonstrations and dissections, Monday, Wednesday, Friday, and Saturday, at 9½ a.m. Principles and practice of surgery, Monday, Wednesday, and Friday, at 7 p.m. Principles and practice of medicine, daily, except Saturday, at 10½ a.m. Chemistry, daily, except Saturday, at 8 p.m.

Clinical Instruction.—Clinical instruction is given by the physicians and surgeons of the hospital in their visits, and also by Dr. Laycock, by means of lectures and examinations upon the cases at the dispensary. Payment included in the hospital fee.

Clinical Medicine.—Lectures will be given, from time to time, by Dr. Simpson and Dr. Belcombe, Physicians to the County Hospital.

Clinical Surgery.—Surgical clinical lectures will be given by Mr. Hey, surgeon to the hospital. These will constitute a regular course, which the pupils must attend, to ensure their certificate of hospital practice; also by Mr. Moore and Mr. Keyworth, at the dispensary.

SUMMER TERM.

Materia medica and therapeutics, daily, at 6 p.m. Midwifery, and diseases of women and children, daily, at 8 a.m. Medical jurisprudence, four days a-week, at 10 a.m. Botany, daily, at 5 p.m.

[*For particulars of Lecturers, see Table, p.* 311-12.]

PLAN OF THE LECTURES.

WINTER SESSION.

	Hours.	Days.	Entire Course. £	s.	d.	Perpet. £	s.	d.
Demonstrations	9½ a.m.	Mon., Wednes., Fri., and Sat.	4	4	0	7	7	0
Medicine	10½ a.m.	Mon., Tues., Wed., Thurs., and Fri.	5	5	0	8	8	0
Hospital Attendance	11½ to 1	Mon. and Thurs.						
Anatomy	3 p.m.	Daily	6	6	0	10	10	0
Surgery	7 p.m.	Mon., Wed., and Fri.	3	3	0	5	5	0
Chemistry	8 p.m.	Daily, except Sat.	5	5	0	7	7	0
SUMMER SESSION.								
Midwifery	8 a.m.	Daily	3	3	0	5	5	0
Medical Jurisprudence	10 a.m.	Four days a-week	2	12	0	4	4	0
Hospital Attendance	11 to 1	Mon. and Thurs.						
Botany	5 p.m.	Daily	2	12	6	4	4	0
Materia Medica	6 p.m.	Daily	5	5	0	7	7	0

Perpetual to all the above courses, 42*l*.

The Museum of Anatomy, comprising the collection of the late Mr. James Atkinson, is open to the medical student daily during the session. The student's subscription to the medical library is 10s. 6d. per annum.

Medical and Surgical Practice at the Hospital, and the Dispensary.—Physicians of the Hospital: Dr. Belcombe, Dr. Simpson; Surgeons of the Hospital: Mr. Russell, Mr. Hey; Physicians of the Dispensary: Dr. Simpson, Dr. Laycock, Dr. Shann; Surgeons of the Dispensary: Mr. Dodsworth, Mr. W. Matterson, Mr. Moore, Mr. Keyworth.

Terms of admission to the medical practice—eighteen months, twelve guineas; perpetual, fifteen guineas. Terms of admission to the surgical practice—one year, twelve guineas; perpetual, fifteen guineas; perpetual to both medical and surgical practice, twenty-five guineas.

Pupils entering to the surgical practice will be allowed to dress the patients in their turn without additional fee. Reception of patients at the hospital, every Thursday, at 11 a.m. Attendance of the physicians and surgeons, Mondays and Thursdays, at 11 a.m. Attendance of the physicians and surgeons at the dispensary, Mondays, Wednesdays, Fridays, and Saturdays, at 11 a.m.

Pupils entering to the surgical practice of the hospital, or attending the surgical lectures, will be allowed to attend the practice of the Ophthalmic Institution without addional fee.

HULL AND EAST RIDING SCHOOL OF MEDICINE AND ANATOMY,

KINGSTON-SQUARE.

The winter session will commence on Monday, October 3, 1853.

	Sessional Course. £	s.	d.	Perpetual Course. £	s.	d.
Anatomy, Physiology, and Pathology, daily at 8 a.m.	5	5	0	8	8	0
Anatomical Demonstrations, daily at 5 p.m.	4	4	0	6	6	0
Principles and Practice of Medicine, daily at 3 p.m.	5	5	0	7	7	0
Principles and Practice of Surgery, Tuesday, Thursday, and Saturday, at 4 p.m.	3	3	0	5	5	0
Chemistry, Tuesday, Wednesday, Thursday, and Friday, at 8 p.m.	5	5	0			
SUMMER SESSION,—Commencing May 1, 1854.						
Midwifery, and Diseases of Women and Children, daily at 7 a.m.	4	4	0	6	6	0
Materia Medica and Therapeutics, daily at 8 a.m.	5	5	0	7	7	0
Forensic Medicine, Monday, Wednesday, Friday, and Saturday, at 4 p.m.	3	3	0			
Botany, Monday, Wednesday, Friday, and Saturday, at 3 p.m.	3	3	0			

Perpetual to all the lectures, except Chemistry, 42*l*.

Attendance at the above lectures and at the hospital will confer the same qualification as is obtained in the medical schools of London.

Application for tickets may be made to Mr. R. M. Craven, jun., 14, Albion-street, Hull.

LEEDS SCHOOL OF MEDICINE.

PLAN OF LECTURES.

The winter session will commence on Monday, Oct. 3, 1853, when Samuel Smith, F.R.C.S.E., President for the ensuing year, will deliver the introductory lecture, at twelve o'clock.

	FIRST SEASON.	SECOND SEASON. Entitled to Perpetual Attendance.
Anatomy, Physiology, and Pathology, five days in the week, at twelve o'clock. The first lecture, Tuesday, Oct. 4, at twelve..	6 6 0	4 4 0
Descriptive Anatomy, Monday, Tuesday, Thursday, and Friday, at ten a.m. The first lecture, Tuesday, Oct. 4, at ten a.m.	4 4 0	3 3
Principles and Practice of Surgery, Tuesday and Thursday, at a quarter before seven p.m., and Saturday, at ten a.m. The first lecture, Tuesday, Oct. 4, at a quarter before seven p.m.	3 3 0	
Chemistry, Monday, Tuesday, Wednesday, Thursday, and Friday. The first lecture, Monday, Oct. 3, at a quarter to four p.m.	4 4 0	3 3 0
Principles and Practice of Physic, Monday, Tuesday, Wednesday, Thursday, and Friday, at five p.m. The first lecture, Monday, Oct. 3, at five p.m.	5 5 0	3 3 0
SUMMER SESSION,—Commencing May 1, 1854.		
Materia Medica and Therapeutics, daily at twelve o'clock	5 5 0	3 3 0
Midwifery and Diseases of Women and Children, daily at seven a.m.	3 3 0	2 2
Forensic Medicine, Monday, Tuesday, Thursday, and Friday, at ten a.m.	2 12 6	1 11
Botany, Monday, Tuesday, Thursday, and Friday, at five p.m.	2 12 6	1 11
Practical Chemistry		
Operative Surgery		

Perpetual to all the courses, 42*l*.

Application for tickets may be made to the treasurer, Mr. Samuel Hey, Albion-place.

N.B. Attendance on the above lectures will confer the same qualification for examination as is obtained in the medical schools of London. The terms of attendance on the practice of the Infirmary, the House of Recovery, the Dispensary, and the Eye and Ear Infirmary, may be known on application to the officers of those Institutions.

Clinical lectures will be given at the General Infirmary, on medical cases, by Dr. Chadwick and Dr. Heaton.

On surgical cases, at the General Infirmary, by Mr. Smith, Mr. T. P. Teale, and Mr. Samuel Hey.

On ophthalmic and aural practice, at the Eye and Ear Infirmary, by Mr. Nunneley.

Medical libraries are connected both with the School and the Infirmary.

By a regulation of Apothecaries' Hall, attendance on no lectures will be recognised unless entered to within seven days after their commencement.

SHEFFIELD MEDICAL INSTITUTION.

President.—Wilson Overend, Esq., F.R.C.S.E.

Vice-Presidents.—Henry Jackson, Esq., F.R.C.S.E., and Samuel Gregory, Esq., F.R.C.S.E., Surgeons to the Sheffield General Infirmary.

Treasurer.—Mr. Gregory.

Honorary Secretary.—Mr. Hunter.

The Introductory Address will be delivered on Monday evening, October 3, 1853, at eight o'clock, by Dr. Law.

[*For particulars of Lecturers, see Table, p.* 311-12.]

Winter session commences October 1, 1853; summer session commences May 1, 1854.

Hospital Practice.—Sheffield General Infirmary.—Physicians: Dr. Thompson, Dr. Branson, Dr. Bartolome. Surgeons: Mr. Henry Jackson, Mr. S. Gregory, Mr. Barber. House Surgeon: Mr. Tinsley. Medical Practice: One year, 10*l*. 10s.; perpetual, 15*l*. 15s. Surgical Practice: One year, 10*l*. 10s.; perpetual, 21*l*. Upwards of four thousand patients are annually attended at the hospital.

Clinical Lectures will be delivered during each session, on

the medical cases in the Infirmary, by Dr. Bartolome, and on the surgical cases by the surgeons.

The microscope will be used to illustrate particular subjects in the lectures on anatomy, chemistry, and botany; and microscopical specimens will be exhibited to the class.

The dissecting room is open to students during daylight, where their studies will be superintended by the Lecturers on Anatomy and the Prosector, from ten to four o'clock, daily.

TABLE OF FEES, AND HOURS OF ATTENDANCE ON LECTURES.

Lectures.	Days.	Hours.	One Course.
Anatomy ..... Pathology & Physsology	Daily		£4 4 0
Demonstrations	Daily		2 2 0
Medicine	Daily	8 P.M.	4 4 0
Surgery	Four Days in the Week...	7 P.M.	3 3 0
Chemistry	Daily	1 P.M.	6 6 0
Botany	Daily		3 3 0
Medical Jurisprudence...	Daily		3 3 0
Midwifery.....	Daily		3 3 0
Materia Medica	Daily		4 4 0
Practical Chemistry			

The Fees for all the lectures required by the London University, the College of Surgeons, and the Society of Apothecaries, will not exceed 42*l.* This, however, is exclusive of the fee for practical chemistry, which must be subject to special arrangement with the lecturer.

House pupils will be received by some of the lecturers.

A prospectus and every information may be obtained by addressing the Honorary Secretary, Mr. Hunter, 25, Howard-street, Sheeffield.

LIVERPOOL ROYAL INFIRMARY.

SCHOOL OF MEDICINE.

The session of 1853-1854 will commence on Saturday, 1st October, when an Introductory Lecture will be given at two o'clock, by J. Long, Esq., F.R.C.S.

WINTER SESSION.

Anatomy, Physiology, and Pathology.—Daily, at 8 a.m, fee for one course, 5*l.* 5s.

Anatomical Demonstrations and Dissections.—Daily (except Saturday), at 6 p.m., fee 3*l.* 3s.

Chemisry and Pharmacy.—Tuesday, Thursday, and Saturday, at 3. p.m., fee 5*l.* 5s.

Principles and Practice of Physic.—Daily (except Saturday) at 5 p.m., fee 5*l.* 5s.

Principles and Practice of Surgery.—Monday, Wednesday, Thursday, and Friday, at 4 p.m., fee 4*l.* 4s.

Clinical Medicine, and Instruction in Morbid Anatomy.—Wednesday, at 11 a.m.

Clinical Surgery, with Instruction in Morbid Anatomy.—Tuesday, 1 p.m., at 11.

SUMMER SESSION.

To commence 1st May, 1854.

Materia Medica and Therapeutics.—Daily, at 3 p.m., fee for one course, 4*l.* 4s.

Botany.—Daily, at 8 a.m., fee 3*l.* 3s.

Midwifery, and Diseases of Women and Children.—Daily, at 4 p.m., fee 4*l.* 4s.

Medical Jurisprudence.—Four days weekly, at 2 p.m., fee 3*l.* 3s.

Practical Chemistry.—Three days weekly, at 9 a.m., fee 3*l.* 3s.

Ophthalmic Medicine and Surgery.—Tuesday and Friday, at 2 p.m., fee 1*l.* 1s.

Clinical Medicine, with Instruction in Morbid Anatomy.—Friday, at 1 p.m.

Clinical Surgery, with Instruction in Morbid Anatomy.—Tuesday, at 1 p.m.

[*For particulars of Lecturers, see Table, p.* 311-12.]

Fees to all the lectures (including practical chemistry) required by the Hall and College, 45*l.*, payable in advance.

Examinations will be held annually in all the subjects, and prizes or certificates of honour awarded according to proficiency.

A gold medal of the value of 10*l.* 10s. will be awarded annually to the student who distinguishes himself most in a general examination on all subjects taught at the school. The Committee of the Infirmary will, in addition, give to the medallist six months' free residence, dressership, and clerkship, in the Infirmary, with the title of Liverpool Royal Infirmary Medical Scholar. In case the medal is taken by a resident pupil, six months' payment will be returned to him. The Committee will give free residence to two pupils every six months. They will be elected from among the students of the school by examination by the lecturers.

Hospital Practice.—Students are admitted to the medical and surgical practice of the Liverpool Infirmary from 10 a.m. to 1 p.m. daily. The certificates are received by the University of London, the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Worshipful Society of Apothecaries.

The Liverpool Royal Infirmary contains 226 beds, operating and lecture theatres; and a good museum of healthy and morbid anatomy is attached to the school.

Six dressers and six clinical clerks will be elected quarterly by selection, and examination from among the house and out-pupils of the Infirmary, from the students attending the school in their second or third session, and from all medical pupils who have entered on their third year of professional education. The office will be tenable for two successive periods. Pupils of the Infirmary are admitted to learn pharmacy in the shop for six months. Clinical wards have been set aside for select cases, and a clinical prize instituted for annual competition.

Fees for Medical and Surgical Practice.—For six months, 10*l.* 10s.; for the first year, 18*l.* 18s.; for the second, 12*l.* 12s.; for the third, 10*l.* 10s.; for three years, 36*l.* 15s. No additional fees whatever.

Apprentices are admitted for five years, to reside and board in the house, for 60 guineas per annum; and for one, two, or three years, upon payment of 70, 130, or 190 guineas. Such sums to include library and lecture fees, but not hospital practice.

For further particulars apply at the Infirmary.

Tickets for the lectures to be procured from the Secretary, Dr. Inman, and countersigned by the respective lecturers.

Registration.—The register of tickets of admission to lectures or hospital practice is open from October 1st to 21st, 1853, and from May 1st to 7th, 1854, the latter day inclusive. Application to be made, and the tickets brought to Dr. Inman, at his residence, 16, Rodney-street, any morning between 9 and 11 o'clock.

COLLEGE OF CHEMISTRY, DUKE-STREET, LIVERPOOL.

Established 1848.

The certificates of attendance are acknowledged by the University and Apothecaries' Hall of London, and the Apothecaries' Hall of Ireland, etc.

The course of practical instruction in this institution is under the direction of the founder and principal, Dr. Sheridan Muspratt, F.R.S.E., M.R.I.A., and assistants.

Regulations, Fees, and Sessions.—A working bench is appropriated to each student, who provides himself with all apparatus, and books, platinum, and silver solutions, alcohol, substances for original research, platinum wires, and filtering paper. The common re-agents, and gas and fuel, are supplied by the professor, who is present from ten till five o'clock every day during the session. Each student proceeds by himself in a series of experiments, which make him acquainted with the re-actions,—*i. e.*, the chemical properties of all the more commonly occurring bodies. The laboratory term is divided into three sessions, each of seventeen weeks. All fees payable in advance.

Students working every day in the week	£16 16 0 per session.
Four days	14 14 0 ,,
Three days	12 12 0 ,,
Two days	10 10 0 ,,
One day	9 9 0 ,,
Half-a-day	7 7 0 ,,

Students may also attend one hour, two hours, or three hours, etc., per day or per week. The amount of fee paid by each student is regulated by the time he works in the laboratory; moreover, he may enter at any time during the year, and the fees will be regulated accordingly. The lowest fee received will be three guineas. If a student pays 40 guineas in advance, he may work in the laboratory every day for three years.

Diplomas.—When a pupil has completed an investigation of importance, he will receive a "testimonial of proficiency."

SCHOOL OF MEDICINE.

Practical Course.—Medical students desirous of obtaining their certificates for the Apothecaries' Hall of London or of Ireland, may attend any hour, from 10 a.m. till 5 p.m., each day during the week, for their practical instruction. Fee, *3l.* 3s. per session of four months.

TABULAR SYNOPSIS.

GENERAL HOSPITAL STATISTICS.

	No. of Beds.	In-patients 1852.	Out-patients 1852.	Casualties.	Days of Operations.	Average No of Inmates 1851.	Deaths 1851.
St. Bartholomew's	650	5763	19,446	63,745	Sat. at 1	522	444
St. Thomas's	520	4305	43,808(a)	...	Sat. at 1.	449	238
Guy's	530	4509	48,703(a)	...	Tues. at 1	475	424
Westminster.	174	1661	16,051	...	Sat. at 1	131	119
St. George's	325	3801	12,175	...	Thurs. at 1	275	255
London	400	4246	17,917	...	Thurs. at 1	308	258
Middlesex	300	2305	12,622	...	Thurs. at 1	255	173
University	120	1153	14,704	...	Wed. at 2	86	116
Charing-cross	100	1282	15,204	...	Monday at 2	100	79
King's	120(b)	...	...	...	Sat. at 1½	106	120
St. Mary's	150	1264	6541	...	Wed. at 1½	...	...
Royal Free	134	...	...	30,000(c)	Tues. at 3	57	40

(a) Including casualties. (b) Increasing.
(c) Includes both in and out-patients—about.

HOSPITAL PRACTICE FEES.

	MEDICAL PRACTICE.								SURGICAL PRACTICE.								DRESSERSHIPS.			
	3 Mos.	6 Mos.	9 Mos.	12 Mos.	18 Mos.	Perpetl.			3 Mos.	6 Mos.	12 Mos.	18 Mos.	3 Years.	Perpetl.			3 Mos.	6 Mos.	12 Mos.	
St. Bartholomew's	£ s. ...	£ s. 10 10	£ s. 12 12	£ s. 15 15	£ s. 15 15	£ s. 31 10			£ s. ...	£ s. 15 15	£ s. 20 20	£ s. ...	£ s. 26 5	£ s. 31 10			£ s. 12 12	£ s. 18 18	£ s. 26 5	
St. Thomas's*	...	...	...	...	...	...			...	...	...	...	...	...			—	...	...	
Guy's	...	...	...	...	...	...			...	...	...	...	...	...			...	...	...	
Westminster(a)	...	10 10	...	12 12	15 15	21 3			8 8	12 12	21 0	...	31 10	...			(b)	(b)	(b)	
St. George's	...	8 8	...	16 16	...	25 4			...	15 15	21 0	...	...	52 10			...	...	...	
London	...	6 6	...	11 11	...	21 0			...	...	12 12(c)	18 (d)	26 5(e)	21 0			...	...	5 5(f)	
Middlesex(g)	6 6	10 10	...	15 15	...	21 0			...	10 10	12 12	...	18 18	21 0						
University	...	10 10	...	15 15	...	26 5(h)			...	10 10	15 15	...	...	26 5(h)						
Charing-cross(i)	...	10 10	...	15 15	...	...			...	10 10	15 15	...	...	...						
King's(l)	6 6	10 10	...	15 15	...	21 0			10 10	15 15	...	...	...	26 5						
St. Mary's	5 5	7 7	...	12 12	15 15	21 0			...	9 9	21 0	...	21 0	32 10			...	...	...	
Royal Free	...	...	...	...	...	...			...	...	...	...	...	...			...	...	...	

(a) Conjoined fee for the period of hospital practice required by College and Hall 27*l.* 6s.
(b) Pupils entering to the surgical practice are allowed, when qualified, to dress patients, for three months, and perpetual pupils for six months, without fee. The dresser for the week boards at the hospital free of expense.
(c) Including three months' dressership.
(d) Including twelve months' dressership.
(e) Including twelve months' dressership.
(f) Additional during the three years, and for twelve months' dressership after expiration of the three years.
(g) For the entire period of attendance required by College and Hall 30*l.*
(h) 26*l.* 5s. for both medical and surgical.
(i) Full period required to both practices, 26*l.* 5s.
(k) For twenty-one months.
(l) Perpetual to both practices for Matriculation Students, 31*l.* 10s.
* The Prospectus gives no particulars. General admission fee—40*l.* first year; 40*l.* second year; 10*l.* for each succeeding year, or 90*l.* at one payment for unlimited attendance.

TABLE OF FEES TO THE LECTURES.

No. of Courses required by College and Hall...	Anatomical Demonstrations.			Anatomy Descriptive and Surgical.			Structural and General Anatomy and Physiology.			Chemistry.			Materia Medica and Therapeutics.			Principles and Practice of Medicine.			Principles and Practice of Surgery.				Midwifery and Diseases of Women and Children.			Botany.			Medical Jurisprudence.			Comparative Anatomy.			Experimental and Descriptive Natural Philosophy.			Practical Pathology.			Microscopical Anatomy.			Dentistry.			Ophthalmic Surgery.			Practical Chemistry.		
	3			3			3			1			1			2			2				2			1			1			...			...			...			...			...			...			1		
	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course or Session.	A Second Course.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.	One Course.	Two Courses.	Perpetual.
St. Bartholomew's	£ s. 3 3	£ s. 5 5	£ s. ...	£ s. 4 4	£ s. 7 7	£ s. 10 10	£ s. 5 5	£ s. 7 7	£ s. 10 10	£ s. 5 5	£ s. ...	£ s. 7 7	£ s. 5 5	£ s. ...	£ s. 7 7	£ s. 5 5	£ s. 3 3	£ s. 7 7	£ s. 6 6	£ s. 4 4	£ s. ...	£ s. 6 6	£ s. 4 4	£ s. ...	£ s. 4 4	£ s. 3 3	£ s. ...	£ s. 4 4	£ s. 3 3	£ s. ...	£ s. 4 2	£ s. 2 2	£ s. ...	£ s. 3 3	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. ...	£ s. 2 2	£ s. 3 3	£ s. ...
St. Thomas's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guy's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Westminster	...	...	...	...	...	...	5 5	...	...	6 6	4	...	5 5	...	...	6 6	4	...	6 6	3	...	6 6	3	...	5 5	2	...	38 2	...	...	3 3	...	...	4 4	...	...	...	...	...	...	...	...	1 1	...	...	2 2	...	...	...	...
St. George's	...	...	...	...	...	...	8 8	6 6	...	8 8	5	...	6 6	5	...	6 6	4	...	6 6	4	...	6 6	4	...	5 5	3	...	4 4	3	...	4 4	3	...	4 4	...	...	...	...	...	...	...	...	...	...	...	4 4	...	...	...	...
London	5 5	...	10 10	5 5	...	10 10	3 3	...	10 10	7 7	3	...	4 4	4	...	6 6	4	...	6 6	4	...	6 6	4	...	6 6	3	...	4 4	3	...	4 4	3	...	4 4	...	...	...	...	...	...	...	...	...	...	...	2 2	...	...	...	...
Middlesex	2 2	...	3 3	8 8	0(a)	11 0(a)	4 0	6	...	8 0	3	...	5 5	4	...	7 7	4	...	6 6	4	...	6 6	4	...	6 6	3	...	4 4	3	...	4 4	3	...	4 4	...	...	...	...	...	...	...	...	...	...	...	2 2	...	...	...	...
University(c)	...	...	...	6 6	0	9 9	6 6	6	...	9 9	6	...	6 6	5	...	8 8	4	...	6 6	4	...	6 6	4	...	6 6	3	...	4 4	3	...	4 4	3	...	4 4	...	...	...	...	...	...	...	...	...	...	...	2 2	...	...	...	...
Charing-cross	2 2	3 4	4 4	6 6	7 7	9 9	7 7	5 5	6 6	7 7	5	...	6 6	5	...	9 9	7	...	7 7	5	...	7 7	5	...	7 7	4	...	5 5	4	...	6 6	4	...	6 6	...	...	...	...	...	...	...	...	...	...	...	2 2	...	...	...	...
King's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Mary's	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Royal Free	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(a) Single Course of Anatomy, Physiology, Demonstrations, and Dissection, £9 8s; Perpetual, £15. (b) This includes also Zoology. (c) And a Course of Palæo-Zoology, under Dr. Grant, £1. (d) Vacant.

CLASSES AND LECTURERS AT THE LONDON MEDICAL SCHOOLS.

	Anatomical Demonstrations.	Anatomy, Descriptive & Surgical.	Structural & General Anatomy & Physiology.	Chemistry.	Materia Medica and Therapeutics.	Principles & Practice of Medicine.	Principles & Practice of Surgery.	Midwifery & Diseases of Women & Children.	Botany.	Medical Jurisprudence.	Comparative Anatomy.	Experimental & Descriptive Natural Philosophy.	Practical Pathology.	Microscopical Anatomy.	Dentistry.	Ophthalmic Surgery.	Practical Chemistry.
St. Barth. ...	Mr Holden, Mr Coote, & Dr Kirkes	Mr Skey	Mr Paget	Dr Stenhouse	Dr Roupell	Dr Burrows	Mr Lawrence	Dr West	Dr Farre	Dr Baly	Mr McWhinnie	Mr Gibbon	Dr Kirkes & House-Surgeons				Dr Stenhouse
St. Thomas's	Mr Rainey, Mr Barwell, & Mr Jones	Mr Clark	Mr Grainger	Dr Thomson	Dr Peacock	Dr. Bennett.	Mr South	Dr Waller & Dr Griffith	Dr Bristowe	Dr Brinton	Dr E Meryon (a)		Mr Simon	Mr Grainger and Mr Rainey	Mr Saunders	Mr Mac-murdo	
Guy's(c).....	Mr Callaway, Dr Habershon, & Dr Lloyd	Mr Hilton & Mr Birkett	Dr Gull	Dr Taylor	Dr G Bird & Dr O Rees	Dr Addison, Dr Babington & Dr Barlow	(c), Mr Cock & Mr Hilton	Dr Lever & Dr Oldham	Mr Johnson	Dr A S Taylor	Dr Gull & Dr Habershon	Dr Lloyd			Mr Bell & Mr Salter	Mr France	Dr Odling
Westminster	Mr Power	Mr Holthouse	Mr Hillman	H Lewis, M.A.	Dr Basham	Dr H Roe & Dr Basham	Mr B Holt & Mr Guthrie	Dr F Bird	Dr Radcliffe	Dr Fincham		Mr Brooke			Mr Clendon		
St. George's.	Mr H Gray, Dr Ogle, & Mr Holmes	Mr Hewett & Mr Pollock	Mr Johnson	Mr Noad	Dr Pitman	Dr Nairne & Dr Page	Mr Tatum	Dr R Lee	Mr Henfrey	Dr Fuller						Mr Tatum & Mr Johnson	Mr Noad
London	Mr N Ward and Mr Wordsworth	Mr Adams	Dr Carpenter	Dr Letheby	Dr H Davies	Dr Little	Mr Curling & Mr Critchett	Dr Ramsbotham	Mr Bentley	Dr Ramsbotham & Dr Letheby	Dr Carpenter		Mr Wordsworth	Dr Parker	Mr Barrett	Mr Critchett	
Middlesex ..	Mr Nunn & Dr Van der Byl	Mr Moore	Mr De Morgan	Mr T Taylor & Mr Heisch	Dr Stewart	Dr Crawford & Dr Thompson	Mr Shaw	Dr Frere	R Bentley, F.R.S.	Dr Goodfellow	Mr Waterhouse			Dr Van der Byl			
Univer. Coll.	Mr F W Sayer	Mr Ellis	Dr Sharpey, F.R.S.	Mr Graham & Professor Williamson	Dr Garrod	Dr Walshe	Mr Erichsen	Dr Murphy	Dr Lindley, F.R.S.	Dr W B Carpenter	Dr Grant, F.R.S. (d)	Prof. Potter	Dr Jenner		Vacant	Mr W Jones	Professor Williamson
Charing-cr...	Mr Goldsbro	Mr E Canton	Mr E Canton	Mr Lewis	Dr Steggall & Dr Willshire	Dr Chowne & Dr Rowland	Mr Hancock	Dr Chowne & Mr Hird	F W Headland, A.B.	Dr Birkett & Mr Hird							Mr Lewis
King's Coll..	Mr Lee & Mr Wood	Mr Partridge	Dr Todd & Dr Beale	Dr Miller & Mr Hardwich	Dr Royle	Dr Budd	Mr Fergusson.	Dr Farre	Prof. Forbes	Dr Guy	Mr T R Jones						Mr Bowman
Theatre of Anat. & Med. adjoining St. George's.....	Mr Benson & Mr Waters	Mr Blenkins & Mr Lane	Messrs. Lane & Blenkins	Mr Rodgers	Dr Lankester	Dr Daniell & Dr Sibson	Mr Pilcher & Mr Smith	Mr Bloxam	Dr Lankester	Mr Warder				Mr Blenkins			

(a) And Natural History. (b) Demonstrations on Cutaneous Diseases, by Dr. Addison. (c) Vacant by the lamented decease of Mr. B. Cooper. (d) And Palæo Zoology.

PROVINCIAL SCHOOLS.

Queen's Col., Birm.	Mr Bolton & Mr Pemberton	Mr S Cox	Mr Parker	Mr Shaw	Dr Heslop & Mr Knowles	Dr Johnstone	Mr S Cox	Mr Berry	Mr Knowles	Dr Davies	Mr Parker						
Sydenham Coll., Birm.	Mr Jones & Mr Postgate	Mr Elkington, Mr Jones & Mr Postgate	Dr Keyworth	Mr A Hill	Dr Russell & Mr Bassett	Dr Fletcher	Mr A Baker	Dr Elkington	Mr Westcott	Mr Orford							
Newcastle-on-Tyne Col. of Med. & Surgery.....	Mr Furness, Mr Fife, & Mr McNay	Mr Fife & Mr Newton	Dr Robinson	Mr Dixon	Dr Cogswell	Dr Glover & Dr Robinson	Sir J Fife, Mr Potter, & Mr Fife	Dr Dawson	Mr Watson & Mr Gibson	Dr Bramwell							
Chatham-st. Sch. of Med., Manch (e)..	Mr Murphy	Mr J S Fletcher & Mr J O Fletcher	Mr Dumville	Mr Stone	Mr Somers	Dr Watts & Dr Wilkinson	Mr Southam	Dr Whitehead & Dr Merei	Dr Jepson	Dr Aikenhead			Dr Watts	Dr Jepson		Dr A Todd	

(e) Psychological Medicine—Mr. Noble.

PROVINCIAL SCHOOLS.—*Continued.*

	Anatomical Demonstrations.	Anatomy, Descriptive & Surgical.	Structural & General Anatomy & Physiology.	Chemistry.	Materia Medica & Therapeutics.	Principles & Practice of Medicine.	Principles & Practice of Surgery.	Midwifery & Diseases of Women & Children.	Botany.	Medical Jurisprudence.	Practical Pathology.	Microscopical Anatomy.	Ophthalmic Surgery.	Practical Chemistry.
Sheffield Medical Institution.	Mr Atkin	Mr Barber	Mr Gregory Mr Skinner, & Mr Allanson	Mr Haywood	Mr Hunter	Dr Bartolomé	Mr Jackson, Mr Gregory, & Mr Barber	Mr Jackson		Dr Law				
Leeds School of Medicine ...		Mr N Price & Mr Wheelhouse	Mr Ikin, Mr S Hey, Mr W N Price & Mr Wheelhouse	Mr Morley & Mr Scattergood	Dr Clarke	Dr Chadwick & Dr Heaton	Mr Hey & Mr Nunneley	Mr Smith & Mr Braithwaite	Dr Heaton	Dr P Smith			Mr Nunneley	
Liverpool Royal Infirmary ...	Mr Fletcher	Dr Vose & Dr Turnbull	Mr Long	Dr Brett	Dr Inman	Dr Dickinson	Mr Cooper	Mr Batty	Dr Nevins	Dr Brett & Mr Fletcher			Dr Taylor	Dr Brett
York School of Medicine.....	Mr Hornby & Mr North		Mr Allen & Mr Hornby	Mr Procter	Mr Williams	Dr Laycock	Mr Russell & Mr Keyworth	Mr Allen & Mr Anderson	Mr Moore	Mr Procter				
Hull & East Riding School of Medicine and Anatomy.	Dr King		Mr Craven	Mr Beckett	Dr Daly	Dr Sandwith	Mr Gibson	Mr Hardey	Mr Reckitt	Mr Munroe				
Newcastle-on-Tyne College of Medicine, in connexion with Durham University	Mr. Pearse	Mr Pearse	Dr Embleton & Mr Gibb	Dr Richardson	Dr Humble	Dr Charlton	Messrs Heath	Mr Frost & Dr Gibson	Mr Thornhill & Mr Oliver	Messrs Robinson & Chater				Dr Richardson
Manchester Royal School of Medicine and Surgery	Mr Lund	Dr Renaud	Mr Turner & Mr Smith	Dr Allan	Mr Childs	Dr Browne	Mr Orr	Mr Heath	Mr Grindon	Mr Greaves	Dr Renaud	Mr Smith	Mr Hunt & Mr Lund	Dr Allan

WEIGHTS AND MEASURES.

Troy Weight, as used by the British Apothecaries.—Pondus pharmaceuticum seu *medicinale.*

The *pound* lb	contains	12 ounces.
The *ounce* ℥		8 drachms.
The *drachm* ʒ		3 scruples.
The *scruple* ℈		20 grains.
The *grain* gr.		

These, and the signs by which they are denoted, are the same in all the British Pharmacopœias, as well as in the American.

lb.		Oz.		Dr'ms.		Scrup.		Grs.
1	=	12	=	96	=	288	=	5760
		1	=	8	=	24	=	480
				1	=	3	=	60
						1	=	20

Poids de Marc.

The *pound*	contains	16 ounces.
The *ounce*		8 drachms.
The *drachm*		3 scruples.
The *scruple*		24 grains.
The *grain*		

Avoirdupois.

Pound.		Ounces.		Drachms.		Troy grains.
lb. 1	=	16	=	256	=	7000
		1	=	16	=	4375
				1	=	27,34375

The avoirdupois drachm is sometimes divided into three scruples, and the scruple into ten grains. The pound of 7680 grains avoirdupois = 7000 grains troy, and hence 1 grain troy = 0.097 grain avoirdupois.

The *Poids de Marc* is that employed by the French Pharmaciens, when the new weights are not.

New French Decimal Weights.

		Troy grains.	lb.	oz.	dr.	gr.
Milligramme.....	=	.0154				
Centigramme ...	=	.1544				
Decigramme.....	=	1.5444				
Gramme	=	15.4440				
Decagramme ...	=	154.4402	= 0	0	2	34.4
Hectogramme ...	=	1544.4023	= 0	3	1	44.4
Kilogramme.....	=	15444.0234	= 2	8	1	24
Myriagramme ...	=	154440.2344	= 26	9	6	0

Comparative Value of the French Medicinal Pound and that of other Places.

	lbs.	oz.	dr.	gr.	
Germany	0	15	4	48	
Amsterdam	1	00	0	42	
Belgium	1	00	0	42	
Berne	1	00	0	00	
Copenhagen	0	15	3	20½	
Florence.....	0	11	0	50	divided into 12 oz.
Genoa.....	0	10	5	60	ditto.
Geneva	1	00	0	18	
Hamburg	0	15	2	15	
Lisbon.....	0	15	7	68	
London	0	12	3	12	divided into 12 oz.
Madrid	0	15	0	16	
Milan	0	9	3	00	
Monaco	0	15	2	23	
Naples	0	10	7	54	divided into 12 oz.
Paris	1	00	0	00	divided into 16 oz.
Rome	0	11	0	50	divided into 12 oz.
Stockholm.....	0	13	7	8	
United States	0	12	3	12	divided into 12 oz.
Warsaw	1	10	4	24	
Venice	0	8	6	00	
Vienna	1	2	2	32	

MEASURES OF CAPACITY.

English Measure of Fluids.

The *gallon* (*congius*)	contains	8 pints.
The *pint* (*octarius*) O		16 fluid ounces.
The *fluid ounce* f. ʒ		8 fluid drachms.
The *fluid drachm* f. ʒ		60 minims.
The *minim* m		

Proportions of the Apothecaries' and Wine Gallon.

Gal.		Pints.		Fluid oz.		Fluid dr.		Minims.		Cubic in.
1	=	8	=	128	=	1024	=	61440	=	231
		1	=	16	=	128	=	7680	=	28.875
				1	=	8	=	480	=	1.8047
						1	=	60	=	.2256

Imperial Measure, adopted by the London College in their Pharmacopœia of 1836.

Gallon.		Pints.		Fluid oz.		Fluid dr.		Minims.
1	=	8		160	=	1280	=	76800
		1	=	20	=	160	=	9600
				1	=	8	=	480
						1	=	60

LIST OF SCIENTIFIC SOCIETIES IN LONDON.

Title of Society.	Place of Meeting.	Days of Meeting.	Hour.	Anniversary when held.
Abernethian Society	St. Bartholomew's Hospital	Every Thursday, from October to March	8 P.M.	March 31.
Astronomical Society	Somerset House	From 2nd Friday in November to 3rd in June	8 P.M.	Feb. 12, 3 P.M.
Arts, Society of	John-street, Adelphi	From 1st Wednesday in November to 2nd in June	7½ P.M.	1st Monday in June.
Botanical Society, the London	20, Bedford-st., Covent-garden	1st and 3rd Friday, from November to June, and 1st from June to November.	8 P.M.	Nov. 30, 8 P.M.
Chemical Society	Adelphi, Strand	.....	...	.....
Entomological Society	17, Old Bond-street	1st Monday in each month.	8 P.M.	Jan 25, 8 P.M.
Epidemiological Society	35, Berners-street	1st Monday in each month, from November to Aug.	8 P.M.	.....
Ethnological Society	Newman-street	.....	...	.....
Geological Society	Somerset House	Every alternate Wednesday, from November to June	8½ P.M.	Feb 19, 1 P.M.
Guy's Hospital Physical Society	Guy's Hospital	Every Saturday	8 P.M.	.....
Harveian Society	64, Edgeware-road	1st and 3rd Thursday of each month, from October to June.	8 P.M.	.....
Hunterian Society	4, Blomfield-street, Finsbury	1st and 3rd Thursday of month, excepting June, July, August, and September.	8 P.M.	February 16.
Linnæan Society	Soho-square	1st and 3rd Tuesday, from June to November	8 P.M.	May 24, 1 P.M.
Medical Society, the London	32a, George-st., Hanover-sq.	2nd Saturday in October to last in May	8 P.M.	8th or 9th of March.
Medical Society of King's Coll.	King's College	Every Thursday	7½ P.M.	.....
Medico-Botanical Society	32, Sackville-st., Piccadilly	2nd and 4th Wednesday, from November to June	8 P.M.	January 16.
Microscopic Society	Horticultural Society Rooms, 21, Regent-street.	3rd Wednesday in each month	8 P.M.	February 15.
Pathological Society	33, George-st., Hanover-sq.	1st and 3rd Tuesdays of every month	8 P.M.	.....
Pharmaceutical Society	17, Bloomsbury-square	1st Wednesday, ditto	8½ P.M.	3rd Tuesday in May.
Phrenological Society	Exeter Hall	1st Monday, from November to May	8½ P.M.	.....
Royal Botanic Society	Inner Circle, Regent's-park	2nd Saturday, from March to August	4 P.M.	August 30.
Royal Institution	21, Albemarle-street	Every Friday during the Season	9 P.M.	May 2.
Royal Medical and Chirurgical Society.	35, Berners-street	2nd and 4th Tuesday, from November to July	8½ P.M.	March 1, 4 P.M.
Royal Society	Somerset House	Every Thursday, from November to June	8½ P.M.	Nov. 30, 1 P.M.
St. George's Hunterian Society	St. George's Hospital	Every alternate Thursday	8 P.M.	.....
St. Thomas's Hospital Physical Society.	.....	Every alternate Thursday	.....	.....
Statistical Society	12, St. James's-square	Every 3rd Monday, from November to July	8 P.M.	March 15, 3 P.M.
University Coll. Medical Society	.....	Alternate Thursdays	7½ P.M.	.....
Western Medical and Surgical Society.	44, Sloane-street	1st and 3rd Fridays in every month, from October to May.	8 P.M.	1st Friday in April.
Westminster Medical Society	17, Savile-row	Every Saturday, from 3rd week in October to April	8 P.M.	2nd Saturday in Oct.
Zoological Society of London	11, Hanover-square	For general business 1st Thursday, and for Scientific business, 2nd and 4th Tuesday in each month.	3 and 8 P.M.	April 29, 1 P.M.

HOSPITALS AND SCHOOLS OF SURGERY AND MEDICINE

FROM WHICH CERTIFICATES OF THE PROFESSIONAL EDUCATION OF CANDIDATES FOR THE FELLOWSHIP WILL BE RECEIVED BY

THE ROYAL COLLEGE OF SURGEONS.

HOSPITALS.

England.—London.—St. Bartholomew's.—St. Thomas's.—Westminster.—Guy's. — St. George's. — London. — Middlesex. — University College.—Charing-cross.—King's College. Provincial: Bath United Hospital.—Bedford General Infirmary.—Birmingham General Infirmary.—Queen's Hospital, Birmingham.—Bristol Infirmary. — Addenbrooke's Hospital, Cambridge. — Derbyshire General Infirmary.—Devon and Exeter Hospital.—Gloucester Infirmary,—Hull Infirmary.—Kent and Canterbury Hospital.—Leeds General Infirmary.—Leicester Infirmary.—Liverpool Infirmary.—Liverpool Northern Hospital.—Manchester Royal Infirmary.—Newcastle-upon-Tyne Infirmary.—Norfolk and Norwich Hospital.—Northampton General Infirmary.—Nottingham General Hospital. Radcliffe Infirmary, Oxford—Salisbury General Infirmary.—Salop Infirmary.—Sheffield General Infirmary.—Stafford County General Infirmary.—Sussex County Hospital.—Winchester County Hospital. Worcester Infirmary.—York County Hospital.

Ireland.—Dublin.—Richmond.—Dr. Stevens's.—City of Dublin. — Mercer's. — Meath. — Jervis-street. —St. Vincent's. Provincial.—Belfast Hospital.—North and South Infirmaries, Cork. —Limerick County Infirmary.

Scotland.—Edinburgh.—Royal Infirmary. Provincial: Glasgow Royal Infirmary.—Aberdeen Royal Infirmary.

SCHOOLS.

England.—London. — St. Bartholemew's. — St. Thomas's.—Guy's.—St. George's.—London.—Middlesex—University College. —King's College. — Westminster. —Charing-cross. — Grosvenor-place.—Kinnerton-street.—Hunterian. Provincial: Royal School of Medicine and Surgery, Birmingham.—Old Park Medical School, Bristol.—Hull and East Riding School of Medicine.—Leeds School of Medicine.—Liverpool Infirmary School of Medicine. —Royal School of Medicine and Surgery, Manchester.—Chatham-street School of Medicine, Manchester.—Newcastle-upon-Tyne College of Medicine.—Newcastle-upon-Tyne School of Practical Science.—Sheffield Medical Institution.—York School of Medicine.

Ireland.—Dublin.—Royal College of Surgeons.—Trinity College.—Apothecaries' Hall.—Carmichael School of Medicine.—Dublin School of Medicine.—Original School of Medicine, Peter-street—Park-street School of Medicine. Provincial: The Queen's Colleges of Belfast, Cork, and Galway.—South Mall School of Medicine, Cork. The several schools recognised by the Royal College of Surgeons in Ireland.

Scotland.—Edinburgh.—University. Provincial: University, Glasgow.—King's College, Aberdeen—Marischal College and University Aberdeen. The several schools recognised by the Royal College of Surgeons of Edinburgh.

Schools and Hospitals in the British Colonies.—The Medical College, Calcutta.—The Church University, Toronto. In Foreign Countries: Paris.—Montpellier.—Strasburg.—Berlin.—Vienna. — Heidelberg. — Bonn. — Gottingen. — Leyden. —Liege.—Pavia.—New York.—Philadelphia.

INSTITUTIONS FROM WHICH

THE LONDON UNIVERSITY

IS EMPOWERED TO RECEIVE CERTIFICATES FOR DEGREES IN MEDICINE.

ENGLAND.

Birmingham.—The Queen's College.—The Birmingham General Hospital.—Sydenham College.

Bristol.—The Bristol Medical School.—The Bristol Infirmary.—St. Peter's Hospital.

Haslar.—The Royal Naval Hospital.

Hull.—Hull and E. R. of York School of Medicine and Anatomy.

Leeds.—The Leeds School of Medicine.—The Leeds General Infirmary.

Leicester.—The Leicester Infirmary.

Liverpool. — The Liverpool Infirmary. — The Liverpool Fever Hospital and Infirmary.

London.—University College.—King's College.—The London Hospital.—The Middlesex Hospital.—School of Anatomy, adjoining St. George's Hospital.—The Charing-cross Hospital.—St. Thomas's Hospital.—St. Bartholomew's Hospital.—The Westminster Hospital. —Guy's Hospital.—St. George's Hospital.—The Physicians of the St. Marylebone Infirmary.—The Royal College of Chemistry.

Manchester.—Royal School of Medicine and Surgery.—The Union Hospital.—The Royal Infirmary.—School of Medicine in Chatham-street.

Newcastle-upon-Tyne.—College of Medicine in connexion with the University of Durham.—College of Medicine and Practical Science.

Northampton.—General Infirmary.

Nottingham.—The General Hospital near Nottingham.

Sheffield.—The Sheffield Medical Institution.

York.—The York School of Medicine.

SCOTLAND.

Aberdeen.—King's College and University.

Edinburgh.—The University of Edinburgh.—The Minto-house Dispensary.—The Royal Infirmary.

Glasgow.—The University of Glasgow.—The Andersonian Institution.—The Royal Infirmary.

IRELAND.

The Queen's Colleges in Ireland.

Cork.—The Cork Recognised School of Medicine.—The Cork North Infirmary, and the Cork South Infirmary, in conjunction.

Dublin.—Original School of Anatomy, etc., Peter-street.—School of Physic in Ireland.—Apothecaries' Hall of Ireland.—School of Medicine, Park-street.—Carmichael School of Anatomy, etc.—Theatre of Anatomy, etc., 27, Peter street.—St. Vincent's Hospital.—Mercer's Hospital.—Jervis-street Hospital.—Dublin School of Anatomy, etc., Digges-street.—Royal College of Surgeons in Ireland.—Meath Hospital.—City of Dublin Hospital.—Coombe Lying-in Hospital.—Dr. Steevens's Hospital.

Maryborough.—Queen's County Infirmary.

MALTA.—The University of Malta.

CEYLON.—The Military Hospital in the Island of Ceylon.

BENGAL.—The Medical College of Bengal.

CANADA.—The University of M Gill College, Montreal.

PUBLIC EXHIBITIONS.

British Museum.—Open to the public every Monday, Wednesday, and Friday, from 10 till 7, during May, June, July, and August, and from 10 till 4 the rest of the year, except the first week in January, May, and September, Ash Wednesday, Good Friday, and Christmas day, and Fast or Thanksgiving Days. The Zoological Collections (including the Insects) are open for study, and comparison of specimens, to persons having permission, (which is granted on proper application and recommendation to the keeper,) on Tuesdays and Thursdays, from 10 till 4. The Reading-room is open, to persons having tickets of admission, every day, (except Sundays, and when the Museum is closed as above-mentioned,) from 9 till 7 in May, June, July, and August, (except on Saturdays, when it closes at 5,) and from 9 till 4 during the rest of the year.

Botanical Society.—Herbarium may be inspected every Friday, from 12 till 4. Library open on the same days.

East India House Museum.—Saturday, from 11 till 3; all the year except in September.

Entomological Society.—Museum and Library open every Monday, between 1 and 7 p.m.

Geological Society.—Library and Museums are open every day from 11 till 5.

Horticultural Society.—Days of Exhibition at the Garden occur in May, June, and July.

Kew Botanical Gardens.—Every day, except Sunday, from 1 till 6.

Linnæan Society.—Library open on Monday Tuesday, and Thursday; and the Museum on Wednesday and Friday, from 12 till 4.

London Institution.—Lectures every Monday and Thursday evenings at 7, from November to May, both inclusive.

Museum of Practical Geology, Jermyn-street.—Mondays, Tuesdays, and Wednesdays, from 10 till 4.

Royal Asiatic Society.—Museum open every Tuesday, Wednesday, and Thursday, from 11 till 4. Admission by members' tickets.

Royal Botanic Society.—The Exhibitions in May, June, and July, at 2. Promenades on Wednesdays, in May, June, and July, at half-past 3.

Soane Museum, 13, Lincoln's-inn-fields.—Thursday and Friday, during April, May, and June, from 10 till 4. Tickets must be applied for previously, and will be sent by post.

Statistical Society.—Library open from half-past 10 a.m. till half-past 4 p.m.

United Service Institution.—Museum open all the year, from 11 till 5 in summer, and from 11 till 4 in winter. Admission by members' tickets.

COMPARATIVE SCALES OF THERMOMETERS.

The zero of the Centigrade and of Reaumur's thermometer each corresponds to 32° Fahrenheit.

To convert degrees of Reaumur into equivalent degrees of Fahrenheit, multiply the degrees of Reaumur by 9, divide the product by 4, and add 32; the result will be the degrees of Fahrenheit. 9 Fahrenheit, 5 Centigrade, and 4 Reaumur, are equivalents.

To convert Centigrade into Fahrenheit, multiply by 1·8, and add 32°.

MEDICAL NEWS.

APPOINTMENTS.

MILITARY.—75th Foot: Assistant-Surgeon Augustus Frederick Turner, from the Staff, to be Assistant-Surgeon, vice Johnston, deceased. 87th Foot: Assistant-Surgeon Peter Davidson, M.D., from the Staff, to be Assistant Surgeon, vice Ray, deceased.

MILITIA.—Royal Cumberland: Thomas Delamain Wheatley, gentleman, to be Assistant-Surgeon.

DEATHS.

STALLARD.—Sept. 7, at his residence, Leicester, John Pinfold Stallard, surgeon, aged 61.

WALLACE.—Sept. 2, at Carlisle-terrace, Bow, Mr. John Andrew Wallace, surgeon, aged 51. L.S.A. 1828.

THE CHOLERA. — LIVERPOOL. — No fatal cases have occurred since those of the German emigrants reported last week to the Health Committee, and all the German lodging-houses are reported to be in a healthy condition.——PRUSSIA.—Cholera neither augments nor diminishes at Berlin, but it has broken out with considerable intensity at one or two places in the new marches. Though the cases are not numerous (about 20 odd a day), they terminate fatally in about 60 per cent., and after a very short illness. Out of 323 cases, there have been 187 deaths, 24 cures, and 112 still under treatment.——PERSIA.—Letters of the 9th of August from Tebriz, in Persia, announce that the cholera was very sensibly diminishing.——The cholera is making progress in Bessarabia.——NEWCASTLE.—Up to Monday 133 cases of attacks of the Asiatic cholera occurred, and 53 were fatal, at Newcastle. The disease had also broken out at Hexham, were 2 cases were fatal. 2 fatal cases had also occurred at Morpeth.. At Newcastle some cases had occurred with great severity. Mr. Grainger, one of the medical inspectors of the General Board of Health, has been in the town since Friday, advising the local authorities, and acting with the medical officers in taking all the precautions which appear to be practicable, in which they are now earnestly assisted by the members of the local Boards. At Morpeth there had been early preparations to meet the disease. It is expected that an order in Council will be issued for the enforcement of the Diseases Prevention Act. In parts of Newcastle most densely overcrowded by Irish labourers, the provisions of the Common Lodging-houses Act have never yet been put in force, though the Town Council is the body to whom the execution of that Act belongs.——LEEDS.—The Mayor of Leeds has issued a circular, calling attention to the progress of the cholera westwards, and urging the re-organisation of district sanitary Committees, and other precautionary measures, with a view to check its progress, should it reach Leeds.—SWEDEN, on the 2nd inst., declared London and all ports on the Thames, or situate at its mouth, infected, and all ports between the mouth of the Thames and the Tweed suspected.

MORTALITY NOTABILIA.—1015 deaths have been registered in London during the week ending Sept. 10. The mortality is below the corrected average of the week; for, within the ten preceding years, when the population of London was one-tenth part less numerous than it is now, the deaths ranged from 840 to 1040, and in the year 1849, when epidemic cholera had only begun to decline, the burials were 2865. The deaths by diarrhœa have been 131, less by 21 than were referred to that disease in the previous week, but more by one-third than the corrected average number (99) of preceding years. Seven deaths by cholera have happened; 5 in children under 15 years of age, 2 in adults of 15 and under 60,—6 of the 7 persons who died were males. The number of deaths by cholera in corresponding weeks of the 10 previous years were, 4, 1, 2, 8, 7, 6, 1682, 4, 17, and 5; so that the deaths do not exceed the usual number in ordinary years by certain forms of cholera. Two of the persons were, however, registered as having died of Asiatic cholera. Both the deaths occurred within four days of each other, in the same house, 12, Turner's retreat, Bermondsey, on the south side of the Thames.

Births.—Last week the births of 843 boys and 826 girls, in all 1669 children, were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1327.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·967 in. The mean temperature of the week was 56·1°, which is 2° below the average of the same week in 38 years. The highest temperature of the week was 72·0°, and occurred on Tuesday; the lowest was 45·0°, and occurred on the same day. The greatest difference between the dew-point temperature and the air temperature was 14·1° on Tuesday; the least 1·0° on Saturday. The general direction of the wind was from the north, and it blew at the rate of 60 miles a-day. The electric condition of the atmosphere has been positive on every day of the week.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending September 10:—

	Males.	Females.	Total.
Workhouses	41	34	75
Military and Naval Asylums.. ...	3	2	5
General Hospitals	32	14	46
Hospitals for Special Diseases ...	4	6	10
Lying-in Hospitals	...	1	1
Lunatic Asylums	1	...	1
Military and Naval Hospitals ...	1	...	1
Hospitals for Foreigners, &c. ...	1	...	1
Prisons	3	...	3
	86	57	143

TO CORRESPONDENTS.

All communications will be acknowledged and answered in our next Number.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES
ON THE
RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE

The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture V.

In the concluding part of my last lecture, I spoke of those cases of epilepsy which are excited by a great and sudden shock of grief or terror. I purpose now to consider those cases of the same disease, which arise from the comparatively slow operation of mental anxiety. The cases of the latter class which have come under my own care, and of whose history I have a sufficiently accurate knowledge, are seventeen in number. Although it appears desirable to give a separate consideration to the two classes of cases, it is probable that their nature is essentially the same. There is, however, a difference in their history, which it is of much practical importance to observe. It has already been shown, that the epileptic disease which results from the shock of violent grief or terror, usually commences quickly after the occurrence of the shock, and is, in fact, unavoidable; while, on the other hand, those cases of the same disease which originate from over-work and anxiety, or from the influence of continued grief, are almost invariably preceded by a train of warning symptoms; and it is during this period of incubation of the disease that preventive treatment may be resorted to with a reasonable hope of success.

The sources of mental disturbance and anxiety which I have observed to terminate in epilepsy, have been grief on account of the illness, or death, or misconduct of relatives and friends, loss of money, failures and disappointments in business, and, among the poor, over-work or insufficiency of work, with its attendant anxiety and low diet. In two of the seventeen cases to which I have referred, anxiety was combined with intemperance; but I have retained them in this class because mental anxiety appeared in both cases to be the most powerful influence. The cause of the anxiety was in one case the loss of a large sum of money, and in the other excessive labour as a tailor. In the latter case the poor man had been working two whole nights without going to bed; he then took an extra quantity of drink, and was seized with a fit while in bed. He became a confirmed epileptic.

In a former lecture I alluded to the importance of distinguishing that form of delirium which results from the immediate poisonous influence of alcohol in the blood, from the delirium which may more probably be referred to the combined influence of the mental anxiety and the bodily weakness which result from the too free habitual indulgence in alcoholic drinks. It is equally desirable to make a similar distinction with regard to convulsive attacks. With reference to prognosis the distinction is a very important one. When an epileptic seizure has occurred during a fit of intoxication, it may never be repeated if the patient is careful to avoid the like exciting cause; but when a man who is sometimes intemperate and continually nervous and anxious has once been seized with epilepsy while he is sober, the probability that he will be visited by a return of the disease is very much greater than in the case of a convulsive fit which has been immediately excited by intoxication. We will exclude from our present consideration all cases in which mental anxiety is not either the only or the chief cause of epilepsy.

The symptoms which precede the full development of epilepsy are precisely those consequences of mental anxiety which I described at the commencement of my last lecture, —terrific dreams and visions, startings, talking, and sometimes screaming, during the hours of sleep; after which, a sense of fatigue in the morning, with pain, weight, or constriction in the head, loss of appetite, and weakness. These symptoms continue for a variable period,—sometimes for many months, but in other cases only for a few days before the occurrence of the first epileptic fit, which generally takes place in the night and during sleep. The nocturnal disturbances then continue, sometimes in an aggravated degree; and after an interval which varies from a few hours to many months, a second fit of epilepsy occurs, and so the disease is established.

It is needless to describe the well-known phenomena of epilepsy, or to advert to the blighting influence which the disease exerts upon the noblest faculties of the mind. My object is to direct attention to the premonitory symptoms, and to insist upon the importance of arresting the progress of these before the occurrence of the first epileptic paroxysm.

I must here guard against a possible misconception. I do not maintain or believe that every over-worked or anxious man, who has unpleasant dreams, and who talks, or screams, or starts up in his sleep, will become epileptic. Such an opinion would be very unreasonable; but, expressed in the hearing of a nervous patient, it might contribute much to bring about its own verification. I do maintain, however, that any one whose sleep is habitually and for a long time disturbed in the manner described, is in danger of incurring some serious form of nervous disease,—it may be epilepsy, or it may be an outburst of delirium or mania, or a sudden attack of partial paralysis, or that more gradual decay of all the cerebro-spinal functions to which the term "general paralysis" is applied. Some one or other of these terrible maladies may result from the long continuance of excessive labour and anxiety by day, with restlessness and terror by night. The object of treatment in such cases is obviously twofold: 1st. To remove the cause, when that is possible; and, 2nd. To combat the earliest effects, with a view to prevent the occurrence of more serious disease.

Respecting the means of accomplishing these objects I shall speak more particularly hereafter; but it may be observed here, that, when our treatment is most successful, we cannot know the full extent of benefit which we have conferred upon our patient. We cannot tell in what proportion of cases the milder symptoms of nervous disorder would have passed into epilepsy; but that they would have done so in many cases there is much reason to believe.

One of the worst cases of epilepsy from over-work which I have met with is that of a boy, R. M——, who is at present an out-patient at the hospital. The disease commenced about five years ago, when he was 13 years old. Before that time, he was very intelligent, of a rather excitable temperament, with light brown hair, and a fair, clear skin. He was employed as a reader in a printing-office, and he worked at this occupation about ten hours a-day, in a hot room. For about a month before the commencement of the epilepsy, he often complained of feeling tired and stupid, and he suffered from headache. At the same time, too, his parents observed that he talked much in his sleep, and occasionally walked about the room in a state of somnambulism. At length he was seized with a very violent fit in the night; and, after a few days, he had a second fit. The fits have frequently recurred from that time. He sometimes has two in a week; but occasionally he has been free from fits for two or three weeks at a time. He was soon obliged to resign his employment as a reader; his memory became impaired, and he cannot now read without feeling confused. His parents are healthy; there is no hereditary tendency to nervous disease. Now, it is probable that a week's rest from his work, or a shortening of his day's labour during the month in which the warning symptoms of mischief presented themselves, might have saved this poor boy from the terrible disease under which he continues to suffer.

The great importance of a careful attention to the earlier symptoms of mischief resulting from over-work and anxiety, will be apparent from an analysis of a given number of cases of epilepsy with reference to the nature of the exciting cause. It is better to exclude from consideration cases of renal epilepsy, of infantile convulsions, and of convulsions during the early stage of the acute specific diseases, as, *e.g.*, small-pox. The reason for excluding these cases is, that they are all temporary, except those which result from chronic renal disease, and these are, in most instances, quickly fatal. Excluding these cases, then, I find, on comparing the histories of 37 cases of epilepsy, that in 11 cases the fits occurred after some sudden grief or terror, in 17 cases mental anxiety was the cause, in 5 either bodily disease or intemperance, and in 4 cases the cause could not be ascertained, there being no history of mental shock or anxiety, nor any evidence of bodily disease or of intemperance. It appears, therefore, that a large majority

f the cases of permanent, incurable epilepsy, have their rigin in mental influences; and that of 28 cases so origiating, 17 were produced by the comparatively slow operation of anxiety from various causes. I have before stated, that in two of these cases the influence of intemperance was added to that of mental anxiety, and the following case is an illustration of another combination of causes.

F. H., a female, aged 41, came to the hospital, in February, 1851, and gave me the following history of a former illness. About sixteen years ago, a few hours after the birth of her second child, she observed her attendants whispering to each other, and in reply to her inquiry what it meant, they told her that her husband was dying. He had been suddenly seized with a dangerous illness at her mother's house, which was a mile distant. Her husband eventually recovered, but her anxiety was intense for several weeks, and in about a month after her confinement she was suddenly seized with a fit, during which she nearly bit her tongue in two. Her medical attendant bled her, and she had three more fits on the same day. From that time she continued to suffer from the fits, sometimes having four in one day, and never being a week free from them, until the expiration of two years from their commencement, when her medical attendant gave her every night and morning, for a few days, a dose of castor oil and turpentine. The result was, that she brought away about forty round worms, and from that time she has not had a single fit. She had often passed worms of the same kind during the two years preceding the commencement of the epilepsy, but she never had a fit until she was subjected to the intense mental anxiety. After this, however, it appeared that the worms had perpetuated the disease until they were expelled. Her doctor, she said, told her that the fits had been caused partly by fright and partly by the worms. Her story was a very consistent one, and I have no doubt as to its substantial accuracy. She came to the hospital on account of nervousness and restlessness, from which she always suffers when she is anxious, but she has had no return of the epilepsy.

The preceding case is very similar in its general features to one which has been recently published by the late Dr. Graves.(a) The two cases are confirmatory of each other, and both convey an important practical lesson. The case to which I refer was communicated to Dr. Graves by Dr. Harvey. "A young gentleman at a boarding-school lost his brother, who died rather suddenly. This event gave rise to intense grief, which occasioned convulsions, occurring so frequently that the boy was obliged to leave the school. It was soon found that regular epilepsy had been developed, and in a severe form. Various remedies were exhibited, but in vain, for several months, when it was judged expedient to try the effects of oil of turpentine. After it had been used for a few days it unexpectedly acted as a vermifuge, and expelled a tape-worm, from which time the epilepsy never re-appeared." Such is the report of the case, to which Dr. Graves adds the following brief commentary:—"Here, then, we have an instructive example, proving that a source of irritation may exist without producing sympathetic disease, but yet capable of keeping up nervous symptoms when the latter have been caused by other agencies."

It has been before observed, that cases of epilepsy which result from obvious bodily disease, are in most instances curable when the original disease is remediable. It appears, also, that when some bodily disease or irritation of a temporary and removable character has concurred with mental anxiety to produce epilepsy, the prognosis is less unfavourable than when the epilepsy has been occasioned by purely mental influences. The only case of this kind which has come under my own observation, and in which there has been a complete cure, is the one whose history I have just now given. I include that case in the list of seventeen to which I have before referred as resulting from mental anxiety. The remaining sixteen are, so far as I know, uncured. I may remark, however, with reference to this point, that I lost sight of two of the cases quickly after the occurrence of the second fit in each case; so that, although the prognosis was unfavourable, I have no knowledge of the actual results of these cases. In another case, after the first epileptic seizure had been quickly followed by a second fit, there has been no recurrence of the disease for, I believe, more than a year. It is, however, well known that such a patient cannot as yet be considered safe. The history of one case, which is still under my observation, will illustrate this.

H. C——, aged 51, pianoforte maker, a very intelligent and a very temperate man, with a remarkably fine and powerful bodily frame, after suffering much from anxiety consequent upon pecuniary difficulties and excessive labour at his business, had an epileptic fit on the 19th November, 1851. On the 28th December he had two fits of the same kind. After this he had no return of the disease until the 8th February, 1853, so that there was an interval of fourteen months. Then again he had another fit only eight days afterwards—on the 15th February; and another on the 9th of the present month (April). The irregularity of the intervals between epileptic seizures, and the difficulty of deciding when a patient who has become epileptic under the influence of mental emotion can be considered as actually safe and well, are known to every practitioner. It will frequently be found on inquiry, that when a paroxysm of epilepsy occurs after a long interval there has been some fresh exciting cause, or a repetition of the original cause,—some shock of fear, or grief, or anxiety, or anger, acting through the mind, or some unusual fatigue or attack of sickness disturbing and weakening the body. The practical inference from these facts is obvious. I mean, that a patient who has had one or more epileptic seizures should be most carefully guarded against every influence which, whether acting primarily upon the mind or upon the body, endangers a return or a continance of the disease.

The history of every *cure* of confirmed epilepsy possesses some degree of interest. I am therefore induced to give a few particulars of one case which I have not included in my list of seventeen arising from mental anxiety.

L. G——, aged 40, a butcher, came to the dispensary on the 20th February, 1852, complaining of nervousness and restlessness,—the result, as it appeared, of anxiety occasioned by his having been out of employment. He stated, that, about six years before, he was for three months subject to epileptic fits, which he attributed to excessive eating and drinking. He had been in the habit of eating large quantities of meat, and he was frequently intoxicated. He sometimes had as many as three or four fits in one day. He was advised to drink less, and did so. About two months after the commencement of the fits, a large abscess formed near the anus. It was slow in maturating; but at length it was opened; and from that time he has had no fit of convulsion. The abscess occasionally closed and opened again, and it did not finally close for two years. I cannot vouch for the accuracy of this history; but the patient himself appeared quite confident as to the facts. The case affords support to the doctrine of the humoral origin of epilepsy which has been so ably advocated by Dr. Todd.

That epileptic convulsions frequently result from poisonous materials in the blood is as clearly demonstrated as any pathological fact can be. Take, for example, the convulsive attacks which are produced by prussic acid, or by an accumulation of urinary constituents in the blood. In other cases such a cause is in the highest dergee probable, as *e.g.*, when convulsions precede the eruption of small-pox. Again, there are other cases in which it is certain that the blood is abnormal in quality, although it may be impossible to demonstrate the precise nature of the deviation from the normal state; as, for instance, in a case of gluttony and drunkenness, like the one to whose history I just now referred; and, on the other hand, in that numerous class of cases in which continued anxiety and restlessness are associated with a defective appetite for food, and great impairment of the digestive powers. The cases of epilepsy in which the probability of a morbid state of the blood being the essential cause may at the first view appear to be least, are those which are suddenly induced by terror. But, as there is no *à priori* improbability that the character of the blood may be quickly altered by terror, so there are some facts which cannot well be explained, except on the supposition that the blood is in some way changed by violent mental emotion. I allude to the well-known influence of mental emotion upon the various secretions, and particularly upon the secretion of milk, as tested by the sensitive stomach and nervous system of a sucking infant.

The immediate effect of mental anxiety, or grief, or anger, in the nurse upon the infant at the breast is well known, not only by every practitioner, but by every mother. I have repeatedly been told by nursing mothers, that when they are

(a) *Dublin Quarterly Journal*, November, 1852.

very anxious, their infants invariably have green stools, and suffer from griping. On one occasion, I attended an infant which had been in good health until the mother was rendered intensely anxious by her dissipated husband staying out all one night; the infant, on the following day, was griped, had green stools, and a fit of convulsions. The man returned; the mother's anxiety subsided, and the child quickly recovered. The most remarkable case of this kind is quoted from a German author, by Dr. Carpenter, in his "Principles of Human Physiology:"(a)—"A carpenter fell into a quarrel with a soldier billeted in his house, and was set upon by the latter with his drawn sword. The wife of the carpenter at first trembled from fear and terror, and then suddenly threw herself furiously between the combatants, wrested the sword from the soldier's hand, broke it in pieces, and threw it away. During the tumult, some neighbours came in, and separated the men. While in this state of strong excitement, the mother took up her child from the cradle where it lay playing, and in the most perfect health, never having had a moment's illness; she gave it the breast, and, in doing so, sealed its fate. In a few minutes the infant left off sucking, became restless, panted, and sank dead upon its mother's bosom. The physician—who was instantly called in—found the child lying in the cradle, as if asleep, and with its features undisturbed; but all his resources were fruitless—it was irrecoverably gone."

Such an event could hardly, as Dr. Carpenter observes, be regarded as more than a simple coincidence, if it were not confirmed by numerous other facts of a less striking character, but equally decisive. There can, I think, be little doubt that the effect of mental emotion in modifying the secretions is consequent upon some previous change in the blood itself. This explanation is certainly more consistent with other facts and with analogy than is the supposition, that the modified secretion results from some direct and immediate influence transmitted through the nerves to the gland itself or to its secreted products. One of my Dispensary patients, a boy about 14 years of age, had a fit of epilepsy after the violent excitement of a quarrel with one of his fellows. Now, it is certainly not unreasonable to suppose, that this boy's brain was poisoned by some noxious modification of his blood, similar to, if not identical with that which, in like circumstances, leads to the secretion, by the mother, of milk so poisonous in its character, that it either quickly kills, or convulses, or gripes her sucking infant. The green stools, and the griping thus induced, are not distinguishable from the same symptoms occurring as a consequence of the mother eating some kinds of vegetables, such as cabbage. She may or may not be inconvenienced by such diet; but the more delicate stomach of her infant will often prove, by its derangement, that some injurious material has passed through the mother's blood into the secretion of the breast.

There is not wanting even direct chemical evidence of changes in the composition of the secretions effected by the agency of the nervous system. Bernard(b) has shown, that when the medulla oblongata of a rabbit is irritated by the insertion of a fine needle, the urine of the animal quickly becomes saccharine, and that the secretion of sugar continues so long as the irritation of the brain remains. Whatever may be the precise *modus operandi* of the cerebral influence, there can be little doubt that the kidneys only secrete or separate the sugar which is conveyed to them by the blood. They probably have no share in the formation of that material. This is a very striking illustration of a change in the vital chemistry of the blood and of the urine affected by nervous influence. The experiment in question is confirmatory of an opinion entertained by many pathologists, that diabetes in the human subject may be induced by over-work and anxiety. I have myself no doubt that this opinion is correct, and within the last few months I have seen two cases of diabetes, the origin of which appears to be clearly traceable to such influences. Another fact which has an important relation to the same subject is the influence which opium frequently has in lessening the quantity and the density of the saccharine urine secreted by diabetic patients. This fact appears, indeed, to be the counterpart of Bernard's experiment. If irritation of the brain of a rabbit by a needle, or of the human brain by mental anxiety, will lead to the secretion of sugar by the kidneys, it is not difficult to believe, that the soothing influence of opium may, in some degree, counteract that particular effect of cerebral irritation.

Returning now to the pathology of epilepsy, it seems reasonable to suppose that, however diverse may be the remote causes of the disease, the proximate cause of the epileptic paroyxsm is similar in every case. It is certain, that in a large proportion of cases a morbid state of the blood is associated with the disease, and is, in fact, the essential cause of the convulsion. And lastly, while there is some degree of *à priori* probability, that mental emotion causes epilepsy, through a change effected in the composition of the blood, there are some well ascertained facts which afford positive evidence as to this mode of operation. In fact, it is probable that a fit of anger, or of sudden and violent grief, or terror, may generate in the blood a poison which is sometimes as quickly fatal as a large dose of prussic acid, and which is almost identical with that compound in its mode of operation.(a) In discussing a subject of such acknowledged difficulty and obscurity as the pathology of epilepsy, hypothesis must sometimes serve as, at least, a temporary substitute for demonstration. We have only to be careful not to maintain our favourite hypotheses after they have been shown to be inconsistent with actual facts. It scarcely need be added, that, to use hypotheses with caution, and to abandon them when they have served their purpose, or are no longer tenable, is not only a rule of true philosophy, but also a solemn obligation of duty on the part of every one who proposes to found upon hypothetical opinions, rules for the practical guidance of himself or others.

I have before referred to the subject of *delirium*, as being one of the consequences of mental anxiety, under which term I include those mental states, which result from grief, over-work, and an over-anxious care for the future, or a dread of ill consequences. In my third Lecture, I gave the history of a poor man (*Case* 2), who was rendered delirious, and, at a subsequent period, epileptic, by continued grief and anxiety, consequent on the misconduct of his wife. The delirium in that case is a good example of the kind of delirium which is sometimes occasioned by intense anxiety. This form of delirium rarely, if ever, occurs without being preceded by some warning symptoms. In this respect it resembles the epileptic disease, which is often induced by similar influences. The warning symptoms, too, are of the same kind. The patient's sleep is disturbed by frightful dreams, which he may remember and speak of with dread during his waking hours, or which may be known to occur only by his being heard to talk frequently, or to moan or scream, during his sleep. When he is talking in this manner during sleep, he will sometimes answer questions as if his faculties were quite alive; but, when he awakes, he may have no recollection of what he has said or heard. At other times, he appears while sleeping to be carrying on a conversation with some person whom he imagines to be present. I was once told by a very intelligent woman, whose husband eventually became insane, and died in an asylum, that he was of what she called "a very close disposition," so that he would never willingly speak of his troubles to her or to any one; but, whenever he had been unusually worried, he talked so much in his sleep, that she learned from him then, not only the fact of his being anxious, but also the particular cause of his anxiety.

The transition from a state of sleeping delirium to delirium in the waking condition is sometimes rapid. An intermediate stage appears to be that in which a man starts up in a state of terror and confusion, looking about him, and sometimes talking wildly, and recovering complete consciousness only after being frequently spoken to, and roused by being touched or shaken. In some instances, the excitement on first awaking is accompanied by a more or less strong and durable temptation to commit suicide, or to do violence to others; and the patient will afterwards describe these feelings as most distressing and terrible. The symptoms which I have described, if permitted to continue unchecked by treatment, may be quickly followed by an outburst of maniacal delirium, or by an epileptic seizure, and sometimes, as I have seen in two instances, by both these consequences in suc-

(a) Fourth Edition, p. 980.
(b) Archives Générales de Médicine.

(a) It is by no means improbable, that a morbid condition of blood, and a minute structural change of the brain, may be concurrent causes of some epileptic seizures, and of those, in particular, which result from a sudden and violent mental shock. (See the previous Lecture.)

cession. In no case whose history I have investigated has an outbreak of delirium occurred without being preceded, for a longer or shorter period, by some of the warning symptoms to which I have referred. I have sometimes heard and read of men becoming suddenly delirious or mad without any warning and without any appreciable cause. I have never seen such a case in practice, but I have met with more than one case which, without a careful examination, might have passed for such,—cases in which there was a deep and abiding cause for anxiety, which was never revealed even to the nearest friend or relation until it was made known after it had wrought irreparable mischief in the mind and body of the patient.

One case of this kind presented itself in a clergyman, who was possessed of a powerful mind and body, until he suddenly became insane, and subsequently epileptic, when little more than 30 years of age. His habits were strictly temperate, but he was perhaps over-anxious about his work and the results of his labours. His wife observed, that his appearance and manner were changing; he became unusually reserved, and sometimes irritable; in other respects, too, his conduct was strange. He was at a distance from all other members of his family, and his anxious wife had no suspicion either of the real cause of the change which had come over him, or of the further consequences which were threatened. At length he became suddenly and furiously delirious in the middle of the night. The mental disease continued, and became complicated with epilepsy, and, after nearly four years of suffering, he died. Now, the cause of all this mischief was not ascertained until the time for prevention had passed. His income was small, and insufficient for the wants of an increasing family; he was in difficulties on this account, but no one was aware of the fact until the state of his affairs was disclosed after his illness. He was naturally of a reserved, and perhaps, I might add, of a proud disposition; and he had concealed his difficulties from his wife, probably from an unwillingness to distress her by a knowledge of them. It scarcely need be added, that his own anxiety was rendered the more intense by this reserve, and by his not seeking that relief which might have been derived from such a free out-speaking of his troubles as would have enabled his family to assist him out of them, or to share them with him.

I could give the details of several cases of whose history I have an intimate knowledge, in which consequences equally disastrous, though differing in different cases, have resulted from similar causes, and especially from the influence of suppressed grief or anxiety, the cause for which has neither been known nor suspected even by the patient's nearest friends, until it has been brought to light after the onset of some terrible illness,—an attack of mania, or epilepsy, or paralysis.

Now, it is in the highest degree important, that our attention should be alive to the true nature of these cases; and for this particular reason—that we may often be consulted by an anxious patient before his nervous system has suffered serious injury. He will be apprehensive of some bodily disease, and will come to us with a complaint of some of those symptoms which I described in a former lecture. He feels certain that his heart, or his lungs, or his kidneys, are in a state of incurable disease; and he begs to have our opinion upon their condition. We examine these organs, and we can detect no sign of structural disease, either in them or in any other part. We observe the patient's anxious appearance and manner, and, after inquiring for other sources of disturbance, we may often feel certain that all his discomfort has its origin in some mental influence. If, then, we express this conviction to the patient, in terms which must greatly depend on his circumstances and on the degree of our intimacy with him, we shall probably so far gain his confidence as to obtain from him a confession of trouble and anxiety, of which, perhaps, he had never before spoken to any one. Or, if he hesitate, as perhaps he may, to make a confessor of his physician, we may at least succeed in awakening his attention to the true source and nature of his sufferings, and so induce him to confide in some friend, and to unburden his mind, so far as this can be done, by giving "sorrow words." In this way we may often be instrumental in preventing the occurrence of diseases which, when once they are fully developed, are irremediable by any means which we can command; while, on the contrary, an error of diagnosis—and particularly as to the origin of the patient's suffering—may be attended with very disastrous consequences, partly by confirming the patient in his fears as to the state of his bodily organs, and partly by suggesting a plan of treatment the very reverse of beneficial.

Before leaving this part of my subject, I will remark, that, when a patient has once been delirious or insane from the effects of mental anxiety, he is very liable to suffer from restlessness, or to have his sleep disturbed by frightful dreams and visions, if at any time his bodily strength be much reduced by illness or over-fatigue, or if he be exposed to any fresh source of mental worry. I have observed this particularly in the case of a poor woman, who has once been in an asylum, and who has several times since complained to me of the symptoms to which I have referred. On each occasion she has been quickly relieved by an opiate taken at bed-time for a few nights. In such cases, it is probable that the mere dread of a return of the disease is often a source of great anxiety. And the same observation is applicable to epileptic patients. One poor man told me, that he always sleeps soundly for a few nights after he has had a fit; and he explained the fact by the feeling of confidence which he has that there is then little reason to fear an immediate recurrence of the fits, which, at other times, he so much dreads, that he cannot sleep with comfort.

Among other consequences of long-continued mental anxiety, I have frequently observed a greater or less degree of that general impairment of all the functions of the mind and of the nervous system to which the term *general paralysis* has been applied. It has appeared to me, that the most frequent and powerful influences concerned in producing this state of body and mind are,—overwork or a deficiency of work, with the anxiety attendant upon it, an insufficient supply of wholesome and nutritious food, and the impure atmosphere of dwellings and workshops. The intemperate use—or, rather, abuse—of alcoholic liquors is by no means an essential cause, but a very powerful one when it exists; for it is an almost constant source of mental anguish, at the same time that it poisons the body and impairs its nutrition. The brief history of one case will serve as an illustration of this form of disease.

J. M ——, aged 44, an upholsterer, came to the hospital on the 19th January, 1851. His mental faculties were so much impaired, that he could give no account of himself; but I obtained from his wife the following particulars of his history:—No members of his family had suffered from nervous diseases except his father, who was the owner and commander of an East Indian merchant-vessel, and who became insane, in consequence, as was supposed, of misfortunes and losses during one of his voyages. My patient had married about twenty years before; he had then a good business, and for some time went on very prosperously. About ten years ago he began to drink occasionally to excess, but not so as to interfere with his attention to business. He had always been of a somewhat nervous temperament, but the effect of his occasional intemperance was to make him much more nervous and anxious. About five years ago he lost the custom of a firm which had given him the greater part of his business. He now became very anxious and irritable; he could neither sleep nor eat, and about the same time he had some kind of fit, which was attributed to intemperance. His memory and intellect gradually failed; he drank less, but his limbs were so tottering and unsteady that he often appeared to be intoxicated when he was quite sober. This had an injurious effect upon his business, and on one occasion a large order was countermanded because he was erroneously supposed to be intoxicated when he received it. He was exceedingly distressed by this occurrence, as well as by the loss of two of his children, which occurred at a more recent period. This series of misfortunes had gradually impaired his health, and when he presented himself at the hospital the expression of his countenance indicated a state of childish imbecility, his memory had entirely left him, his perceptive powers were greatly impaired, he answered questions slowly and imperfectly, his speech was thick, and his gait tottering,—yet with all this his muscles were tolerably firm and well nourished.

I saw him several times after his first visit to the hospital. He remained in much the same condition until the 7th March, when, as I afterwards learnt, he became excited by the expectation to obtain some employment which was promised him, and apparently in consequence of this he was suddenly seized with a fit of convulsions. A medical man

who was called in immediately took eight ounces of blood from the arm. After this he gradually became lower, and the convulsions, which were accompanied or preceded by loud screams, returned frequently at intervals of about half-an-hour. He died on the following day, about twenty-seven hours after the first seizure. I did not hear of his death until it was too late to examine the body.

It is evident that the mental and bodily powers of this poor man were gradually broken down by an accumulation of injurious influences, all more or less connected with each other. It appears that his disposition was originally nervous, and that an occasional habit of intemperance was the first avoidable cause of disaster. He may have been tempted to this habit by his constitutional nervousness; but any temporary relief which he thus obtained was of course followed by an aggravation of the original evil, and so his descent commenced and continued until the final catastrophe. Great as is the physical mischief which is directly occasioned by an abuse of alcoholic drinks, there can scarcely be a question that as in this, so in many similar cases, the mental anguish which the drunkard experiences is not less powerful in its influence upon the nervous system; its action being primarily upon the mind, and secondarily upon the bodily instrument of the mind.

Besides the cases of general paralysis to which I have referred, I have occasionally observed some form of *local palsy* in connexion with intense mental anxiety. I do not now allude to cases of apoplexy and hemiplegia which, however, I have certainly known to occur under the immediate exciting influence of distress and anxiety; but I refer more particularly to the partial loss of sensation in some of the fingers or other parts of the body—symptoms which are often a source of great discomfort and alarm to a nervous patient. I am ignorant of the proximate cause of these disordered sensations.

I have before stated, that some degree of impairment of vision is frequently complained of. In one case, a nervous man had been rendered intensely anxious by a change of his situation which he had expected to be for the better proving quite the reverse; he became very restless, and quickly lost the sight of the right eye without any outward change in the appearance of the organ; at the same time, too, the sensation of the upper lip on the same side became impaired. Before he came under my care, he had taken mercury without benefit. His health has since improved in other respects; but when I last saw him he had not recovered either his sight or the feeling in the lip.

A girl who was subject to occasional fits of hysteria, suddenly lost the sight of the left eye from the effects of hard work and anxiety. The pupil on the affected side was much dilated. She had a timid, delicate appearance, and a pallid skin. I gave her sulphate of iron three times a day, muriate of morphia at night, and an occasional dose of compound aloes pill. She quickly recovered her sight, and the pupil regained its natural size.

In the case of one woman, at present under my care, who has been much harassed and overworked, and who complains of the usual symptoms, disturbed sleep, etc.; one pupil is about twice the size of the other; but she declares that her sight is good, and equally so in both eyes.

It is needless to do more than make a passing allusion to the subject of *chorea* as connected with mental influences. It is well known that scarcely any disease is more intimately connected with the emotions of fear and anxiety. Without doubt, some derangements of the bodily organs may concur in the production of chorea, and these must be regarded in conducting the treatment of the disease; but neither the pathology nor the therapeutics of chorea would be complete without due attention to mental and moral influences.

And, lastly, with reference to *hysteria*, it is unnecessary to insist upon the fact, that, notwithstanding the etymology of the disease, it is by no means limited to the female sex. There is not one of its characteristic symptoms which may not be fully developed in the male. It is a less frequent disease among men, for the reason, that the feeble constitution and the excitable nervous system which predispose to the hysterical paroxysm are less common in men than in women. The *globus* in the throat is the form of hysterical symptom which I have observed more frequently than any other in anxious patients, both men and women. It is always a distressing symptom, and it often alarms the patient greatly. The sensation is usually excited by some sudden emotion, and it may occur at any period of the day or night. In several cases, especially in men, it has been complained of only at night, and, in these instances, it has appeared to be connected with the unpleasant dreams by which the patient was nightly disturbed. The dreams and the hysterical globus have been cured by the same means.

One of the most remarkable cases of the kind was that of a man nearly 60 years of age, who came to the Dispensary, and assured me, that, for the period of a year, he had scarcely passed a night without being disturbed by a frightful sense of suffocation, for the relief of which his son and daughter assisted him to the open window. He had no cough, nor any symptom of disease within the chest. His countenance indicated great anxiety, and he spoke of having been much troubled by circumstances, the nature of which he did not communicate. I ordered him to take five grains of the compound soap pill each night at bed-time. He came again at the end of a week, and told me, that, since taking the pills, he had slept well, and had not once been disturbed by the choking sensation which had so long distressed him. From that time I saw him no more; I therefore conclude that he had no return of the complaint. I have seen many cases similar, though less striking than this,—similar, both as regards symptoms and the results of treatment. It sometimes appears that local irritation of the throat excites the sensation of *globus* in those who are predisposed to it. When a very nervous woman gets a common sore throat, her distress and sense of suffocation are often quite out of proportion to the local irritation or swelling. One poor woman, who was very anxious, and much overworked, had a slight choking fit while swallowing some food, and afterwards she felt convinced that some substance had lodged in her throat. She went to one of the hospitals, where the house-surgeon passed a probang, but this rather increased the discomfort. She afterwards came to the Dispensary, and told me her history. The mucous membrane of the fauces and pharynx was congested, but her intensely-anxious face and nervous manner, and her description of the *rising* in her throat, were the most significant facts. It was not until after many days, and then very gradually, and with occasional relapses, that she escaped from the painful conviction that there was some solid mass actually sticking in her throat.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS.

No. V.

EXTRACTS FROM A REPORT UPON THE SANITARY CONDITION OF THE PARISH OF STONEHOUSE, DEVON.

By WILLIAM THOMPSON KAY,
Assistant-Surgeon, Royal Marines.

[The able Report of Mr. Kay, drawn up at the desire of Sir William Burnett, when Cholera was attacking Stonehouse in 1849, will be of great interest at present, and show how numerous are the sources of disease which are brought to light by careful inspection of our towns.—Ed.]

The localities under consideration and investigation, included in this Report, have been those that are more immediately in connexion with the Marines, either from the men and their families, inhabiting the streets themselves or residing near to them, and have been made the subject of consideration, on account of their bearing in a sanitary point of view, affecting the general health of the battalion stationed at head-quarters.

The privies in many streets in the parish are in the most filthy, disgusting, and abominable condition that it is possible to conceive. There does not exist any authority for attending to their proper construction, and seeing that they are cleansed; or, if such authority does exist, which I am much disposed to question, it is not exercised as it should be.

In most of the houses the privies require to be frequently emptied, but are not; in some the liquid part drains off through pipes, protected at their entrance by a grating, and the solid fæcal matter remains to be removed in from one to two or more years, as may suit the pocket or inclination

of the landlord or sub-landlord of the house; and again in others, they empty into the ash-pits, giving rise to the most abominable fetid exhalations, which either originate, aggravate, or promulgate malignant fevers and other diseases, tending to shorten the lives of the inhabitants surrounding them, increasing the mortality and the poor-rates.

Scarcely one privy that I have inspected in the parish is properly constructed; they have no means of allowing the foul air to escape from the upper part. They should have holes in the door of the upper part, and an opening at the side of the wall near to the roof, or one in the roof itself, protected against the ingress of rain.

In one district complaints were made to me of the state of the privy of an adjoining house; and, on inquiry and investigation at the premises, I learned that the statement had not been exaggerated, for the nuisance was even worse than had been represented, probably from the inhabitants being accustomed to the noxious effluvia emanating from it and the subjacent cess-pool.

The Drainage and Sewerage.—The natural facilities for drainage afforded in this parish are excellent; there has been more, indeed, done by nature than art, for the declinations from the Marine Barracks, or either side, north or south, are most favourable for the carrying out of a proper system of drainage; and the declination in the same direction, on either side of High-street and Fore-street, point out how easily it might be pursued, provided a common sewer was formed, and carried out to a sufficient distance beyond the quay, to empty itself at low water.

The present system of drainage employed in the parish is most defective, being by means of flat-bottomed drains, which, from being some time "pitched" with rough stones, and then "grouted," present many points of obstruction throughout their course, requiring them to be frequently cleansed, and, therefore, adding materially to the expense of the houses.

Other drains, though possessing a smooth surface at the bottom, yet have such numerous projections from their sides as to cause lodgments of straw, leaves, and sand, which, forming a nucleus of obstruction, in process of time, chokes the drain.

There are other parts of the parish which have open drains or gutters, sluggish, and emitting occasionally most offensive odours and keeping up typhoid fevers, especially where they overflow and run along the kennel at the side of the street, giving rise to the most noisome exhalations.

In Water-lane is an open sewer where the contents of a privy are received, and mixed with such refuse as fish, offal, dead rats, and vegetables; it cannot be surprising that low and malignant fevers are more frequent and more fatal in this than in other districts. It was here that cholera prevailed last April, on the 13th and 17th, proving fatal to a child one year old, and the woman that tended it as nurse. Facts like these speak for themselves.

To allow such fertile sources of aerial impurity to exist, is to poison the inhabitants by degrees, to give rise to an unhealthy class of people, and cut them off in the early stages of acute diseases under which they may labour, without the possibility of their being able to remedy the evil, if not assisted by others. One of the most serious consequences resulting from defective drainage is the pollution of the well-water, which must exert a baneful influence upon the people.

I have inserted an appendix, in which the description of any nuisances existing in each street has been given at length, in order that they may be referred to at any time. It will thus form an index to mark the improvement or retrogression of the parish.

Pound-street—Immediately outside the south gate of the barracks, and opposite the Colonel-Commandant's house, is a shed, belonging to Mr. Arnold, containing a large quantity of manure, which evidently, from its appearance, has been there for a long time; and from the statement of John Peters, a pensioner-sergeant of the Royal Marines, who resides in the adjoining house, which belongs to him, it appears that it has been there for nearly a year, and that when it rains the annoyance is increased, in consequence of its being situated next to the stove in the lower room of the house. A labourer, named Allan, who rents the lower room, complains of the noxious vapours emanating from the manure heaps, and also the dampness it causes in his room and coal-cellar, obliging him to lime-wash the latter to keep it sweet. John Peters considers his property much deteriorated in value in consequence, and has complained to Mr. Arnold of the nuisance, but has not any redress; on the contrary, has been told that it shall remain as long as he (Mr. Arnold) pleases.

Barrack-street runs in a direct line from south to north, parallel to the western aspect of the barracks. The houses are mostly dirty, consisting of beer-shops and petty slop-shops, with some respectable ones here and there; the drainage is defective, and the ashes are collected in tubs or foul pits; the privies are also bad. There are two filthy places leading from this street—Barrack Ope and Gant's-alley, the former being in a most beastly condition, and the latter, until lately, not much better; but now, by dint of lime-washing, and the use of chloride of zinc, it has become rather more wholesome, though, from the deficient supply of water and drainage, it is impossible to keep it so for any length of time, except by employing the same measures.

Chapel-street.—This street is a continuation of Dumford-street, extending from its northern extremity towards Edgecombe-street and Fore-street. Considering the respectable outward appearance of the street, it is astonishing that so many nuisances exist, and have been allowed to remain so long without complaint and redress. Being inhabited chiefly by tradesmen, the houses are clean, so far as the rooms are concerned; but the existence of piggeries; a slaughter-house where the boiling of bones has been carried on, to the annoyance of the neighbours; privies that empty into ash-pits, and bad drainage, are quite sufficient to account for the prevalence of diarrhœa. The general details of the existence of nuisances in this locality will be found in the Appendix.

West, or Newport-street.—Leading from the northern part of Chapel-street, and taking, as its name implies, a westerly direction, is West-street. The houses are tolerable, but, as in other parts of the parish, badly ventilated, drained, and supplied with proper receptacles for ashes. The privies are very bad, many of them emptying into the ash-pit, but some being worse than others. The drains in some houses have to be emptied with buckets; and sometimes one house receives two or three drains. The ashes are thrown into a heap in the garden, together with vegetable and animal matter, and frequently the urinals are emptied over them, so that the exhalations are most offensive. In one house, the ash-pit was six feet square and about three feet high, quite full, and the stench most offensive. At the further extremity of the street, there are, or were lately, six heaps of ashes and offal, so situated as to impregnate the atmosphere with an abominable stench, near also to the churchyard, where people that have died of cholera have been buried lately; and yet there is scarcely room to inter bodies. Under an archway on the right is a series (three) of foul piggeries, where a donkey and fowls also add to the vitiation of the atmosphere. Diarrhœa and typhoid fevers have prevailed here in a severe form.

Bridge-court, *Fore-street*, is situate at the west end of Fore-street, close to the water and near the bridge. The privy empties itself into the sea, and, the fæcal matter not always passing off, the stench is so bad as to oblige the inhabitants to keep the window down. It was in No. 1 in this court that a case of cholera occurred, and terminated fatally in sixteen hours. The ashes are thrown along with vegetable and animal refuse into the privies, and the drain from Fore-street empties itself on the top. The court is almost impassable in rainy weather, in consequence of the badly-paved court allowing the water to lodge that passes off from the bridge.

Fore-street.—Running at the back, and parallel to Edgecumbe-street, is the most filthy locality in the parish,—Fore-street. It is inhabited chiefly by prostitutes, and consists mostly of beer-shops of the worst description. It is badly drained, and the houses ill-ventilated and in a most filthy condition. Leading from this are three courts, where nuisances do, and have, existed for some time past, which have been complained of without redress.

Lane's, or Derrham's, Court.—This is the first one on the left-hand side going towards Plymouth, deserving of attention, that leads out of Fore-street. It runs parallel to Rowe's-Court and Water-lane, containing, and surrounded by, nuisances at the north end. The houses are whitewashed outside every year, and were done about two months ago. The drainage is defective, especially at the further extremity, where the stench from it, in consequence of Lane's

privy emptying itself towards the beach, is very offensive. The privy smells bad, and the ash-pit is very foul, being partly filled with fish-offal and vegetable matter. Diarrhœa has prevailed here occasionally, with typhoid fever, aggravated, if not originated, by the adjoining yard of Mr. H. Cridland, and the neighbouring deposit for the night-soil, collected in various parts of the parish by Mr. Drown, and established and upheld by Mr. H. Cridland.

Court Back of No. 84, Fore-street.—Here is a collection of ashes, offal, and manure of fowls, &c., which, when visited, was in a moist condition, exhaling, under the influence of a hot sun, a most baneful vapour. The privy is bad, the drainage defective and open.

Rowe's-court, Fore-street.—This runs parallel to Lane's-court, and between it and Water-lane, and is, without exception, the most filthy, disgusting, and fever-exciting spot, in the parish. On entering the court, the stench from a series of piggeries on the left-hand side is almost insupportable in hot weather; and, until the rumour spread, that a Commissioner from the Board of Health in London was about to visit the parish, no attempt was made to remedy the existing nuisances. Even then the zealous promoters of outward cleanliness were too late; for I am happy to say, that Dr. Gavin Milroy was enabled to see the filth that existed before they were aware of his arrival, and the measures that had been adopted to blind him, after it was known that he had arrived. In addition to his evidence, Mr. M'Clure, of the Royal Naval Hospital, and Dr. Millar, Royal Marines, have both visited the locality, and can bear testimony to the statements here made. After passing a number of dirty, ill-ventilated, and half-rotten houses, also several piggeries, with an abominable slaughterhouse, where pigs were seen feeding on the entrails of animals just killed, and wallowing in blood and mire, and the ashes and offal from houses in the neighbourhood, I arrived at a spot where the night-soil from various parts of the parish is carted, spread and exposed to the action of rain and the rays of the sun, which of themselves are sufficient to cause virulent diseases, and impair the health of the surrounding inhabitants, by rendering the atmosphere impure, and unfit for respiration; but, to add to the nuisance, pigs were allowed to wallow in the filth, turning up the soil, and thus exposing a fresh surface to be acted upon by the sun, and thereby keeping up a supply of noxious gases to be disseminated in the surrounding aerial fluid. The tan-yard of Mr. H. Cridland adjoins the focus of pestilence, and must necessarily add to the impurity of the atmosphere. Still lower down, at the corner of Water-lane, the ashes and offal are thrown where a drain empties itself, creating an abominable stench. A short time ago, a cart belonging to Mr. H. Cridland broke loose, and allowed the night-soil to escape, causing a most disgusting effluvium. The carts pass these houses at all hours of the night, and even so early in the morning as six o'clock. It was last November that the stench was worse than I ever remember it since knowing this locality; and it was brought under my more immediate notice from having to attend a marine's wife in her confinement, who resided close by Dr. Sheppard; and Mr. Perry, the parish-surgeon, who visited the case with me, remarked the nuisance at the time.

Water-lane is a narrow passage leading out of Fore-street in a northern direction, having a good declination towards the sea, and in a parallel line with Rowe's-court, Lane's or Derrham's-court, and Bridge-court. The houses are generally dirty, badly drained and ventilated, and surrounded with noisome fetors, arising from the spreading of night-soil, and such other refuse as it is impossible to describe. At the upper part is a drain which burst through the wall of an adjoining house more than a year ago, and the night-soil escapes into an open kennel at the side of the street, and flows on towards the trap, which frequently becomes choked. The stench from this is so bad, that the people who live in a lower room opposite are generally obliged to keep the lower sash of the window down, and the upper sash not letting down, they have no proper means of ventilation. On the left side of the lane is a court, at the further extremity of which is an ash pit, next to the fire-place of an adjoining house, into which a privy empties itself, causing the most disgusting fetor possible to conceive. This is immediately outside a room in which I had a severe case of typhus fever, undoubtedly retarded in its recovery by the nuisance. The drain is flat-bottomed and choked.

High-street.—High-street runs in a line from Fore-street to Quarry-lane, Plymouth. The houses, on the whole, are tolerably clean and respectable; but one spot leading out of it, and nearly opposite the hospital inn, deserves particular notice.

Navy-bower—is an open space leading out of the most eastern part of High-street towards Market-lane, containing eight families and forty inhabitants in two houses, one having twenty-six children and eleven adults. It is generally more or less affected with fevers of an adynamic or exanthematous character, and diarrhœa, more severe in their symptoms than in any other parts of the parish. The rooms of the people living here are generally clean, though not as much so as elsewhere, which I ascribe principally to the depressing effect the bad and defective system of drainage exerts upon those whose disposition is to be cleanly and orderly, for nothing can possibly produce so injurious an influence as the filthy condition the people are in at present. A pains taking, hard-working woman, endeavours to make her room as comfortable as possible for her family; but, alas, her efforts are unavailing, for as often as she cleans her room, so almost immediately after does the drain become choked from the influx of water, and percolates through her floor, generating the most noxious effluvia possible to conceive, and impossible to inspire with impunity in a civilised dwelling. The privy, in this place, empties itself into the ash-pit, where the fæcal matter is exposed to the rays of the sun, and, consequently, the most disgusting and deleterious vapours are continually emanating from the decomposing mass. So bad, indeed, are the exhalations, that private James Wood, R.M., and family, who inhabit a front lower room immediately adjoining, are frequently obliged to keep their windows closed, leaving them no means of ventilation except by the door. In addition to this, the room in the the rear, inhabited by Corporal William Maunder and family, is frequently filled with the stench from the same cause. The privy is sometimes in so filthy a state from the contents overflowing the seat, and the liquid part oozing between the boards, that the women are obliged to go there in pattens. The liquid part may now be seen exuding through the wall into the garden. Typhus fever, exanthemata, and diarrhœa have been most obstinate in this locality. This I consider the worst place visited during my investigation, with the exception of Rowe's-court; but when the number of cases of cholera and choleraic diarrhœa prevailing in the immediate vicinity is considered, it becomes a matter of astonishment how the landlords themselves could have allowed such nuisances to exist and progress without seeking redress, the more especially as they have frequently been complained of; but the only notice taken has been unfeeling and disgusting replies to the tenants. It becomes the duty of the rich for their own safety, to inquire into such nuisances, to endeavour to obviate their renewal, and to support the poor—not to oppress them. The cholera has only commenced with the back streets and habitations of the poor; it may ultimately terminate with the dwellings of the rich; and not until a fearful sacrifice of human life has been made, will any of the abominations be effectually removed.

CONTRIBUTIONS TO ORTHOPÆDIC SURGERY.

By BERNARD E. BRODHURST, Esq.,
Assistant-Surgeon to the Royal Orthopædic Hospital, etc.

(Continued from p. 38.)

TALIPES.

Talipedo, to walk on the ankle; hence, talipes, from *talus* and *pes*. The term talipes was first used as a generic term, by Dr. Little, to express deformity of the foot and ankle. It is applied to those affections in which there is deviation from the normal position of the foot, with or without partial displacement of the articular surfaces of the tarsal bones. The term consequently embraces distortions in which the foot is turned inwards, *talipes varus;* those in which it presents outwards, *talipes valgus;* others, where the heel is raised from the ground, *talipes equinus*; and where the heel alone is brought to the ground, *talipes calcaneus*. Thus there are four varieties of talipes, each of which presents degrees of deformity. And also, there are compound varieties, in which distortion partakes of the characters of any two com-

bined,—as equino-varus, equino-valgus, varo-equinus, calcaneo-valgus, etc.(a)

Club-foot occurs both as a congenital and as a non-congenital affection. As a congenital affection, both feet are perhaps more commonly affected than one only; but, as a non-congenital affection, both feet are rarely affected. The following table shows the comparative frequency of congenital and non-congenital talipes, of males and females which are affected, of both feet and one foot only, and of the right and left foot, in 240 cases, according to Duval:—

(b) Congenital Club-foot	Double	Males 35 Females 10	45				145	240
	Single	Males	right foot 35 left foot 27	62	100			
		Females	right foot 18 left foot 20	38				
Non-Congenital Club-foot	Double	Males 9 Females 5	14				95	
	Single	Males	right foot 13 left foot 22	35	81			
		Females	right foot 18 left foot 28	46				

At the Orthopædic Hospital, of 1780 cases of talipes, 765 were congenital, and 1015 non-congenital.(c) During the last three years, cases of congenital and non-congenital talipes, double and single, and right and left foot, have occurred in the following relative proportions:—

Congenital club-foot	Double		2
	Single	right foot	1
		left foot	1
Non-congenital club-foot	Double		⅛
	Single	right foot	2
		left foot	3

I propose to treat, first, of talipes congenitus; and, secondly, of talipes non-congenitus; and to consider each variety of distortion before and after the weight of the body has been borne on the feet.

Talipes varus is the most common form of distortion which occurs *in utero*. Of 765 cases of congenital club-foot recorded by Mr. Tamplin,(d) 688 were of varus, and 363 of these cases were instances of double varus.

Pes varus implies that the foot is turned inwards. It is occasioned by retraction of M. tibialis anticus alone. This simple, uncomplicated form of varus, whether occurring as a congenital or a post-natal affection, is rare. It is so distinct from the other forms of varus, however, that I deem it worthy in a classification to be esteemed the *first degree*. In this form, the inner edge of the foot is scarcely raised, and the M. gastrocnemius and soleus are not retracted. Congenital club-foot is invariably produced by tonic muscular retraction. This circumstance was perceived by Rudolphi, who wrote respecting it, "I presume that club-hand and club-foot in the fœtus arise alone through morbid nervous influence acting upon the muscles. Those who believe in an extraneous, mechanical cause, as by pressure through an unnatural position, can scarcely have known that many such deformities have been found in the embryo so early as the third and fourth month."(e) M. Jules Guérin followed in the steps of Rudolphi, and, in his classical memoir (f) is contained all that is known relative to the etiology of club-foot. Muscular retraction is there eloquently and logically supported.

In the *second degree* of varus the toes are inverted, the inner edge of the foot is raised, and the tendo-Achillis is tense. The foot is not yet rotated on to its external border, but its position is such that a line drawn in the long diameter of the leg, and passing by the tibio-tarsal articulation, will fall upon the ball of the little toe. Through the action of M. extensor proprius pollicis the great toe is almost always extended. This is especially to be remarked in children who have not yet walked.

In the *third degree* of varus the foot is inverted, its inner border is raised, so that the plantar surface describes a right angle, or nearly a right angle, with the horizon; the dorsum presents outwardly, and the heel is elevated. The sole of the foot is shortened, and presents an unnaturally concave and irregular surface. The great toe is extended, but less adducted, relatively to the rest of the foot, than in the second degree. This is the ordinary form of varus, and the second degree is the next in frequency. That which is now described as the first degree is not usually mentioned by English authors; and if I have placed in the first degree a class of cases so small and apparently insignificant, it is that it represents the true pes varus. In this first degree the foot is alone turned inwards. In all the other degrees of varus there is superadded to adduction of the foot retraction of the extensors, or more or less equinus, and, in consequence, varus has come to be considered, not adduction of the foot only, as the term implies, but, together with adduction, elevation of the heel. Thus, Mr. Tamplin says, "By talipes varus is understood that kind of deformity which consists, firstly, in the elevation of the heel from contraction of the gastrocnemius; secondly, in the adduction and semi-rotation of the anterior portion of the foot by the contraction of the anterior and posterior tibial tendons; thirdly, in a shortened condition of the sole, occasioned, firstly, by the adduction of the foot, secondly, by the contraction of the plantar fascia, muscles, and ligaments of the sole."(a) Guérin, however, says, "*varus* is produced by retraction of M. tibialis anticus."(b) If, therefore, for the sake of convenience, by varus is understood adduction of the foot and elevation of the heel, the simplest form of distortion, or that in which the foot is inverted through the action of tibialis anticus, will be considered the first degree of varus.

The *fourth degree* is an exaggeration of the former distortion. The toes present upwards and inwards, the dorsum of the foot outwards and downwards, or forwards; the inner margin of the foot may be almost in contact with the tibia, and the heel is drawn upwards and inwards. The flexors and the extensors of the toes are at the same time tonically contracted, the plantar surface of the foot is abnormally concave, and the length of the foot is diminished, the toes being approximated to the heel.(c)

The anatomy of varus shows that, in the first degree, there is retraction alone of M. tibialis anticus. In the second degree there is superadded retraction of M. tibialis posticus, extensor proprius pollicis, gastrocnemius, and soleus. Both the first and second degrees may be overcome by gentle manual force alone; but this being remitted, the toes are again plucked back to their former position. In the third degree, the same muscles are retracted, and to a greater extent, as well as the flexor longus digitorum pedis, and the muscles in the sole of the foot, especially flexor accessorius. Some of the tarsal bones are now rotated on their smaller axes, and the foot cannot be restored to its normal position by manual pressure alone. In either of these degrees, distortion may be of one foot alone, or of both feet. In the fourth degree, displacement of the tarsal bones has yet increased, as well as muscular tension: both feet are now always affected; not invariably with varus, however, but always distorted, with calcaneus for instance, or with some other form of talipes, but in general with varus. Not unfrequently, also, with this degree, there is combined spina bifida, and some other distortion than muscular derangement of the leg and foot only; the bones of the leg and foot may be distorted; or there may be other spasmodic action, giving rise, perhaps, to dysarthrosis, or, without dislocation, to flexion of the leg upon the thigh, or the thigh upon the trunk, &c., to talipomanus, torticollis, strabismus, &c.

Congenital varus, as contradistinguished from post-natal varus, is marked by muscular retraction without opponent paralysis; and, in the fourth degree, by more complete rotation of the tarsal bones, and frequently by imperfect muscular and osseous development, and by a condition of imperfect general nutrition. With post-natal varus there is generally associated, even from its commencement, or soon after spasm has been developed, paralysis of the opponent muscles.

(a) Vincent Duval proposed the term stréphopodie, from στρέφω, torqueo, and πούς, as a generic term for deviations of the foot from its normal position; and formed the terms stréphendopodie, stréphexopodie, stréphypopodie, stréphanopodie, stréphocatopodie, with the adjuncts, ἔνδον, ἔξω, ὑπὸ, ἄνω, κάτω. But, however well these several terms may express deviations of the foot from the natural position, they have not been generally adopted.

(b) Traité pratique du Pied-Bot., p. 327. Ed. 2. Paris, 1843.

(c) Vide Introductory Lecture by Mr. Tamplin, *Medical Gazette*, Nov., 1851.

(d) Loc. cit.

(e) 'Grundriss der Physiologie." Band II. P. 323. Berlin. 1823.

(f) "Mémoire sur l'Etiologie Générale des Pieds-Bots Congénitaux." Paris. 1838.

(a) "On the Nature and Treatment of Deformities," p. 42. 1846.

(b) "Sur les Variétés Anatomiques du Pied-Bot Congénital," p. 8. 1839.

(c) Five degrees of distortion were adopted by Dieffenbach, and three by Dr. Little. I have adhered to the divisions adopted by the latter, excepting in the addition of my first degree.

The bones of the tarsus which are most affected by the distortion of varus, are as follow :—

The *calcaneum* is perhaps more displaced than any other of the tarsal bones. It is twisted on its smaller axis to the outer side of the foot, its anterior surface being directed downwards, and its posterior extremity inwards and upwards. This, the largest bone of the tarsus, and the basis of support of the other bones, is very firmly articulated with the rest, and especially with the astragalus.

The *astragalus*, according to Scarpa and Little, is less displaced than any other bone of the tarsus in congenital varus. Dr. Little says, "I have examined no preparation of varus in which each of the three facets of this bone, which articulate with the tibia and fibula, has not been in partial contact with the appropriate surface of these bones."(a) But Guérin has viewed with a critical eye the displacement that necessarily occurs to this bone. He says :—"Independently of the rotation which is sometimes observed, contrary to that which has been stated by Scarpa, and by those who have taken him as their guide, the astragalus undergoes another very remarkable displacement, namely, of rotation on its vertical axis, by reason of which its inner surface tends to assume a direction forwards, and its external a direction backwards; and, as it is firmly held between the malleoli, these are dragged along with it, and undergo a similar displacement, so that the internal malleolus is thrown forwards and the external backwards."(b) In the natural position of the foot the anterior edge of the internal malleolus is situated on a plane anterior to the corresponding edge of the external malleolus, while the posterior border of the external malleolus is posterior to the corresponding border of the internal malleolus; and this is increased by placing the foot in the position of varus. The malleolus internus is then carried forwards, and the externus backwards; the tibia is slightly rotated forwards and outwards, and the fibula outwards and backwards; but this motion cannot be without its effect on the astragalus; the shape of this bone and of the malleoli render it impossible. The astragalus is, consequently, rotated on its vertical axis, so that its inner surface tends anteriorly, and its outer surface posteriorly. Notwithstanding the double rotation which is imparted to it by the malleoli on the one hand, and by the os calcis on the other, it retains its position, as described by Dr. Little, between the malleoli. The astragalus is destined to receive immediately the weight of the body, and is, as it were, the key-stone of the arch of the foot. It articulates inferiorly with the calcaneum, in such a manner, that the articulation inclines slightly, but more to the inside than to the outside. Elevation of the heel and adduction of the foot necessarily incline the os calcis downwards and outwards, and cause rotation on its smaller axis. And, through its connexion with it, the astragalus is carried forwards, more or less to uncover the tibio-tarsal articulation, and is at the same time rotated outwards in conjunction with the calcaneum. Thus there is necessarily a double rotation, the one on its vertical axis, the other on its longitudinal axis. The anterior articulation of the astragalus with the os naviculare is that of a ball and socket joint, the head of the astragalus being received into the cavity of the os naviculare; but the navicular bone is partially rotated on its smaller axis, so as to leave in part the head of the astragalus uncovered, and thus apparently raised on the dorsum of the foot, while, in fact, it projects in consequence of the rotation of the os naviculare.

The *os naviculare* is rotated outwards, so that its inner margin presents upwards, and is in contact even with the malleolus internus; and the external tubercle is directed downwards, and even forwards. The *os cuboides*, the *ossa cuneiformia*, and the *ossa metatarsi*, with their phalanges, necessarily follow in this rotatory action; which, having commenced with the calcaneum and the naviculare, is imparted successively, as it were, in proportion to the strength of the articulating ligaments, and in proportion to the breadth of the articular surfaces, to each and all of the ossa tarsi; the anterior part of the foot is rotated *en masse*, being strongly connected with, and carried along by, the rotated bones. With Scarpa, it may be said, that "the essence of this deformity of the feet appears to consist in the twisting of the os naviculare, of the cuboides, of the calcaneum" (and of the astragalus), "on their smaller axis; into which morbid direction, the cuneiform bones, those of the metatarsus, and those of the phalanges of the toes are also drawn."(a)

The state of development of the muscles and bones is probably in great measure dependent on the period of gestation, at which irregular action was induced. Usually, and when the distortion is not of the last degree, the limb is of the same size as the unaffected limb, and the muscles and bones are equally well developed. There is then neither malformation of bone, nor impaired nutrition of the limb. As Du Verney correctly wrote, "These distortions depend entirely on the unequal tension of the muscles and ligaments, through which rotation of individual bones and of the entire foot is produced."(b) The breadth of the foot is preserved, and often increased beyond that which is natural; and the foot is shortened through the conjoint retraction of the extensors, flexors, and adductors. Together with varus, the patella is frequently very small. It has been said occasionally to be wanting, but this is probably incorrect. Lately, I have had occasion to see an instance of varus, where the patella was said to be absent. It was remarkably small, retracted from two to three inches above its usual position, and lying on the outside of the femur.

[To be continued.]

(a) "On the Deformities of the Human Frame." New Edition. P. 278. 1853.
(b) Op. cit., p. 24.

CASE OF EPILEPTIC CONVULSIONS CURED BY THE INTERNAL ADMINISTRATION OF CHLOROFORM.

By HENRY BOWE, Esq.

Thomas Eason, aged one year and seven months, was placed under my care on the 7th of April, 1853, suffering from epileptic fits.

The previous history of the case, as obtained from the mother, is as follows:—When the child was five months old, she was awoke early in the morning by a scream, and then found him in strong convulsions: the face turgid, foaming at the mouth, and the hands forcibly clenched. Being much alarmed, she took him to a medical man, who attended him for some time, but gave her no hope of his ultimate recovery, as he feared there was organic disease of the brain. He was subsequently attended by two other medical men: the fits at this period occurring from three to six times in the course of the day. The remedies prescribed seemed to affect neither their force nor frequency. As the mother could not afford to pay for medical advice, the child for some time continued in about the same state without any means being taken for his relief. At the time he first came under my care (April 7th) he frequently had seven or eight well-marked fits during the day. His appearance was very peculiar; the head being either constantly rolled from side to side, or thrown backwards; his face had a vacant and almost idiotic expression. On looking into the mouth, I found the gums covering the upper incisor teeth tense and swollen; they were freely lanced, and an aperient powder given. The child to be put into a warm bath.

10th.—The fits had increased in frequency, the child was no better in any respect. As the gums were still rather tense, they were again freely incised, to have another warm bath, and take another dose of castor oil. As the child was continually rubbing his nose, I subsequently ordered him a powder of calomel and jalap, thinking, perhaps, he had worms. The bowels were freely relieved, but no worms were detected.

From this time up to April 20th, the fits increased rapidly as many as eighteen occurred in one day, following each other in quick succession. In the short intervals between them he lay in a semi-comatose condition, for three days he took no nourishment whatever, and was evidently fast sinking from exhaustion. Seeing that everything done had failed to give even the slightest relief, I determined to give chloroform a trial.

I commenced giving it internally, in five-minim doses, suspended in mucilage, directing the mother, after every fit, to give a dose of the medicine. On visiting the child the following morning, the 21st, I found that he had slept almost continuously since taking the first dose, and that there had not been any fit. He was quite sensible when

(a) Sui Piedi Torti Congeniti dei Fanciulli, p. 29. Pavia, 1806.
(b) Des Pieds-Bots. Paris, 1751.

awakened to take his food or medicine, of which three doses had been given in the course of the previous day.

I directed the mother to continue the medicine three times daily, and frequently to give small quantities of beef tea and arrowroot. From this date the child improved rapidly up to May 6th, on which day he was very fretful, and evidently suffering from the irritation caused by the teeth, which had nearly penetrated the gums. The dose of chloroform was increased to seven minims, and a purgative powder to be given twice a week, after which he was much relieved. I ceased to attend him on May 20th. He was then perfectly well, never having had a return of the fits since the first dose of chloroform was administered.

July 18th.—I have this day seen the child; he continues in perfect health; has cut three teeth, and has not had any return of fits.

I am not aware that chloroform has hitherto been given internally in similar cases to the present. Of course, very little can be argued from a solitary case; but, perhaps, experience will prove that in convulsive affections, especially those of children, we have in chloroform a powerful remedial agent.

16, Tichborne-street.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

MEDULLARY CANCER OF THE HUMERUS IN A BOY.—AMPUTATION AT THE SHOULDER-JOINT.—RECOVERY.

[Under the care of Mr. ERICHSEN.]

Respecting the liability of the young to become the subjects of malignant disease, we took an opportunity, a few months ago, of showing, (*Medical Times and Gazette* for July 16, 1853,) that it is greater than is commonly suspected. The analysis of the series of twenty cases which we then recorded, in all of which the patients were under the age of 19, and had come under our observation at the various Metropolitan hospitals within the same year, went to indicate, firstly, that, of the several forms of cancer, the medullary is by far the most frequent in early life, it having occurred in no less than seventeen out of the twenty; secondly, that the bones are the parts most usually attacked, the disease having appeared in them in more than a third of the cases, or, exeluding those of melanosis of the skin, in nearly half the remainder; thirdly, that, of the several bones, the lower extremity of the femur is the favourite site, and, next to it, the upper part of the humerus; fourthly, that it is not at all usual, in these cases, for there to be any known history of hereditary tendency to malignant disease. The very interesting case, the particulars of which we are now about to record, does not furnish any exception to these observations.

Richard Bailey, aged 15, a farm-labourer, living near Boston, in Lincolnshire, was admitted on July 29, 1853, on account of a large tumour, which involved the upper half of the right arm and the shoulder. He was tall, moderately stout, of dark and florid complexion, but had nevertheless a certain appearance of delicacy or cachexia; his eyes were very bright and glassy; the deep ruddy colour of the cheeks was circumscribed; and the parts of the face to which it did not extend were of a yellowish and peculiarly sallow tint. He stated, that he had, previous to the appearance of the present disease, always enjoyed good health, and that he had been accustomed to live well. None of his relatives had, as far as he knew, ever suffered from tumours of any description. Excepting that he had been in the frequent habit of carrying a basket on the shoulder, he knew of nothing likely to have excited the appearance of the disease. In March of the present year, he first began to experience pain in the part, but no swelling showed itself until the following May, when it appeared as a soft prominence on the outer part of the shoulder. He had been, throughout the illness, under the charge of a surgeon in the neighbourhood of his home, by whom he had been treated with leeches, blisters, and embrocations, with the result of affording some relief to the pain, but not in any way checking the rapid increase of the growth. On two occasions, within the last month, a small puncture had been made into its softest and most fluctuating part, but, on each, a quantity of bright-coloured blood only had escaped from the incision. Since the commencement of the swelling he had been quite unable to use his arm.

Present Condition.—The whole upper half of the arm, especially on its front and outer aspects, is occupied by a large, evenly-rounded tumour, which extends so far upwards around the shoulder-joint as quite to conceal the prominence of the acromion. The back of the shoulder is, however, not involved, the spine of the scapula being naturally prominent; the boundaries of the acromion may also easily be felt. The greatest circumference of the swelling is about its middle, where it measures seventeen inches and a-half. The shaft of the humerus can be felt, of normal thickness, up to the middle of the arm, where it suddenly begins to bulge. To the touch, the tumour is, in all parts, soft and yielding, excepting a very small extent of the superficies of its upper portion, which is hard, as if encased in bone. The overlying skin, excepting that it is marked by numerous leech-bites, and crossed by large tortuous veins, is not diseased; it is much warmer than that of surrounding parts. From a very perceptible bend in the direction of humerus through the tumour, and the existence of slight mobility of the lower on the upper fragment, there appears no doubt but that a spontaneous fracture has occurred, although crepitus cannot be felt. By grasping the upper part of the swelling it may be proved that the head of the bone is still capable of motion in the glenoid cavity.

From the symptoms thus detailed there appeared no room for doubt as to the malignant nature of the growth, and its removal having been determined on, the only question left for decision appeared to be, whether the operation should be an amputation at the shoulder-joint, or through the body of the scapula. As it was impossible to ascertain whether or no the disease had yet involved the glenoid cavity and the acromion, Mr. Erichsen determined to perform the first steps of the operation, and to open the joint, as if for the former, but to be prepared to adopt the latter and more severe alternative should the circumstances then disclosed seem to demand it.

Aug. 3, 2 p.m.—Chloroform having been administered, and the subclavian artery compressed by an assistant in the usual way, Mr. Erichsen commenced the operation. As the nature of the disease made it quite impracticable to transfix a flap, the incisions were necessarily made from without inwards, with a strong bistoury. In this manner a large flap of skin was surrounded and dissected upwards from over the whole convexity of the shoulder; the shoulder-joint was next opened from above, and it having been ascertained that the disease was confined to the shaft of the humerus, a second incision convex downwards was made to connect the inner extremities of the former one, and the soft parts having been divided the disarticulation was completed. Although the main artery had been efficiently commanded, yet the bleeding from the small vessels had been very considerable, and was not arrested until nearly thirty separate ligatures had been employed. A compress wet in cold water was afterwards applied to the face of the stump, and the patient returned to bed. At eight in the evening little or no oozing having in the meantime occurred, the stump was dressed, the flaps being brought into apposition by means of isinglass plaster, and supported by a compress and tolerably tight bandage. The lad appeared as comfortable as could be expected, and was free from pain. Pulse 108. As a measure of precaution against further hæmorrhage, it was arranged that one of the dressers should sit by his bedside during the night.

Sept. 16.—The progress of the patient has been satisfactory ever since the operation, and the stump is now, with the exception of one or two small places, quite cicatrised. On the 6th day after the amputation thirteen detached ligatures came away; on the 9th there remained only two, and that of the main artery was among those removed; on the 11th their removal was complete. During the first fortnight a rather profuse suppuration took place, the pus appearing to flow chiefly under the acromion process; after about that time the discharge gradually abated, and the sinus filled up from below. The lad is now in tolerable health, and will, it is expected, shortly be discharged from the hospital.

On examination the tumour presented an excellent specimen of osteo-cephaloma (soft cancer in bone.) The morbid growth had commenced in the medullary cavity, expanded and destroyed the bone. It was, however, distinctly circumscribed or encapsuled by a distinct investment of condensed tissue, and had not invaded the glenoid cavity. This appeared to be protected from morbid action by the articular cartilage which had been pushed before the mass, and was not implicated in its tissue. The neighbouring soft structures were quite sound.

ST. BARTHOLOMEW'S HOSPITAL.

EXTRA-UTERINE FŒTATION.—ESCAPE OF THE FŒTUS INTO THE PERITONEAL CAVITY.—DEATH.—AUTOPSY.

[Under the care of Dr. WEST.]

Sarah Moss, aged 28, a married woman, the mother of two children, was admitted on June 7, 1853. She stated, that her symptoms of illness had commenced six weeks previously, when, after unusual exertion, she was seized with pain in the lower part of her body; and, on examination, found that her womb had come down, and was protruding externally. Having retired to bed, the womb receded; but, soon afterwards, a profuse discharge of blood from the vagina took place, attended with considerable pain. The flow of blood continued for three weeks afterwards, when, under the influence of some medicine prescribed for her by Mr. Wood, the Resident Medical Officer of the hospital, it entirely ceased, and she much improved in health. It appeared, however, that through the whole time she had suffered severely from pain in the lower part of the abdomen, especially during the evacuation of the bladder or bowels, and that, by a sudden increase of this pain, she had at length been induced to apply for admission. Soon after her admission, the following note of her condition was made by Mr. Stutter, Dr. West's clinical assistant, to whom we are indebted for the particulars of the case.

June 7.—The slightest pressure over the hypogastrium appears to occasion intolerable pain, more especially in the left iliac region. The patient states, that she has a constant desire to pass water, but has not been able to do so for twelve hours; the bowels have not acted during the past day. She lies in bed with the knees drawn up, and her countenance is expressive of pain. Pulse 96, sharp; tongue coated; no vomiting. The catheter having been easily introduced, about half a pint of urine was drawn off. On examination *per vaginam*, the os uteri was found to be tilted backwards, and extremely tender to the touch; when pressure was made backwards on the parts between the vagina and rectum, the pain produced was so great, that the examination could not be persisted in. A castor-oil enema was ordered to be administered, and twelve leeches to be applied over the pubes.

8th.—The patient had two rigors yesterday. She has passed a restless night, and her countenance is still expressive of great anxiety. No urine having been passed, the catheter was again had recourse to; its introduction, although easily accomplished, appeared to occasion great pain. The vaginal examination, although very painful, was not so much so as yesterday. A tumour, the size of an apple, but elongated in form, was detected, occupying the cul de sac between the bladder and rectum, but placed considerably more to the left than the right side. By it the uterus was pressed forwards, until its cervix was situated immediately behind the pubic symphysis. The tumour had an irregular outline, and gave a sensation to the finger as if it contained fluid. The os uteri was open, and the body of the uterus seemed less freely moveable than natural.

Ordered hirudines vj. vaginæ.

℞ Pulv. ipecac. co. gr. x. horâ somni.

9th.—Has slept well, but was this morning seized with a severe pain over the whole abdomen, which is now extremely tender. The catheter is still required. The bowels have been slightly moved. Pulse 120, soft and small. The diagnosis of a pelvic abscess having been formed yesterday, the vaginal examination was repeated to-day, with the intention of puncturing the swelling, if the sense of fluctuation still continued distinct. As the swelling, however, appeared less prominent, and the uterus was not so much displaced, it was decided to defer the puncture.

℞ Liq. opii sed. mx., aq. menth. pip. ʒj. 4tis horis.

10th.—Much in the same condition as yesterday.

11th.—The patient slept fairly, and continued without material alteration until noon to-day, when she suddenly sank into a state of collapse; the countenance became completely blanched, the surface cold, the pulse extremely rapid and feeble. Some brandy having been administered, this alarming condition was slowly rallied from.

℞ Pil. sapon. co. c. opio gr. v. h. s.

12th.—She appears considerably better this morning, having slept comfortably. The tenderness of the abdomen is less than it was. The catheter is still required twice a day, and always relieves the pain for a time, although the latter very soon returns.

13th, eight a.m.—She slept well during the night, until about three o'clock, when she began to be very restless and uneasy. About five, she stated that she had felt "something give way in her body." Pulse 108, of improved power; tongue coated, but moist. She is taking brandy in considerable quantities, and a nutritious diet. Two p.m.—At eleven this morning the patient was again seized by symptoms of sudden faintness, which lasted until about half past one, when death took place.

Post-mortem Examination.—The abdomen having been opened, the uterus was seen enlarged to about three times its natural size, and tilted forwards, its fundus being in apposition with the anterior parietes. The pelvic cavity was filled with coagulated blood, which had moulded itself to the surrounding organs; there was also about a pint of blood in a fluid condition. The coils of intestine were displaced out of the pelvis, and, in many parts of the lower half of the abdomen, they were adherent by dry shreds of coagula. On search among the extravasated blood, a small fœtus, of apparently about two months, with its investing membranes, was found lying quite detached. In the walls of the left Fallopian tube were the remains of a small cavity or laceration, which could not, however, be proved to have communicated with its interior. Both ovaries were in a normal condition, as also the uterus, excepting that the walls of the latter were much thickened, and that its interior contained well-formed decidua.

The case just detailed presents us a good example of the usual termination of cases of tubal gestation. It is well known, that, when the fœtus is detained, and undergoes development within the cavity of the Fallopian tube, it is seldom carried beyond the second month, about which time it usually escapes by rupture into the peritoneal sac, gives rise to profuse internal hæmorrhage, and destroys the patient. Although these cases are far from being of frequent occurrence, yet we think the observation is warranted as a general one, that they almost always terminate very rapidly. No time is left for speculations as to diagnosis; a woman, suspecting herself pregnant, and having perhaps suffered more or less of aching pain in one or other iliac region, is suddenly seized with a sharp pain in the belly, almost immediately sinks into deep collapse, which very soon ends in death. Such is their usual history. In a case recorded in our pages a few weeks ago, (*Medical Times and Gazette* for Sept. 3,) by Mr. Filliter, of the Queen Adelaide Dispensary, the patient went to bed well, and was found in the morning lying on the floor, quite dead. So sudden had been the death, that suspicions of violence were excited; but the examination proved it to have been due to escape of a fœtus from the Fallopian tube, and the extravasation of an enormous quantity of blood. There is something, then, very unusual in the duration of the urgent symptoms in the above case. Setting aside, as accidental concomitants, the uterine prolapse and hæmorrhage, which occurred six weeks before death, and also the abdominal pains, etc., which followed it, we yet seem to have evidence that the first escape of blood took place a full week before the fatal event. On the day after admission, a tumour the size of an apple, and yielding a sense of fluctuation, was distinctly felt by vaginal examination; and, judging from the symptoms which had been present, there is little doubt but that things had been in the same condition during the two previous days. Subsequent to this, however, two distinct shocks of collapse occurred, in the last of which the patient died. From consideration of these facts, we seem to be led to the conclusion, that the process of escape of the ovum from the interior of the tube to the peritoneal sac was accomplished, not as it usually is, by a single rupture, but by several distinct ones. At first, probably, the laceration was only of the walls of the tube, and the extravasation resulting from it was bounded by the peritoneal folds, behind which it lay. Such a condition would well account for the pain, constitutional disturbance, etc., which were present; and it may readily be supposed, that the collapse which occurred suddenly on the 11th was due to an accidental increase in the quantity of extravasated blood. It may be doubted whether the rupture of the peritoneal layer, and the escape of the blood, etc., into the cavity of the abdomen, occurred at this date, or immediately preceding death, since, under either supposition, the symptoms are quite explicable. We need scarcely point out, that the difficulty there was in tracing the laceration into the canal of the Fallopian tube much supports the conclusion, that time enough had elapsed for it to become closed.

Some observers have thought, that extra-uterine pregnancies are, considering the relative proportion of natural ones, of more frequent occurrence among single than married women. In the above case, and in the two recorded by Mr. Filliter in the paper we have already referred to, the patients were married. Mr. Stutter has, however, mentioned to us the remarkable fact which lately fell under his observation, that two sisters, both unmarried, died from the consequences of tubal gestation.

ST. MARY'S HOSPITAL.

CASES OF EPIDEMIC CHOLERA.

[Under the care of Dr. SIBSON and Dr. HANDFIELD JONES.]

Within the last ten days three fatal cases of cholera have occurred in one street, under circumstances which seem to make it conclusive that they are real examples of the epidemic form of the disease. The locality selected for this outbreak, Elms-place, Bayswater, is one reported as in a peculiarly bad sanitary condition, badly drained, and much exposed to the emanations of neighbouring cesspools. The first case was that of a middle-aged woman, who was attended by a surgeon residing near, and died after forty-eight hours, having suffered well-marked symptoms. The second case, also a woman, occurred a few days afterwards, and within a few doors of the first: it was first seen by the medical man who attended the former one, and who immediately recommended her removal to St. Mary's Hospital. The following particulars of her illness, after admission into that Institution, as well as those of the succeeding case, have been kindly supplied to us by Mr. Lawrence, one of the resident medical officers.

Mary Haggen, aged 58, the wife of a gardener, admitted at eleven a.m., on Sept. 14, under the care of Dr. Handfield Jones. She was then in a most extreme condition of collapse, the pulse being doubtfully perceptible; the extremities and face blue; the expression sunken and pinched. She could not speak louder than a whisper, but expressed herself as not suffering much pain. It appeared that she had been quite well on the preceding day, and that her first symptoms of illness had appeared at one in the morning, when she began to be violently sick. Purging of what were described as thin, light-coloured, watery stools, soon after came on; she suffered severely from cramps, and became extremely weak. In addition to the assiduous application of external warmth, Dr. H. Jones ordered

℞ Acidi sulph. dil. ♏xl., tinct. opii ♏iv., aq. ʒj., ft. haust. statim sumend.

This draught was given every half-hour for three doses, and twice afterwards at intervals of about an hour. An enema was also given, containing fifteen grains of tannin and half a drachm of tinct. opii, and the abdomen and extremities were constantly rubbed with a stimulant embrocation of turpentine and ammonia.

After admission into the hospital no purging occurred, nor was any urine passed; the patient did not either suffer from cramps; she remained, with the exception of a very slight attempt at rallying, about an hour after admission, when the pulse became just perceptible, in the state of collapse, and without regaining any material warmth. During the period of improvement she was able to speak in a tolerably loud voice.

At a quarter to six in the evening her condition altered very perceptibly for the worse; the coldness became more complete, and the pulse quite imperceptible. She had been extremely thirsty throughout the day, and had drunk freely of beef-tea; there was now ordered to be added to each draught of the latter, and taken as often as might be, twenty drops of the following—

℞ Sp. æth. sulph. co., sp. ammonia co. aa ʒss., ft. mist.

It did not, however, effect anything in rallying the vital powers, which continued to decline, and death took place about ten minutes to eight p.m., nineteen hours after the seizure.

Emma Ashton, aged 9, residing in Elms-place, within a few doors of the patient in the above case, was admitted at half-past three, on the 17th, under the care of Dr. Sibson. She was not known to have been in company with either of the women who had already died, but had been in the habit of nursing a child which lived in the same house as the first of them. On rising, at seven in the morning, she had appeared in perfect health, but at eight began to be sick, and at nine, much purged. Her father described the motions so as to lead to the belief that they had been well-marked "rice water" stools.

When admitted, she was livid, pulseless, and of a remarkably pinched aspect; the sickness and purging had quite ceased, and she suffered but little pain. The remedies resorted to, consisted in the free exhibition of stimulants, a single dose of opium, and the application of heated air. She was also made to drink freely of salt and water. Some sickness, probably attributable to the latter remedy, followed, but to the end she continued without either purging or cramps. By means of the hot-air bath, the skin was made a little warmer, but not the slightest attempt at rallying was apparent. No urine was passed subsequent to the occurrence of the first symptoms. Death took place a little before seven in the evening, between eleven and twelve hours after the original seizure.

It is reported, that since the above cases, another has occurred in the same yard, in which the choleraic symptoms have been well marked; no application has, however, been made at the hospital, and we cannot furnish any authentic statement respecting it.

THE METROPOLITAN FREE HOSPITAL.

MEDULLARY CANCER OF THE HEAD OF THE TIBIA, AND SURROUNDING THE KNEE-JOINT.—AMPUTATION.—DEATH.—AUTOPSY.

[Under the care of Mr. CHILDS.]

During the past year, there have appeared in our pages, from time to time, the reports of a large number of cases, in which operations had been performed for the removal of cancerous growths in various parts. Not a few of these have afforded most striking illustrations of the benefits conferred on the patient by timely use of the knife, considered merely as a palliative and not as a curative expedient. The idea of curing cancer by any remedy at present known is now all but universally abandoned; and all that is now expected from an operation is, the mitigation of pain, the removal of loathsome disease, and a brief prolongation of life. The first and second indications are almost invariably achieved; but, in the third, the hopes of the surgeon and his patient are but too often doomed to disappointment. Still, however, the number of cases in which the fatal event is directly hastened by the operation is so small, that it should not materially interfere with the question; and, taking all the various circumstances of the case fairly into view, there can be little doubt that the practical rule adopted by almost all Metropolitan surgeons, that cancerous growths, when painful, should always be removed, if the operation be practicable without unusual risk, is one based on sound reasoning, and conducive in the long run to the material alleviation of human suffering. Of the numerous cases we have previously recorded, some three or four only have terminated fatally during the patient's stay in hospital. In order, however, to place the facts of the question fairly before the Profession, it is our duty this week to record another, in which death has occurred as an immediate consequent on the operation. Independently, however, of its unfortunate result, the case presents several features of unusual interest, among which may be mentioned, that almost its entire course had been under the careful observation of the surgeon who performed the operation.

John Jackson, a tolerably healthy-looking man, then aged 52, first consulted Mr. Childs in the autumn of 1851, on account of a severe pain in the upper part of his left tibia. The pain had then existed with intermissions for several months; there was present, however, neither swelling, heat, nor redness. Mr. Childs made trial of many topical remedies, chiefly of the counter-irritant class, and continued them for many months, without, however, obtaining any satisfactory results. At length, nearly a year after the first occurrence of the pain, a small soft swelling made its appearance on the outer side of the leg, about an inch below the head of the fibula. This tumour slowly increased in size, spread round the head of the tibia to its inner side, and upwards over the knee-joint. The pain attending its growth was severe, but the patient did not materially lose flesh; his countenance, however, gradually became more and more cachectic-looking. The real nature of the disease having been for some time apparent, Mr. Childs at length succeeded in persuading him to submit to amputation of the limb; and, for that purpose, he was admitted into the Hospital in May, 1853.

May 7.—The whole knee is enormously swollen, measuring twenty-two inches in its greatest circumference. The tumour extends downwards to the junction of the middle and upper thirds of the tibia, and upwards anteriorly to fully two inches above the patella, behind filling the popliteal space to within an inch of its superior boundary. The mass thus defined feels soft and yielding, especially in parts, but does not present any obvious sense of fluctuation. Its surface is slightly uneven, but not lobulated, and the skin over it is glossy, smooth, and tense, and crossed by numerous ramifying veins. The pain in the tumour is still very severe, and occurs chiefly in paroxysms. The man, although still stout, has a very anxious aspect, a moist and freely perspiring skin, and a frequent and irregular pulse. A few days ago, Mr. Childs made an exploratory incision into the outer side of the swelling, but nothing excepting blood escaped.

10th.—Under the influence of chloroform, a double flap amputation of the thigh was performed, in the upper part of the lower third. On examining the flaps, it was found that the posterior one had at its extremity included a portion of the diseased growth; and the part thus affected was accordingly cut away. The quantity of

blood lost was not unusually large, but, once during the operation, the man became extremely faint and exhausted; he, however, soon afterwards rallied completely, and, when removed to bed, was in a tranquil and even cheerful state. The stump was dressed on the operating-table. Very shortly after the conclusion of the operation, the man again became much exhausted; and, in spite of the stimulant treatment pursued, he continued gradually to sink, and died in the night of the following day.

Autopsy, Fourteen Hours after Death.—Rigor mortis still persistent. A careful examination of all the internal organs was made, but nothing found which reflected any light as to the cause of death. The folds of the omentum and the subcutaneous cellular tissue were unusually loaded with fat. There were no secondary cancerous deposits in either the lymphatic glands or the viscera of the abdomen or thorax, nor was any trace of organic disease to be detected.

Examination of the Amputated Parts.—On dissecting away the skin, it was found that a growth of soft medullary cancer had infiltrated itself in all directions among the tissues immediately below and surrounding the knee-joint. A longitudinal section through the joint, from before backwards, having been made, the structures within the joint were seen to be free from disease, with the exception of a small irregular patch of ecchymosis in the articular cartilage covering the external condyle of the femur. The cancellous structure in the lower extremity of the femur, and in the heads of the tibia and fibula, was softened, broken down, and infiltrated with medullary matter; the patella, however, preserved its natural firmness, and seemed not to have been involved in the disease. The popliteal vessels and nerves ran directly through a large dense cancerous mass, by which the popliteal space was filled, and the peroneal vein was stretched over the surface of a nodular outgrowth of the same, situated just behind the tendon of the biceps. In all parts the disease displayed the usual characters of medullary cancer, and was in some parts much ecchymosed and stained from the extravasation of blood.

It must be noted as remarkable, in the pathological appearances presented by this specimen, that the morbid growth had involved the articular heads of both femur and tibia, and had spread on all sides over the knee-joint, without actually entering the latter. It would appear as if medullary cancer were not prone to attack articular cartilages, etc.; for, in the case mentioned above from University College Hospital, the same immunity was observed; and, in the one on which Mr. Lawrence recently performed amputation through the scapula, on account of the supposed implication of the shoulder-joint, it was found, on dissection, that, although the growth had indeed extended into that cavity, yet was as a fringe jutting in all around the margin of the articular cartilage of the humerus, and possibly still invested by synovial membrane. This observation, even if confirmed, will yet be of no great practical value; since, in all parts excepting the shoulder, if there were disease near to a joint, the surgeon would have to amputate above it. Even as regards the shoulder, judging from the very pleasing results of Mr. Lawrence's case just alluded to, amputation through the scapula is not attended with more risk than disarticulation, and certainly leaves a stump with fewer prominences, and less exposed to injury, while the part of the bone to which the respiratory muscles are attached is preserved.

Medical Times & Gazette.

SATURDAY, SEPTEMBER 24, 1853.

MEDICAL REFORM
A PUBLIC, NOT A PROFESSIONAL QUESTION.

Few men out of the Profession have ever mastered the subject of Medical Reform. The questions involved in its consideration are so complex, the corporate interests concerned so numerous, and the external pressure to stimulate to the labour so slight, that no astonishment can be felt at statesmen leaving the matter to be settled by the Profession itself; and as the interests of one Corporation are opposed to the interests of another, no wonder can be expressed that the cause of Medical Reform is about as far advanced as it was ten years since. And yet there are very few questions in which more important public interests are concerned, whether regard be had to the public in the aggregate, or to each individual of the community. Proper medical treatment reduces the bills of mortality, and, by shortening the illness of the pauper, lowers the parish rates; while no man probably passes the period from birth to death without having experienced, or been in a position to require, that relief which the healing art alone can afford. The very statesmen who "pooh, pooh" or sneer down the question of Medical Reform, may one day owe their lives to medical skill, or lose them through want of knowledge in the medical attendants. Men most learned in all other matters are, as a rule, ignorant of medicine; and even those who have such knowledge of the subject as amateurs may possess, are yet unable to judge of professional merit. In this matter, the sick man is altogether impotent. It is therefore more for the sake of the patient than for the sake of the doctor, that the State is bound to see that the Corporate bodies to which the licensing to practise medicine is confided are in a position to enforce the acquirement of due knowledge by their members; that they have power to prevent those who are qualified being confounded with those not qualified; and, finally, to see that they perform the duties entrusted to them for the public good.

The Question of Medical Reform is a Public and not a Class Question; and it should be legislated on in a public, and not in a class spirit. The Medical Corporations are, we assure the Home Secretary, the last parties in the world to whom the settlement of the question should be entrusted.

In this article, we shall confine our remarks to the highest Medical Corporation in the country. On another occasion, we shall consider the question, how far the College of Surgeons and the Apothecaries' Society answer the public ends for which they were chartered.

We might be advocates of one Faculty—we might consider one State Examination alone necessary—in fact, we might hold and advocate any crotchet whatever; but, in spite of our advocacy, the public would have Physicians, Surgeons, and General Practitioners. The public require ordinary and extraordinary attendants,—Practitioners of all branches of the Profession,—Practitioners who devote themselves especially to surgery,—and Practitioners who give up their time and attention to medicine proper. Any scheme of Medical Reform, in which this tripartite division of the Profession is not recognised, would not be in accordance with public feeling, and, therefore, could not work efficiently.

The College of Physicians is the only Body empowered by the State to create Physicians in London. In England, there are three Bodies which have the right to grant licences to practice as Physicians—viz., the Universities of Oxford and Cambridge, and the President and Elects of the Royal College of Physicians.

Now, the only question which the statesman is *bound* to ask and answer, with regard to these Corporations, is—

Do they secure to the public a sufficient number of well-qualified Physicians, or prevent the practice of the unqualified? To this question we unhesitatingly reply in the negative; and it is because they do not, that we maintain it to be the duty of the Home Secretary to interfere for the public weal in this matter.

The College of Physicians appoint four Censors annually. They are the *élite* of the College,—men in the prime of intellectual life, and known to be theoretically and practically well qualified to discharge their important duties.

The candidates for a licence to practise as Physicians *in*

London present themselves before the Censors' Board for examination: if they show themselves to be qualified to practise as Physicians their names are submitted to the College; that is, to the assembled Fellows. A ballot is then taken, and should a majority of the Fellows present express an opinion that the candidate is worthy of admission into the order of Physicians, he forthwith receives his licence.

The Licentiates of the College of Physicians, therefore, have to submit to an intellectual and moral scrutiny,—and most men hold the latter to be as important as the former, seeing the position the Physician must necessarily hold in the confidence of his patients. From this it might hastily be inferred, that the College of Physicians have the power to insure to the public a supply of morally and intellectually qualified Physicians; and the statesman might ask, Why should I interfere with the present order of things, regard being had by me only to the public weal? The answer is, for these reasons,—

1st. Even in London the College has *practically* no power to restrain the impostor from deluding the public with the idea that he is a Physician; and the effect of this is, that the Censors of the College of Physicians lower the standard of their examination far below what is desirable, in order to induce all intending to practise as Physicians to come before them.

2nd. Having once granted a licence, the College has no power to withdraw it, even though the holder of it misconduct himself in the grossest manner, and the Fellows of the College be unanimous in their desire to withdraw it. Once a Licentiate, always a Licentiate. Such is the law.

3rd. Those who practise as Physicians *in the country* legally, must either possess a licence from Oxford or Cambridge, or hold letters testimonial from the President and Elects of the College of Physicians. With reference to the Graduates of the two English Universities, the public suffer little injury. Their privileges, theoretically disadvantageous to the public, have practically little effect, because their Graduates are not only very few in number, but also because, in consequence of their position in society, they usually obtain the licence of the College of Physicians before commencing practice. The case is different with regard to the Extra-Licentiates. The President and Elects of the College of Physicians may be excellent Councillors, able Governors of the College, worthy of its highest honours, and fitted mentally and morally to fill its most honourable places; but to those qualities the possession of which constitutes a good Examiner, they can lay no claim. Their knowledge is of other times; and the wisdom of to-day can be, in their estimation, little better than foolishness. Many of them were too old when the stethoscope was introduced to re-commence the study of the whole class of diseases of the heart and lungs; and their vision has long been too feeble to permit them, even did prejudice allow them, to employ the microscope; and as to Pathological Anatomy, we suspect that not two of the Elects have seen the interior of a dead man for the last twenty years.

It is currently reported, that the letters testimonial of an Extra-Licentiate have not been refused for many days to any who have applied for them; for the absolute truth of the report, however, we will not be answerable. Having passed this all-but-farce of an examination, the Extra-Licentiate receives his letters testimonial directly from the President and Elects; the College—*i.e.*, the Fellows of the College—having no voice in the matter; for it must be borne in mind, that the Elects are self-elected, and the President of the College is elected by and from among the Elects, and not by the Fellows.

4th. Although the Universities of Oxford and Cambridge and the President and Elects of the Royal College of Physicians, have thus the power to create physicians for the country, neither the one nor the other have the power, theoretical or practical, to prevent any one from practising out of London as Physicians who may please to do so. Any one holding a degree obtained, after the most trivial examination, from Universities that are a disgrace to this country,—any one having a German degree, granted for money without examination,—any one who pleases, though he has no degree at all, may call himself Doctor, place a public announcement to that effect on his residence, and so impress the public with the idea that he is a Physician, and neither College nor Universities can interfere in the slightest degree with the career of the impostor.

For public security, then, it is essential that no man be allowed to practise as a Physician who has not satisfied the legitimate authorities of his fitness to do so; that the Charter of the College of Physicians be so modified as to place the power to license for country as well as London in the hands of the Fellows of that body; and that some pledge for the efficient performance of their duties by the College be obtained by the State; *e.g.*, the submission of their curriculum of study to the Secretary of State; for the State should grant no privilege to medical corporations over which it can exercise no control.

CHOLERA.

Now that the cholera is among us again, we hear on all sides of preparations to meet it. In our Number of Aug. 20, we showed the urgent necessity existing for some such precaution at that time, but nothing was done. Even the extension of the disease to Hamburgh, the premonitory token of our attacks in both our former visitations, was disregarded; and it was not until a man from Hamburgh landed at Hull and died at Liverpool, of cholera, and his case was succeeded by others in the port through which the disease found entrance before, that defensive operations were had recourse to. At last, when the enemy has already begun the work of destruction, there is a burst of astonishment from society at nothing having been done to improve our sanitary condition since 1849. The *Spectator* alone appears to offer a reasonable explanation of the neglect of the responsible public men who admitted the necessity of "doing something," undertook to do it, but either did not perform their promise, or performed it in such a manner as to prevent fulfilment. Here is the statement of this able Journal, in which we must all acquiesce:—

"Sanitary Associations insisted upon the necessity of an Executive Department to guide the public in providing for newly-understood laws of public health. Government acquiesced, and a 'Board of Health' was created; but it was so constituted that those who adopted its creation withheld from it both power and confidence. It was suffered to work imperfectly. Statutes have been passed to enable towns to place themselves under that half-empowered, mistrusted public department; but towns have discovered, that when they place themselves under a public department, they become the victims of crotchets in the particular methods of providing for sanitary administration. Thus the very machinery for facilitating the adoption of sanitary measures has created squabbling and increasing mistrust in itself."

The consequence has been that the Thames remains a vast sewer of which we drink the filtered contents; and, as Dr. Snow has shown, very probably receive in this way the

choleraic poison contained in the excretions of diseased persons which pass along the sewers into the river. The greater part of our streets are undrained. The air we breathe is polluted by emanations from untrapped drains, by the smoke of glass-works, potteries, breweries, etc., and by filthy products of offensive chemical works and other manufactures. Comparatively few of our town graveyards have been closed. The provisions of the Common Lodging-house Act have been but very partially enforced; and with all these reasons to fear that an epidemic disease, if introduced, would be likely to run as fatal a course as in 1849, no means were taken to prevent the importation of the epidemic which was known to be prevailing at Hamburg. We shall not stop to inquire, at present, into the fact of importation in the fruit vessels constantly arriving at Newcastle from Hamburg. This is a question of fact, which will, doubtless, be thoroughly examined by the Committee of the Epidemiological Society. All that we can do now is to urge our readers in all parts of the country to prepare for the disease *before* it arrives, by endeavouring to take advantage of the opportunity thus afforded for establishing efficient regulations to insure the cleanliness of our towns and dwellings, to promote ventilation, to procure wholesome food and warm clothing for the poor, and to enforce the necessity upon all for personal cleanliness, and temperance in its fullest signification.

The Circular of the Board of Health which we append should be read with attention. It is one of the least objectionable documents which have proceeded from the Board; but it is to be lamented that it will lose much of its effect from the want of confidence the public so naturally have in the Board. What weight can the recommendation of Lord Shaftesbury or Mr. Edwin Chadwick, to check premonitory diarrhœa, have with a people who are accustomed to look to Medical men for medical advice? The effect would be very different if the Board consisted, as undoubtedly it ought, of some of the most eminent Medical men in the kingdom, even if precisely the same directions were given. At any rate, we should not then see nine-tenths of the acts and publications of the Board repudiated by the Profession, or have to congratulate the country as we now do, with our Contemporary the *Spectator*, upon the statement it makes, that

"It is understood that the chief department of Health also is to be thoroughly remodelled, to be more closely connected with the Home Office, and rendered more efficient, honest, and straightgoing in its mode of operation."

Until this is effected, we must again urge upon all, the paramount necessity of leading the public on to adopt the sanitary precautions we have just pointed out.

We have not space this week to print the directions and regulations issued by the Board in a Supplement to the *Gazette*, but agree with the wish expressed in the *Times* of Thursday, that they were rather more simple and intelligible. The leading Journal very sensibly adds: "Perhaps some gentleman could be found in the Board of Health competent to translate the document from Parliamentary English to that in common use. In its present state it seems admirably adapted to provoke disobedience, to encourage litigation, and to weary, if not puzzle, the best-intentioned reader."

British Association, Hull.—"On the Morphology of the Pycnogonidæ and some remarks on the Development of the Ova in some species of Isopodous and Amphipodous Crustacea," by Spence Bate. The Paper was read by Dr. Lankester, who stated, that the Committee had requested Mr. Bate to draw up a report of the present state of our knowledge of the lower forms of the British crustacea. The former portion of the paper treated of the metamorphosis discovered by the author in the spider-like crustacea. In the latter portion the author stated that in some of the isopodous crustacea an alteration takes place in the size and form of the outer egg case.

THE CHOLERA.

ORDER IN COUNCIL.

At the Council Chamber, Whitehall, the 15th day of September, 1853, by the Lords of Her Majesty's Most Honourable Privy Council.

Whereas by an Act, passed in the Session of Parliament held in the eleventh and twelfth years of Her Majesty's reign, intituled, "An Act to renew and amend an Act of the tenth year of her present Majesty, for the more speedy removal of certain nuisances, and the prevention of contagious and epidemic diseases," after reciting that it is expedient that, when any part of the United Kingdom shall appear to be threatened with or affected by any formidable epidemic, endemic, or contagious disease, measures of precaution should be taken with promptitude, according to the exigency of the case; it is enacted, that in Great Britain the Lords and others of Her Majesty's Most Honourable Privy Council, or any three or more of them, (the Lord President of the Council, or one of Her Majesty's Principal Secretaries of State being one,) may, by order or orders to be by them, from time to time, made, direct that the provisions in the said Act contained for the prevention of epidemic, endemic, and contagious diseases, be put in force in Great Britain, or in such parts thereof, or in such places therein, respectively, as in such order or orders respectively may be expressed, and may, from time to time, as to all or any of the parts or places to which any such order or orders may extend, and in like manner revoke or renew any such order, and, subject to revocation and renewal as aforesaid, every such order shall be in force for six calendar months, or for such shorter period as in such order shall be expressed.

And whereas the United Kingdom appears to be threatened with a formidable epidemic disease, and a case has arisen for putting in force the provisions of the said Act.

Now, therefore, it is hereby ordered by the Lords and others of Her Majesty's Most Honourable Privy Council, (of whom the Right Honourable Viscount Palmerston, one of Her Majesty's Principal Secretaries of State, is one,) in pursuance and exercise of the powers so vested in them as aforesaid, that the provisions contained in the said hereinbefore recited Act for the prevention of epidemic, endemic, and contagious diseases, be put in force throughout the whole of Great Britain immediately from and after the date of this order.

And it is further ordered, that this order shall continue in force for six calendar months from and after the date hereof.

C. C. Greville.

GENERAL BOARD OF HEALTH.

NOTIFICATION.

General Board of Health, Whitehall, Sept. 20.

It is the painful duty of the General Board of Health to notify a third visitation of epidemic cholera. This disease again, first breaking out in Persia, has extended within the present year over a large portion of Russia, stretching as far northwards as Archangel, on the shores of the Arctic Ocean; it has ravaged Denmark, Norway, and Sweden, and then developing itself in the North of Germany, it has attacked Stettin, Berlin, Rotterdam, and Hamburg; and subsequently it has appeared in England, again breaking out on its north-east coast, in the near neighbourhood of the town in which it made its first appearance in this country in 1831.

In this wide-spread course it has everywhere overleaped the barriers which quarantine has erected to stay its progress; and where this means of protection has been most rigidly enforced, it has not only disappointed the expectation of those who have relied upon it as a safeguard, often to the neglect and exclusion of the most important precautions, but has aggravated the evils of the pestilence, and added disastrous consequences of its own.

The experience already obtained of this pestilence at Newcastle, Gateshead, and Hexham, is decisive, that where the conditions are favourable to its localization and development, as is the case in these towns, the disease has lost nothing of its former virulence. In the two former, indeed, the severity of the disease, as far as it has yet extended, has greatly exceeded that of any former visitation, and it has attacked in all those places, as it has abroad, a much larger proportion of the middle and higher classes.

It is deeply to be lamented, that the interval between the

last visitation of this pestilence and the present has not been generally employed in effecting a larger amount of improvement in our cities and towns. From such inspections as the General Board have recently been enabled to make of the state of populous districts, the former seats of the disease, in apprehension of its re-appearance, they are compelled to state, that there are extensive districts, and even entire towns, in which no perceptible improvement of any kind has been effected. On the other hand, there are instances in which, even where no general permanent works of improvement have been effected, better supplies of water, extensive flagging and paving, more frequent scavenging, and a more active removal of nuisances in epidemic localities have been accomplished. Combined and permanent works, involving elaborate engineering measures, capable of remedying the neglect of years, cannot be effected in a few weeks. But the consciousness of past neglect should stimulate to immediate and resolute exertion, that all which the time requires, and which can be done, may be done. The results in some instances, even of limited and partial improvements, are highly encouraging. During the present epidemic in Hamburg, which has now been prevailing upwards of six weeks, only six cases of cholera have occurred in the improved parts of the town; and during the whole of the epidemic in the Metropolis in 1849 not a single case of cholera occurred in any one of the model dwellings for the poor, occupied by similar classes of the population, though the pestilence raged in the districts in which these buildings are situated, and there were instances of two and even four deaths in single houses close to their walls.

Even in towns in which the greatest amount of improvement has been effected, and in which works under the Public Health Act are most advanced, much remains to be done, and may be done. Local Boards of Health are invested, under the Public Health Act, with ample powers for cleansing, for the removal of nuisances, for preventing the carrying on of unwholesome or noxious trades in such a manner as to injure health, for preventing the occupation of cellars as dwelling-houses unless under certain conditions; for preventing the occupation of any dwelling-house which, on the certificate of an officer of health, shall appear to be in such a filthy and unwholesome state as to endanger the health of any person, until such house have been properly and effectually whitewashed, cleansed, and purified; and for administering the Common Lodging-houses Act, the provisions of which are most important. All those powers should be exercised at the present juncture with extraordinary activity, vigilance, and stringency.

But, though it may be needful to prosecute the work of cleansing more vigorously than in ordinary periods, yet it should be done under supervision, and with extraordinary care. In removing accumulations of filth, precautions should be taken for disinfection, and for preventing the increase of noxious evaporation. The contents of foul drains, sewers, and ditches should in no case be spread upon the surface, and no large accumulation of filth should be removed, excepting under the direction of a medical officer. The escape of noxious effluvia is far more dangerous in an epidemic than in an ordinary season.

The evil of overcrowding, so general, not only in common lodging-houses, but in tenements of all descriptions occupied by the poorer classes, especially by the Irish—an evil preventible, and, to a considerable extent, removable—should be at once and by all practicable means reduced.

Wherever local Boards of Health exist, they should in all cases co-operate with the Boards of Guardians; and it is believed that the Boards of Guardians will, on their part, co-operate with local Boards. The existing means for the extraordinary service now required are divided among independent local jurisdictions; medical officers in England and Wales being under Boards of Guardians; works of sewage and cleansing in towns, not under the Public Health Act, being under Town Commissioners acting under local acts; and the enforcement of orders required for the public service being with the magistrates or municipal authorities. It is confidently expected that a common feeling will give precedence to the branch of service specially needed on this occasion, and insure that unity of action which it is the main object of the rules and regulations issued herewith to authorise and promote for the common object,

Experience has shown that, in the case of the actual outbreak of the epidemic, the chief measures to be relied on for checking its spread are those which prevent overcrowding, remove persons from affected houses, and bring the infected population under prompt and proper treatment during the premonitory stage of the disease. During the epidemic of 1849, an organisation for effecting these objects was brought into operation, the main parts of which were, the establishment of a system of house-to-house visitation, the opening of dispensaries and houses of refuge in affected districts for the gratuitous supply of medicines, the establishment of houses of refuge for the reception of such indigent persons as appeared to be in imminent danger, resident in the most filthy and overcrowded houses, the provision of temporary hospitals for the reception of those who could not be properly treated at their own homes, and in some instances the supply of tents for the removal of the most susceptible and destitute classes to a distance from infected localities. The result of this system was that, out of 130,000 premonitory cases brought under its operation, no fewer than 6000 of which were on the point of passing into the developed stage, only 250 went into the collapsed stage of cholera, or 1 in 520. But, of the 43,737 cases under visitation in the metropolis, including 978 cases on the point of passing into the collapsed stage of cholera, only 52 actually did so,—not 1 in 800; so that, taking together the general result of this extended experience, it appears, that the proportion of cases under early treatment which passed from the premonitory into the developed stage varied from 1 in 500 to 1 in 800.

No doubt is now entertained of the efficacy of this system, or of the duty of local authorities to carry it into effect on the very first appearance of this disease in an epidemic form, and, as none can tell where or how suddenly the pestilence may alight, it is the duty of local authorities to be prepared for the emergency before its arrival. Preparation will be attended with little cost; the power to act with promptitude and efficiency, when the necessity for action arises, will be attended with a great economy of money as well as of life.

With reference to those precautions against the disease which each individual may take for himself, or the heads of families or establishments for those under their charge, the first in importance are personal and household cleanliness, and the freest ventilation of living and sleeping rooms with pure air; the purity of the air we breathe being even more essential than the wholesomeness of food and drink.

When the disease has actually broken out and become epidemic in any district or locality, then the one essential precaution is not to neglect for a single hour any degree of looseness of bowels. This symptom being commonly without pain, and so slight that it is difficult to conceive that it can be of the smallest consequence, naturally leads to neglect, and this neglect has cost the lives of thousands. Were any additional proof of this required, it would be found in the events that are now occurring at Newcastle and Gateshead; all the medical men there bear testimony that premonitory diarrhœa is all but universal, and that life depends on an instant attention to this symptom.

Thus, one physician says, "He has never yet seen a case without premonitory symptoms;" another states, "He has found, in a great number of instances, where the men said they had been first seized with collapse, there had been neglected diarrhœa for twenty-four hours, or even forty-eight hours, or longer;" another declares, "In all cases of collapse investigated it is found there had been neglected diarrhœa." Even in the cases in which death takes place with the greatest rapidity, the suddenness is apparent only, not real; for the fatal collapse is the final but gradual result of diarrhœa neglected for several hours, and sometimes entire days. It must, then, be repeated, that in any district in which cholera is epidemic, life may depend on obtaining prompt and proper relief for painless and apparently trifling looseness of the bowels.

The measure of precaution next in importance relates to the proper regulation of the diet. Great moderation, both of food and drink, is absolutely essential to safety during the whole duration of the epidemic period; an act of indiscretion has been often followed by a severe attack; intemperance at such a time is fraught with the most extreme danger. During the epidemic of 1849 sudden and fatal attacks of the disease followed immediately on the indulgence of habits of drinking after the receipt of weekly wages. The intervals between the meals should not be long, cholera being uniformly found to prevail with extraordinary intensity among the classes that observe the protracted fasts common in Eastern and some European countries.

The utmost practicable care should be taken against

fatigue, which is a very powerful predisposing cause of the disease. Employers, and persons engaged in laborious occupations, should endeavour, as far as possible, so to arrange the amount and time of work as to avoid physical exhaustion.

Warm clothing is of great importance. During the present epidemic in Hamburg, it has been found that incautious exposure to cold and damp has brought on an attack as rapidly as improper food or excess. This precaution against damp is rendered doubly important by the peculiarity of the present season. Long-continued and excessive rains have, in many places, surcharged the ground with moisture, especially undrained and low-lying districts, placing, in many instances, the land contiguous to towns, and beyond the usual range of town drainage, almost in the condition of marshes. The exhalations arising from a surface thus saturated often with water, holding decomposed matter in solution, spread to the towns, and affect the inhabitants, however well-drained the immediate sites of the towns may be. The General Board were so apprehensive that disease would be extensively produced by this unusual and dangerous state of a large portion of the country (an apprehension which was subsequently realised by the breaking out of disease, allied in character to cholera, in 60 towns), that in their Notification, issued in December, 1852, they represented to local authorities, that this calamity afforded a special occasion for administering extraordinary assistance to the poor, to enable them to keep large fires in their rooms, to protect themselves from cold and damp by warm clothing, to sustain their strength by a solid and nutritive diet, and to counteract the predisposition to disease induced under these peculiar circumstances by suitable tonics and other remedies, under medical direction. This representation was made when there was a threatening of the return of cholera; it is now among us, and the General Board would remind the affluent that the opportune supply to their poorer neighbours and dependents of wholesome food, warm clothing, and bedding, and even such remedies (to be always in readiness) as their medical attendant may recommend for looseness of bowels, is charity in the truest sense, and may be the means of saving many lives. It is also much to be desired, that the General Board would strongly recommend, that the higher classes should co-operate with the clergy, who have done so much to promote the object of the Legislature under the Public Health Act, in making frequent visits among the poor, and impressing upon them the importance of following the instructions here laid down, with reference to which there is a perfect accordance between the College of Physicians and the General Board of Health.

In conclusion, after the large experience of this disease which has been obtained since the General Board of Health issued their first Notification, (1848,) they can now repeat, with greater confidence, what they then urged,—that, formidable as this malady is in its intense form and developed stage, there is no disease against which it is in our power to take such effectual precaution, both as collective communities and private individuals, by attention to it in its first or premonitory stage, and by the removal of those agencies which are known to propagate the spread of all epidemic diseases, or, where that may be impracticable, by removal from them. Though, therefore, the issues of events are not in our hands, there is ground for hope, and even confidence, in the sustained and resolute employment of the means of protection which experience and science have now placed within our reach.

By order of the General Board of Health,
C. Macaulay, Secretary.

ON THE ADMISSION OF CHOLERA PATIENTS INTO PUBLIC HOSPITALS.

LETTER FROM DR. BABINGTON, PRESIDENT OF THE EPIDEMIOLOGICAL SOCIETY; TO DR. MILROY, CHAIRMAN OF THE CHOLERA COMMITTEE.

31, George-street, Hanover-square,
September 13, 1853.

My dear Sir,—With reference to a conversation which you and I had last evening, I now fulfil my promise of stating to you, in writing, my opinion of the course which, in the event of the occurrence of cholera in this Metropolis, should be adopted by our public hospitals. I consider that they ought all to receive cases of cholera as freely as cases of any other disease; and that, where circumstances will permit, they should, in order to avoid alarming the other patients, make special provision for them in separate wards. My reasons for thinking that such cases should be admitted into public hospitals are these:—

1st. Because the more severe a malady is, the more it is adapted to establishments founded for the express purpose of curing or alleviating disease.

2nd. Because in public establishments alone are found all the appliances which may be needed in the treatment of cholera.

3rd. Because the fears of relatives and friends may prevent their rendering the requisite assistance, whereas professional men and professed nurses are influenced by no such motives.

4th. Because medical labours are thus economised; since it is much more fatiguing for a practitioner to conduct the treatment of twenty cases of cholera, each in separate dwellings, and having separate attendants, than to conduct the treatment of twenty cases all collected into one building. As a corollary to this reason, it will follow that much more attention will be paid with the same degree of labour to the latter than to the former; and there will, therefore, be a much better chance for recovery.

5th. Because, where numerous cases are brought together under the observation and guidance of professed teachers in public hospitals, they are more minutely observed, comparisons are more readily made, plans of treatment based on scientific principles are more easily carried out, and a more sound, because a more extensive, experience is gained, than is likely to be attained where the same number of cases is distributed among many private practitioners, each individually attending only a few of them, and forming his opinion on the narrow basis thus afforded,

6th. Because there is no reason why cases of cholera should *not* be admitted into hospitals, which does not apply with more than equal force to cases of typhus fever, which are never refused admission.

Believe me, my dear Sir, yours very truly,
(Signed) B. G. Babington.

LONDON.

The locality and other particulars of 16 deaths from cholera in the metropolis are as follow:—

Kensington, sub-district of St. John, Paddington, at 15, Elms-place, on 11th September, the widow of a coachman, aged 53 years, "cholera Asiatica (48 hours.)" In St. Mary's Hospital, from 10, Elms-place, on 14th September, the widow of a gardener, aged 58 years, "cholera (20 hours.)" The Registrar, Mr. Charles Holloway, adds:—"This is the second death from cholera in Elms-place. A third person has been attacked; the houses having cesspools, the smell at times is very great." In the same sub-district, at 43, Oxford-terrace, on 11th September, the son of a gentleman, aged 4 weeks, "cholera (12 days.)"

Marylebone, sub-district the Rectory, at 12, York-court, on 14th September, a bricklayer's labourer, aged 17 years, "endemic cholera (33 hours.)" The Registrar, Mr. Edward Joseph, observes:—"There was the antecedent diarrhœa and vomiting unattended to. Other cases of cholera occurred in the same house, but upon prompt removal to the well-ventilated wards of the parish infirmary the patients are now rapidly recovering."

Pancras, sub-district of Tottenham, at 1, Stephen-street, on 15th September, the wife of a gilder, aged 32 years, "diarrhœa (4 days), cholera (14 hours)." The Registrar, Mr. John Wells, adds:—"The informant, who lives in the house, states, that the deceased died in the attic, and that there was always a bad smell at the top of the house, arising from slops and filth being constantly thrown into the gutters."

Clerkenwell, sub-district of Goswell-street, at 24, Whiskin-street, on 8th September, a tailor, aged 71 years "chronic diarrhœa (some weeks), summer cholera (24 hours)." At 7, Brewer-street, on 13th September, the son of a labourer, aged 2 years, "English cholera (21 hours), convulsions (10 hours)."

Hackney, sub-district of Hackney, at the German Hospital, Dalston, on 16th September, a farmer, aged 30 years, "cholera (20 hours)." The Medical attendant adds:—"This case manifested all the symptoms of Asiatic cholera."

Bethnal-green, Town sub-district, at 9, Anchor-street, on 12th September, the son of a silkman, aged 5 months,

"infantile cholera (4 days)." In the Hackney-road sub-district, at 6, Short-street, on 12th September, the daughter of a toy-maker, aged 1 year, "cholera infantum." The Registrar, Mr. James Murray, adds:—"A close, crowded, and undrained street: its immediate neighbourhood being the usual seat of epidemic disease."

In the same sub-district, at 13, Willow-walk, on 15th September, the daughter of a cordwainer, aged 10 months, "cholera infantum (3 days)."

Saint George-in-the-East, sub-district of Saint Paul, at 9, Star-street, on 12th September, the daughter of a labourer, aged 5 months, "English cholera (1 week)."

Southwark, Borough-road sub-district, at 4, Mason's-buildings, Green-street, Friar-street, on 11th September, a hammerman, aged 55 years, "Asiatic cholera (30 hours)." Inquest. At 15, Francis-place, Friar-street, on 17th September, the son of a tailor, aged 5 years, "croup, cholera infantum (2 days)." The Registrar, Mr. H. C. Elliott, observes:—"When cholera was epidemic in 1849, some of the worst cases in the Borough-road district were those which occurred in this locality; yet, after the lapse of four years, here is a densely-populated neighbourhood in precisely the same condition with cat-gut makers', bone-boilers', and horse-slaughtermen's premises all mingled with dwelling-houses. Successful efforts have recently been made to improve the lodging-houses where tramps and beggars resort for a casual lodging; while the dwellings of the labouring man are, in too many instances, allowed to remain, surrounded by influences which render them unfit for human habitation."

Lambeth, sub-district of Waterloo (2nd part), at 1, Charlotte-street, Waterloo-road, on 13th September, the daughter of a labourer, aged 5 years, "Asiatic cholera (7 hours)." The Registrar, Mr. William Daws, states, on the information derived from the informant and Medical attendant, that "the deceased retired to rest perfectly well, and free from any premonitory symptom; about half-past three in the morning, vomiting and diarrhœa came on, medical aid being in attendance about four o'clock; subsequently the extremities were discoloured, attended with cramp. The house is well drained, and free from any offensive smells; it contains 8 rooms, with 20 inmates, including deceased."

Greenwich, sub-district of St. Nicholas, Deptford, at 1, Collier-street, on 27th August, the son of a labourer, aged 1 year, "English cholera (14 days)."

PROVINCES.

The following are the Board of Health returns of deaths from Cholera (C.) and Diarrhœa (D.)

	Sept. 17.		Sept. 18.		Sept. 19.		Sept. 20.		Sept. 21.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Newcastle ...	101	9	93	7	91	9	108	10	80	4
Gateshead ...	—	—	—	—	22	5	—	—	12	3

NEWCASTLE.—The proportion of the mortality in corresponding periods of the outbreaks of 1831 and 1853 is as follows:—1853.—During the first 19 days, from the 31st of August to the 18th of September, there have been deaths from cholera and diarrhœa, 557. 1831.—During the first 19 days in 1831 (from the 9th of December to the 27th), there were 91 deaths.

19 days (1853)	557
19 days (1831)	91
Excess in 1853	466

It has been found that in a part of Newcastle called Sandgate, 4000 people are living in a state of such filth, overcrowding, and absolute want of conveniences for either decency or cleanliness, that the only hope of effectually checking the progress of the epidemic among them is to remove them from the locality. The Board of Ordnance have promptly sent an order for the immediate despatch of 200 tents, and the War Office promised the aid and co-operation of an experienced officer. Tents were being erected on the Town Moor on Monday morning. The churchyards of All Saints', St. Andrew's, St. Nicholas', and St. John's, have been closed by the churchwardens. St. Ann's, Jesmond Cemetery, St. Paul's, and Westgate Cemetery are open. Dr. Gavin has been sent down by the Board of Health to relieve Mr. Grainger. Extra medical visiters have been sent for, and five gentlemen have proceeded from London to work under the local authorities.

GATESHEAD, Monday.—The epidemic, it is hoped, has exhausted its virulence here. It appears from a report made to Mr. Grainger, Superintending Inspector of the General Board of Health, respecting the state of health of the workmen of Messrs. Crawshay and Sons, that the total number of men employed is 1200, and that the number of deaths was 12. There were 541 applicants for medical relief.

SHIELDS.—On Monday occurred one fatal case at South Shields. A little boy, aged six years, was taken out of St. Stephen's church on Sunday evening, during Divine service, and died during the night. A seaman died after fourteen hours' illness, in a vessel in harbour. Another was ill, but recovered. Tuesday Evening.—Since the last despatch from this place, there have been five deaths from cholera in South Shields. Thanks to the exertions of the medical officers, and to the very creditable state the authorities have put the town in, it has not been permitted to spread; and, as I write, the medical officers report that the inhabitants are generally healthy. Wednesday Noon.—There has not been a fatal case in South Shields since yesterday morning. The medical officers report the town healthy.

EDINBURGH, September 20, 1853.—(From our own Correspondent.)—Active preparations to meet the expected visitation of cholera are in progress. One case is reported to have occurred; but the most minute inquiries which we could institute have convinced us that the case had no affinity with cholera whatever, except in exhibiting a state of collapse. Strange that after the experience we have had, we should still have no better legal resource than the Nuisances Removal Act, and no better guardians of the public health than Poor-law Guardians, with their cheese-paring economy and jobbing propensities.

DURHAM.—District Committees have been appointed, who have completed a thorough inspection of every lane and yard in the town, with a view to the discovery and removal of nuisances. One of the Committees reports a case of cholera as having occurred in a densely-populated part of the city. The borough magistrates are sitting *en permanence*.

LIVERPOOL.—Several deaths have occurred from cholera in Liverpool, chiefly confined, however, to German emigrants. The Pelican, screw-steamer, from Rotterdam, had cholera on board, one passenger having died of that disease on Sunday last during her homeward passage. She was immediately put into quarantine. The other passengers and crew are in good health.

MANCHESTER, Sep. 20.—The General Purposes Committee of the Salford Town Council have determined to put into immediate operation all the clauses of the Nuisances Removal and Diseases Prevention Act, together with all the powers of the local Acts for the same purposes. Manchester and Salford are at present considered healthy, and there is less predisposition to disease of any kind than there was at the last visitation, the people being tolerably well fed and clothed in general.

WOOLWICH.—Two cases have occurred on board the Dreadnought hospital-ship, moored off Greenwich, and lumpers were sent up yesterday to lay moorings for the Hebe receiving-ship, which has been lent by the Admiralty for the purpose of being used as an auxiliary hospital-ship for cases of cholera. A severe case also occurred to one of the men of the Woolwich division doing duty at Deptford, but he has fortunately recovered.

MR. G. NASMYTH, C.E., proposes, that along with the water used for watering the streets there should be a few pounds of chloride of lime put into each cartful of water, with a small quantity of sulphuric acid, to set free the gas. Nothing can be more praiseworthy than the zealous and courageous conduct of the medical men of Newcastle.—*Correspondent of the Times.*

DENMARK.—HAMBURG, Sept. 17.—An occasional case of cholera is named as occurring, but without any death, and the "cholerine" has now become more prevalent instead, and, of course, less fatal in its consequences. In the fortress of Christiansoe, the epidemic has also become less prevalent, and new cases are also treated as "cholerine." In the province of Jutland, only those places already visited by cholera are mentioned as still suffering. The total number of cases in Aalborg are now 751 attacks, and 372 deaths. At Aarhus, down to the 11th inst., the official reports mention 315 attacks, and 194 deaths; but the cases are daily less and less. In Nyekjöbing and Falster, there have been no new cases since the 5th, and the epidemic may be said to have totally subsided there. In these small towns, there have been in all 154 persons taken ill, of whom 87 have died, and 67 recovered. In Svendborg, down to the 11th, there had

been 146 cases, of which 69 proved fatal. Upon the whole, therefore, the virulence of the disease has been very great in Jutland. The cases of cholera, however, in the neighbouring kingdoms of Sweden and Norway have been very fearful, and are mentioned as follow:—Stockholm, to the 12th instant, has officially announced 2373 attacks and 1288 deaths, under cure 554, and recovered 531 only; Carlscrona, to the 9th inst., 1746 attacks and 922 deaths; Nordköping, 569 attacks and 182 deaths. Malmö has improved, and the epidemic is confined to one or two hospitals, in which there are daily a couple of cases. The accounts from Norway are equally gloomy, and few places are mentioned where some cases have not occurred. In our city there have occurred from the 23rd of July to the present time in all 412 cases, of which 215 have proved fatal. Of these 90 have occurred in the marshland districts, of which about half have proved fatal. Only four cases among English sailors have occurred out of these, of which three proved fatal. A medical officer of high repute is my authority, and he also informed me that a medical gentleman has been appointed to inspect all the English vessels in port daily, and to report and attend carefully to any cases which may occur in them. During the last week, however, there have been fewer cases, generally speaking, and the weather is extremely fine and healthy.

Epidemiological Society. — The Cholera Committee appointed by this Society is understood to be diligently engaged in investigating the origin and progress of the present outbreak of cholera in this country. A meeting of the Cholera Committee of this Society was lately held, to consider what steps ought to be taken in order to investigate the origin and progress of the present outbreaks of cholera at Newcastle and Liverpool. The Committee will very thankfully receive, and duly acknowledge, any information from their professional brethren, and others, on this important subject. Communications may be addressed to the Secretaries of the Committee, Dr. Bryson and Dr. McWilliam, 14, Trinity-square, Tower-hill.

REVIEWS.

Woman's Medical Guide: containing Essays on the Physical, Moral, and Educational Development of Females, and the Homœopathic Treatment of their Diseases in all periods of Life, together with Directions for the Remedial Use of Water and Gymnastics. By J. H. Pulte, M.D., Professor of Obstetrics and Diseases of Women and Children; Emeritus Professor of Clinical Medicine in the Western College of Homœopathy, etc. Pp. 228. Cincinnati, 1853.

We have been particular in giving at full length the title of this work, and the professional appointments of the Author, because we conceive that these particulars will sufficiently explain the nature of the book. There are two leading objectionable features at once observable: first, that the author directs his observations to the public, and not to the Profession; and secondly, that he makes his pages the vehicle for the laudation of an absurd quackery, which has already been repudiated by all persons of common sense in the Old and New World. We shall not waste words upon such trash as is here presented to the attention of the female population of the United States, but shall content ourselves with giving a quotation from the chapter on the treatment of female diseases, where we are told under the head of "Deviation of the Menses," that "if the discharge appears monthly through the *eyes*,(?) *chamom. nux vom., carb. veg., and bella* will prove beneficial; if through the *nose* or *ears*,(?) *bryonia, mercury, rhus*, and *silicea*;(?) if through the *lips* and *gums, bryonia, mercury*, and *phosphorus*; if through the *fauces* and *lungs, phosphorus* and *bryonia*; if through the *stomach* by vomiting, *bryonia, carb. veg., veratrum*; if through the *bowels* and *rectum, nux vom., arsenic, sulphur*. The latter remedy will be the most important in every case at the end of the cure to prevent a relapse."—P. 197.

The *italics* and abbreviations are the author's. If the ladies of Cincinnati understand this rubbish, they have more sagacity than we can pretend to possess; and as the work is evidently intended for them and not for us, we shall not trouble ourselves to guess the meaning, if there be any, in such apparently unintelligible jargon, fitting only for the Western College of Homœopathy.

An Introduction to the Use of the Blowpipe for Chemists, Mineralogists, Metallurgists, and Workers in Metals. By Dr. Theodore Scheerer, Professor of Chemistry to the Royal Saxon Mining Academy at Freiburg. Pp. 45. London. 1853.

This essay on the blowpipe first appeared in the "Dictionary of Pure and Applied Chemistry," by Liebig, Poggendorff, Wohler, and Kolbe; and it was afterwards translated and inserted as an article in "The Annals of Pharmacy and Practical Chemistry." The editors of that journal now present it in a separate form as a guide to the chemical student. It is unnecessary to state that the qualitative analysis of chemical substances by means of the blowpipe is an indispensable portion of the duties of practical chemists; and we consider Dr. Scheerer's little work exceedingly well calculated to assist them in their labours. The arrangement of the contents is very lucid, and the subjects and methods of examination are described with great correctness and conciseness. Copious tables are introduced, giving the colours of various mineral substances under the oxidising and reducing flame of the blowpipe. The name of the translator does not appear, and we should imagine him to be a novice at his task; for, although the English version before us is not positively inaccurate, it is far from elegant, and contains an infinite number of Germanisms.

De l'Emploi de la Méthode Hémospasique dans le Traitement du Choléra Epidémique. Par T. Junod, M.D., Paris. Paris, 1849. 8vo. Pp. 16.

On the Employment of the Hæmospasic Method in the Treatment of Epidemic Cholera.

This pamphlet is a reprint of a paper read before the Academy of Sciences. The author contends that all the advantages of blood-letting can be obtained by the hæmospasic method, (*αἷμα*, blood, and *σπάω*, I draw,) without lessening the general powers of the patient. He cites six cases of cholera, in which the derivation of the blood from the head and trunk to the lower extremity certainly appears to have been beneficial. Only one of the cases proved fatal. There can be little doubt that if any good is to be expected from bloodletting in the treatment of cholera, this good might be as readily obtained by attracting the blood to the lower extremity, and certainly with less risk of injury to the patient. Some official reports of the results of the use of this instrument will be found in our Number for September 10th.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON THE DIFFERENCE OF TEMPERATURE BETWEEN VENOUS AND ARTERIAL BLOOD.

By G. V. LIEBIG.

(Inaug. Diss. Giessen. 1853.)

Former investigations upon this subject have led to conflicting results. Most of the older observers, such as Haller, Crawford, Kramer, Scudamore, &c., having declared, that the arterial blood (in the left cavities of the heart) is warmer than the venous blood of the right cavities by 1°; while A. Cooper, Coleman, Mayer, Autenrieth, etc., either pronounce the temperature of both kinds of blood equal, or give to the venous blood an excess of temperature over the arterial of 0·5°. The author proceeds, in his attempt to explain these differences, to inquire, whether the higher temperature be found in the blood flowing from the lungs, or in that from the capillaries, and he reverts to some of his former observations upon "muscular respiration."

The experiments were conducted both upon living and recently-killed animals. That death might be caused quickly, and without loss of blood, the medulla oblongata was severed in some instances, and narcotin was administered in others. The thermometer was introduced, either by the jugular vein or the carotid artery, to the requisite depth to the heart; or it was inserted into the crural vein, or the vena cava abdominalis. Respiration was prolonged after death, when necessary. The experiments were performed upon dogs, and with every possible precaution to avoid errors.

The results were—1. That the temperature of the blood in the right cavities of the heart exceeds that of the left cavities by 0·05° — 0·16° ; 2. That the blood flowing into the heart by the vena cava descendens is cooler than that from the vena cava ascendens (probably because the blood which the former vessel contains comes from parts which present to the atmosphere a very great extent of surface in which a process of cooling takes takes place).

In the venous system, there go on changes of temperature corresponding with the respiratory act. In the vena cava superior it was remarked that at the end of each inspiration the temperature of the blood rose ; between inspiration and expiration it attained its maximum; towards the end of expiration it fell ; and was at its lowest point after expiration. When animals breathe, or rather expire, shortly and quickly, and then inspire deeply, the variations of temperature are greater than usual. When the thermometer is in the right auricle, the highest degree corresponds with inspiration, and the lowest with the beginning of expiration. When the breathing is very short and hurried, these changes of temperature become diminished, or even cease altogether. In the vena cava abdominalis the same phenomena were not observed ; in the vena iliaca they were reversed, the maximum occurring after expiration, and the minimum after inspiration.

The author then remarks upon the mechanical influence exerted by the respiratory movements upon the circulation in veins. The enlargement of the thoracic, and the diminution of the abdominal cavities, coincident with inspiration, cause the blood of the vena cava ascendens to flow into the right auricle, during and especially at the end of inspiration. The contents of the vena cava descendens are less than those of the vena cava ascendens, and they are cleared out at the beginning of inspiration. During expiration, the abdominal cavity is widened, and the vena cava abdominalis gains both in space and contents. Towards the end of inspiration, the auricle will therefore be filled by the warm blood of the vena cava abdominalis ; and at this moment is observed the highest degree of variation in the heart's temperature. In expiration the blood streams into the auricle chiefly from the vena cava descendens, and then is remarked the minimum of temperature. As regards differences of temperature in different parts of the same system, the author found the blood of the vena cava sup. 0·16°, and that of the auricle 0·20°. Between the auricle, where the blood from two vessels of different temperature is not completely mixed, and the ventricle, the difference amounted to 0·1—30·20°.

In the arterial system there are no variations dependent upon the movements of respiration, or they are very slight, amounting to 0·01—0·06°, and connected with the changes in the right cavities of the heart, and the cooling of the blood in its passage from the lungs.

In dead animals, the temperature of the blood of the right ventricle exceeds that of the left by 0·16°. In two experiments, however, the temperature was found the same in both cavities. The temperature of the blood of the vena cava abdominalis was once, upon opening the chest, found 0·72° higher than that of the thoracic portion of the carotid during life. The same observations were repeated in several experiments. The blood of the vena cava abdominalis, which comes from the capillaries of the lower extremities, and of some of the abdominal viscera, is the warmest blood in the body, even in animals where the heart has been emptied by bleeding, and to this point the author attaches great importance.

It would be desirable to know the amount of cooling which the blood undergoes in its passage through the lungs; but the subject is fraught with difficulty. The fact, however, if established, is most important, inasmuch as the source of animal heat has been referred by many to the organs of respiration. As regards the warmth of the blood in the vena cava abdominalis, it must be remembered, that the vessel lies imbedded in soft, highly organised parts, where, under all circumstances, heat is retained for a longer time than in other parts of the body; and perhaps this fact will explain the cause of the warmth of blood in that vessel as satisfactorily as any theory of changes going on in the capillary system.—*Schmidt's Jahrb.*, 1853.

NEUROLOGICAL INVESTIGATIONS.

By R. WAGNER.

The object of the learned Author's present inquiry was to ascertain the mode of termination of nerves, especially the sensitive, and the minute arrangement of nerve fibres. After many examinations, he concludes, "that not only motor, but also sensitive, and the so-called trophic primitive fibres, divide and subdivide, never forming terminal loops; but that the free extremities of nerve fibrils form a general network, from which the ultimate branches terminate either in the elements of the tissue, where it lies, or in ganglia, Pacinian corpuscles, or papillæ. Another object was to determine morphological and physiological equivalents in the nervous system. The cerebellum is a persistent morphological, but not equally persistent physiological, equivalent. While the removal of this organ in birds causes loss of the equilibrium, and of the power of movement, its extirpation in fish is followed by no such phenomena. As regards one physiological fact, it agrees in all animals, it is no reflector ; its removal never excites convulsions. The medulla oblongata is both a morphological and physiological equivalent throughout the whole animal kingdom.

The influence of the n. vagus upon the heart was also studied. After magnetico-electrical excitement of the nerves in fish, the heart's beats ceased for two or three minutes. In mammalia, the experiment did not succeed so well ; in birds it failed nearly altogether, the arrest of movement lasting only for a second or two.

He also affirms, that he has observed the type and rhythm of the heart's action in the embryo of the chick of the fourth day, when there was no trace of genuine muscular fibre, nor of nerve substance, when the heart consisted of a membranous bag, formed of fused cytoblasts and cells. However astonishing such an assertion may be, the name of the author entitles it to consideration and inquiry. (*Schmidt's Jahrb.*, 1853.)

We read in *L'Union Médicale* (August, 1853), that the celebrated Physician Reichenbach, Professor of Vienna, has just published a Memoir, which contains some extremely curious particulars concerning individuals, whom he calls sensitive, (nervous?) It results from his researches, that the persons to whom he alludes, brought into contact with a piece of rock crystal, manifested on the right side different properties from those on the left. Thus they saw on the right all objects coloured blue ; while on the left they were of a yellowish-red hue. The sensations determined in the first case were of an agreeable, and in the second of a disagreeable nature. It does not seem, that the science of medicine flourishes under the excellent and paternal Government of Austria so well as in freer countries.

The Viennese seem to be amusing themselves with doggrel rhymes of a weak character, of which a specimen may be seen, entitled "Hippocrates and the Modern School." Hippocrates, who comes on earth to see how medicine thrives, is conducted everywhere by a barber, with whom he holds converse. We give the following as a literal translation of a verse or two :—

> "That which is too much for one man to learn
> Is acquired in a small degree by another.
> One treats diseases of the chest;
> Another smells typhus from afar.
> There are children's worm, and hernia doctors.
>
> "Brustspäher is an instrument
> Which is called in France 'stethoscope.'
> It is said, a Frenchman discovered it;
> But it was a Viennese, long since buried," &c.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, Sept. 20, 1853.

MEDICAL EVIDENCE IN CRIMINAL CASES.

This subject still continues to excite attention. Tardily, and apparently reluctantly, the Lord Advocate has given instructions to have a report prepared on the whole practice in such cases ; the result cannot fail to be beneficial to the Profession.

INTELLIGENCE FROM LLOYD'S.

I regret to announce that our latest advices bring no good intelligence of the monthly packet "Edinburgh," W. Robertson, Commander. The Underwriters refuse to insure her at any premium. She was last seen lying off Saint Hospice, in a very disabled state, where it is supposed she had put in for additional

hands and ballast. I fear, however, that there she will find nothing to suit her purpose but young lads, most landsmen, and of the rawest possible description. Her owners are, however, still sanguine, though her cargoes for some time have been anything but profitable.

It is reported that an adventurer has purchased the old "Quarterly." She was originally a good ship, being rated A 1 at Lloyd's, at the beginning of last century, but she must now be in a sadly rotten condition, and we understand that her last voyages have been performed with difficulty. Our merchants are not fond of trusting their valuable goods in so unsound a bottom, and accordingly her freights for some time past have been more for the foreign market. A good deal of deception would appear to have been practised, as these foreign goods were generally done up as English packages. She must either be broken up or go into dock for a thorough repair. That the last seems intended appears from the fact, that the owner is said to be engaging a crew; and, stranger still, that the burly boatswain of the "Monthly" is actually engaged as first mate.

How Wood and Bennet will pull together baffles my powers of comprehension—

Par nobile fratrum!

The boatswain was part owner, besides serving in the ship "Monthly;" and it has been whispered for some time that he was anxious for a higher berth in it.

Certainly, a Journal under the joint conduct of Wood and Bennet, will be an era in Medical Journalism.

GENERAL CORRESPONDENCE.

MILITARY MEDICAL STATISTICS.

[To the Editor of the Medical Times and Gazette.]

SIR,—With reference to "Military Medical Statistics," in your Number of the 10th inst., would you kindly permit me, through your valuable Journal, to correct some mistakes the writer of that article seems to have fallen into? It is true there is a regulation that the name of a disease, once entered on admission, is not to be changed, the object being to obviate confusion in the returns of sick and wounded.

Nevertheless, previously to 1827 at all events, a remedy had been provided, at the option of the medical officer in charge, to obviate the more material error in the returns of showing a soldier had died of one disease when he had actually died of another. I have understood it is due to the late Inspector-General Dr. Forbes, when at Chatham, as principal medical officer,—to wit, that when, from original error of diagnosis, or where some serious disease had supervened, the case might be discharged under that head, and re-admitted, as a fresh case, under the other, thus—James Regan, "catarrhus a.," admitted 15th June, discharged 20th June; James Regan, "phthisis pul.," admitted 21st June, died 15th November. Both days being inclusive in hospital, the patient need not be put to the inconvenience of even changing his bed. It makes two admissions of one, it is true; but this is of very minor importance; though a correction for even this has been followed in all regiments in which I have served—to wit, to leave the disease blank, unless on "a return-day," till the medical officer in immediate charge had made up his mind as to the true diagnosis. Under such modifications, errors of the nature referred to by Staff-Surgeon Roberts are extremely rare, and the returns far more correct than can be expected in those of the Registrar-General. Nor under such modifications of the general regulation is the fearful amount of tuberculous disease found (I suppose it is meant when patients die under other diseases). In Fort Pitt, Chatham, however, no doubt this is the case, for there only invalids are admitted; and the great proportion of those who die after their return to this country, die phthisical, nor could the modifications of the general regulation, above referred to, be followed at Fort Pitt without the utmost confusion in the official documents. Many sent home under "hepatitis," "palpitation," "general debility," etc., and the like, are really incipient or latent phthisis; but, from my own experience, I should say, tubercle, without local or constitutional manifestation, is one of the rarest things imaginable. The index was there, though it may have been misapprehended; and I need not say, the last ten or twelve years of my service, tubercles were looked for in every case agreeably to orders. But even Colonel Tulloch's Tables may be made nearly correct with respect to the deaths by a few very simple rules taken from known facts: to wit—add all fatal cases of cattarrhus chr. to phthisis pul.; diarrhœa to dysentery; and fever, in the east, to febris remittens; and in the west, after deducting 5 or 6 per 1000 of strength for febris remittens, the remainder to pestilential yellow fever.—Yours, &c.,

R. H. A. HUNTER, 1st Class Staff Surgeon, Half-pay.

Moffat, Dumfriesshire.

EXAMINATIONS AT THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As the examination at the College of Surgeons appears just now to be a favourite subject for discussion, you will, perhaps, not object to my giving my experience thereof, not merely because it differs somewhat from that of many of your correspondents, but also because an examination, hitherto esteemed as at least practical, has had, in my mind, an unmerited slur cast upon it.

The subjects upon which I was taken were—1st. The anatomy of the larynx and the adjoining regions of the neck; 2nd. The dislocations of the upper extremity; 3rd. The physiology of the blood; and 4th. The diseases of the testicle. I had come direct from the Dublin schools, was utterly unacquainted with the appearance or idiosyncracies of my examiners, and had become nervous and ill, because of over application when preparing for a purely medical examination at the hospital I attended; I, moreover, had never ground, so that everything was against me. Had I been bullied, or, as we students used to term it, "cruxed," I have no doubt that I would have been rejected; as it was, the thoroughly gentlemanlike and urbane conduct of my examiners put me so entirely at my ease that I believe I never stumbled throughout my entire examination. It is true that I could have written upon the subjects chosen much more diffusely than the time for examining permitted me to talk, but I could not have passed unless I were practically acquainted with my subjects; such, at least, was my impression at the time. Two more from the Dublin Schools, with whose incompetency I was well acquainted, were rejected, and they having had the benefit of private tuition were, of course, up to any oddity of questioning that their examiners might think proper to adopt. It must have been to a keen appreciation of the nature of their acquirements they owed their rejection, and I confess, I, with the manner and matter of my examination fresh in my memory, backed by the rejection of my superficial fellow-students, did not feel disgusted, but, on the contrary, highly pleased on receiving my diploma.

What this perhaps too diffuse letter wishes to communicate is, that the writer was extremely grateful for the manner, and not at all disappointed in the matter, of an examination passed at the College of Surgeons in 1848. M.R.C.S. ENGLAND.

Sept. 10, 1853.

FENNELL V. ADAMS.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is desirable that the strong feeling entertained by the Profession in regard to the late trial, "Fennell *v.* Adams," should not pass away till we have defrayed the costs which Mr. Fennell has been driven to incur.

Those of your readers who have not a clear recollection of the case will find in the leading articles of the *Association Journal*, July 8, *Medical Times and Gazette*, July 9, 1853, and in the *Lancet*, July 23, recitals and commentaries very favourable to Mr. Fennell. The Medico-Ethical Society of Manchester have given their powerful testimony to the legitimacy of the plaintiff's appealing to the Profession "on account of the great and undeserved injury that such charges of neglect of duty brought against him were calculated to produce."

I am quite sure that the uprightness and benevolence of the Profession will concur in this opinion. To subscribe and carry Mr. Fennell harmless from the pecuniary cost of the trial is consistent with our Professional character, due to our sense of brotherhood and to our love of justice. Thus warm with the subject, I venture to call on my Professional brethren, and to quote on the spur of the moment, from the pretty little ballad written by a young lady, and sold in aid of the funds of the Medical Benevolent College—

"It needs not great wealth a kind heart to display;
If the heart is but willing it soon finds a way;
And the poorest one yet, in the humblest abode,
May help a poor brother a step on the road."

I am, &c.

Hampstead, Sept. 17, 1853. CHARLES F. J. LORD.

P.S. Since the date of this letter a Committee has been formed, and a subscription (limited to 10s. 6d.) commenced (see advertising sheet.)

TREATMENT OF CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—Without presuming to find fault with the treatment adopted at Newcastle, and elsewhere, for the relief of cholera cases, permit me to suggest the following, based on successful practice during the last attack of this formidable disease.

In all cases where there is any vomiting, whether in choleraic or mere diarrhœa, I at once administer a tablespoonful of mustard, as a direct emetic, dissolved in a cupful of warm water; the result I have found to be most favourable, the vomiting generally shortly ceases, and is followed by warmth of surface, and the diarrhœa is greatly relieved.

I am induced to send you this information because I have found it so very successful, having lost but one patient during the visitation in the year above-named.

Should any cases come under my care, I purpose adopting at once the same remedy, (until I am persuaded of a better,) nor should I hesitate applying it in a state of collapse, providing there be vomiting power and life present.

I am, &c. J. N. JAKINS.

32, Osnaburgh-street, Sept. 13, 1853.

VACCINATION.—MEDICAL ETHICS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In Mr. Badcock's recent letter on "Vaccination—Supply of Lymph," the following passage occurs: "I have vaccinated more than 12,000 persons, and nearly nine-tenths of that number gratuitously, a great proportion of these being the children of decent mechanics, unable to pay the usual fee, but unwilling to apply as paupers to the parish surgeons." Now, I would wish to ask Mr. Badcock, whether the idea had ever occurred to him that in thus vaccinating 10,800 persons gratuitously, he had been the means of preventing the same number of eighteenpences, or 810*l.*, from finding its way into the pockets of the parish surgeons, who are, I suppose, as usual, most miserably paid for their other duties? Or, supposing these "decent mechanics" were too proud to have their children vaccinated by the parish surgeon, I dare say there are in Brighton, as elsewhere, plenty of young practitioners who would be very glad to do it for half-a-crown—a sum, by the way, few of these mechanics would grudge spending on themselves in beer or gin, or their wives, as an instalment for a magnificent new bottle-green velvet mantle. I have practised enough among the artisan class to know, that while in adversity they often exhibit the most heroic patience and kindliness of heart to each other, yet in prosperity they are, as a body, recklessly improvident, and should be taught that what is worth having is worth paying for. Why should the junior members of our miserably paid profession find their bitterest enemies in our ranks? Why should the abominable "advice gratis" system, by robbing them of a decent maintenance during the earlier part of their career, render them moody, struggling, indebted men all their lives? Few can obtain a fair income before five-and-thirty, and then, with the great claims upon us, how is it possible to save anything for old age? Let the sad records of the different medical charities answer my question, and prove how great is the amount of distress among us. Were the aggrieved to unite, and resolve not to meet or have any correspondence with those who give, as a rule, gratuitous advice, the practice would soon be put down.

I am, &c. NEMO.

Sept. 16, 1853.

ARTIFICIAL MEMBRANA TYMPANI.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me, through the medium of your Journal, to suggest to those medical men who are using the artificial membrana tympani, that when it is not in use it should be kept in water. By this means it retains its form, and it is kept quite soft. As at present manufactured by Weiss, the artificial membrana tympani is made of vulcanized India-rubber, not much thicker than ordinary writing paper; I find this material preferable to gutta percha, which is apt to wrinkle. I am, &c.,

18, Savile-row. JOSEPH TOYNBEE.

INCOME-TAX.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have just received an Income-tax paper, requiring me to furnish the Commissioners with an account of my profits derived from my Profession to April, 1854, in order that I may be charged Income-tax accordingly. Can you inform me of the address of an honest *clairvoyante*, by whose means I may be able to estimate the amount of my profits so far beforehand, especially as bad debts may be deducted? The information will be doubly useful, as, knowing beforehand what will be bad debts, I can then avoid them. I am, &c. A LONDON SURGEON.

London, Sept. 17, 1853.

MEDICAL NEWS.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Sept. 8, 1853:—

JEPHSON, JOHN HOLMES, Birkenhead.
JONES, SYDNEY.
KELLY, JAMES DOUGLAS, Liverpool.
MUNDIE, GEORGE, Dalston.

APPOINTMENTS.

MILITIA.—Hampshire: Frederick Josiah Burgess, Surgeon of the South Hants Militia by commission dated the 9th of December, 1852, to be Surgeon, by transfer. George Frederick Bloxsome, M.D., to be Assistant-Surgeon. Isle of Wight: Henry Waterworth, Fellow of the Royal College of Surgeons of England, to be Surgeon.

MEDICAL.—GUY'S HOSPITAL.—At a General Court held on Wednesday, the 14th, at this hospital, the vacancies in the surgical staff, consequent upon the death of the late Mr. Bransby Cooper, were filled up by the appointments of Mr. John Birkett, as Surgeon, and Mr. Thomas Callaway, as Assistant-Surgeon.

MEDICAL APPOINTMENTS, QUEEN'S COLLEGE, BIRMINGHAM.—At a meeting of the Professors of Queen's College, held on the 30th ult., it was unanimously resolved to recommend to the Council Dr. George Fife, of Newcastle-upon-Tyne, for the appointment of Physician to the Queen's Hospital, vacant by the death of Dr. Wright. Dr. Fife is a Graduate of the University of Edinburgh, 1827. His practical experience and sound judgment as a physician are certified by his colleagues, the physicians and surgeons of the Sunderland Infirmary; his uniform kindness and great attention to the sick and suffering by the clergy of Sunderland; his high honourable character, and extensive professional acquirements, by Drs. Abercrombie, Mackintosh, Campbell, Fyfe, Knox, Sir James Ballingall, and other eminent Professors in the University of Edinburgh; his facility in communicating information, and in expressing himself as a lecturer, by the teachers in the Newcastle College of Medicine and the Sciences, in which, for several years, Dr. Fife filled, with distinguished reputation, the important chair of Forensic Medicine. As an author, Dr. Fife is well know to the Profession as the translator of Coster's Manual, 1831; a Treatise on Influenza, 1833; a Critical Analysis of the Inquest held on the occasion of the Explosion at the Wallsend Colliery, 1844; and a pamphlet on Cholera, 1849. Dr. Fife is also a member of the Royal College of Surgeons of Edinburgh, and late President of the Plinian Natural History Society. At the same meeting it was resolved to recommend the Council to re-appoint Dr. Jordan, Member of the Royal College of Surgeons, as Resident Medical Tutor. This gentleman has already discharged, to the entire satisfaction of the Professors and Council, the duties of the office for the period of two years; and at the late second B.M. examination at the University of London, he received the Gold Medal in Physiology.

DEATHS.

PRICE.—On the 7th inst., at Brighton, Charles Price, M.D., F.R.C.P., aged 76. Dr. Price was born at Merriott, near Crewkerne, in Somersetshire, of which his father, the Rev. Thomas Price, was then vicar. He was the eldest son, and was designed for holy orders, but his taste determined the choice of medicine as his future profession. He was educated successively at Ilminster, at Wadham College, Oxford, of which he was a Fellow, and at St. Bartholomew's Hospital, London. He was elected Physician to the Middlesex Hospital, but resigned that appointment, in which he was succeeded by Dr. Latham, for the prospects of private practice which Brighton offered him. Up to that time, 1813, Brighton had not offered sufficient inducements for a physician to reside there through all the year; physicians came and went with the visiters, and in their absence, the physicians at Lewes were consulted in emergencies. It was by the advice of Dr. Warren, who had for some time filled this post of physician to Brighton during the season, that Dr. Price first settled there, and, with the exception of a year which he spent, in 1814, with Lord Aberdeen on the Continent, he continued to reside there till his death. The life of a physician engaged in large practice, exciting and interesting from day to day, leaves little that can claim attention out of the immediate circle of his patients and friends after the lapse of a few years. And such was the life of Dr. Price. A physician of the old school, kind and generous,

witty and accomplished, sociable, and adorning the society of which he was so fond, one year passed away like another; and one year found as little leisure as another to add anything to medical knowledge, to record any of the facts which were presented to his acute, observant mind, in the course of his large practice. He never published anything. Dr. Price was never married. For the last few years of his life his increasing deafness, and the growing infirmities of age, quite unfitted him for practice, and he retired from the society of all but a few friends. He had an attack of apoplexy in 1849, from which he never completely recovered. In 1852, he lost the sight of his left eye by chronic ophthalmia. The fatal attack of apoplexy occurred six days before his death.

CROOM.—Sept. 14, at 3, Argyle-square, Edinburgh, George Croom, Esq., Surgeon, aged 43.

EDWARDS.—Sept. 15, at Dorchester, aged 54, John Edwards, Esq., Surgeon, L.S.A., 1821.

Dr. CLELLAND, Surgeon of the 69th, and the Commanding Officer of the Regiment at Trinidad, both died of yellow fever on the 25th of August. Dr. Clelland had gone through the late epidemic at Barbadoes, which proved so fatal to the Dauntless, but his wife died there.

BEQUEST.

ROYAL ORTHOPŒDIC HOSPITAL.—The late Mr. Durrant, of Newgate-street, has left the handsome bequest of £000*l.* to this Institution.

ST. MARY'S HOSPITAL.—We have been requested to state, that Mr. Alexander Ure will deliver an Introductory Lecture to Clinical Surgery on Monday, Oct. 3, at half-past one, at St. Mary's Hospital.

MEDICAL BENEVOLENT COLLEGE.—At the last meeting of the Council, held at the Hanover-square Rooms, Edward Henry Sieveking, M.D., was unanimously elected Honorary Secretary of the College, *vice* Henry Tudor Davies, Esq., resigned.

MEDICAL BREAKFAST.—On Tuesday morning, the medical strangers of the British Association, by special invitation of the resident medical gentlemen of Hull, sat down to a most elegant and sumptuous breakfast at the London Hotel. Among the strangers present were—Dr. N. Shaw, Dr. Bell (Grimsby), Dr. Balfour, Dr. Neil Arnott, Dr. Redfern, Dr. Camps, Dr. Latham, Dr. Lankester, Dr. Burgess, Dr. Daubeny, Dr. W. Arnott, Dr. Helmoltz, Dr. Barbridge; J. Hogg, Esq., J. P. Bell, Esq., R. J. Bell, Esq. The following resident medical gentlemen were also present:—Dr. Horner, Dr. Sandwith, Dr. Cooper, Dr. Daly, Dr. Bell, Dr. Archbald, Dr. King; F. Huntingdon, Esq., R. Hardey, Esq., J. Dossor, Esq., J. Lowther, Esq., J. H. Gibson, Esq., H. Munroe, Esq., J. H. Locking, Esq., C. Beckett, Esq., R. Craven, Esq., E. Twining, Esq., R. L. Sleight, Esq., W. Hay, Esq., E. Reckitt, Esq., H. Lee, Esq., W. Hodgson, Esq., T. Atkinson, Esq., T. T. Lambert, Esq., J. Wilson, Esq. Dr. Horner occupied the chair, and H. Munroe, Esq., the vice-chair. The President, Dr. Horner, spoke in eulogistic terms of the high honour which the Medical men of Hull felt in having the privilege of entertaining the medical members of the British Association at a repast like the present.—Dr. Neil Arnott, F.R.S., etc., referred with pleasure to the unanimity of feeling among the members of the Medical Profession generally,—a feature not so universally seen in any other profession in the country. A French Medical man who had lately visited him (Dr. Arnott) seemed surprised at the attractive character of the meetings of medical men in London; such meetings in France being the reverse. He was pleased to find that in Hull the medical men were remarkable for the friendly character of their scientific and philosophical meetings; in fact, he had found them really a "happy family," and should be glad, when the British Association held its meetings in London, to offer some small return for the kindness received.—The President then proposed "The British Association."—Dr. Latham, F.R.S., in reply, spoke of the high character and position which the Medical men held in the British Association, owing, in a great measure, to the *bona fide* character of their education. He also adverted to the peripatetic habits of the Association, as calculated to encourage a social feeling among the members of the Profession, such as they witnessed on the present occasion.—Dr. Sandwith proposed "The Medical Visiters." He was pleased to notice the active part which the Medical men of Hull had taken in all the proceedings of the Association. He thought that Mr. Munroe had had his attention first drawn to the subject of his paper on the whale fisheries, from the remark which the Earl of Carlisle made in his speech at the laying of the foundation-stone of the library, that "the people of Hull had souls above blubber." There could be no doubt but that the British Association was the means of fostering into existence the many creditable local papers read. After some further remarks, the Doctor called upon Dr. Lankester.—Dr. Lankester, F.R.S., etc., said that he had been a constant attendant of the British Association meetings for the last sixteen years, and therefore had some claim for his services. The medical section, which was once small, he was proud to say, had now great claims from Medical men, for it had nearly absorbed Section C, and Section C had nearly absorbed Section D to its specific department. Dr. Lankester then, in a most eloquent manner, spoke in favour of the objects of the Association, and more particularly adverted to the kindly and friendly manner in which the members of the Association had been received in Hull.—Dr. Walker Arnott, F.R.S., spoke in eulogistic terms of the reception of the members of the British Association, and, after an interesting speech, proposed the "Resident Medical Men."—H. Munroe, Esq., in reply, spoke of the great pleasure and unanimous feeling the Profession had in inviting the members of the Association to breakfast; and also resolved the cause of the social character of the Medical men in Hull. After some other speeches, this meeting, one of the most pleasant ever held in Hull, broke up, after a vote of thanks to the President, to attend the different section-rooms.

THE NEW COMPULSORY VACCINATION ACT.—This Act, already noticed, was passed on the 20th of August, and it is directed, that within six weeks, parishes or unions, if needed, are to be divided by the Poor-law Board into districts, for the purposes of vaccination, and places appointed, giving increased facilities for the vaccination of the poor. The six weeks expire at the end of the present month.

PROCURING ABORTION.—Henry Hamilton, *alias* Scott, described as a Surgeon in practice at 3, King William-street, Strand, and apparently about 40 years of age, has been committed for trial, charged with having administered drugs to a young woman to procure abortion, and also with having committed a rape upon her person.

MORTALITY NOTABILIA.—The mortality in London from all causes for the week ending the 17th September was 949; in the former week 1015 deaths were registered; in the ten corresponding weeks of the years 1843-52 the average number was 1053, which, with a correction for increase of population, becomes 1158. The deaths returned for last week are therefore 209 less than the corrected average, and 66 less than those recorded in the previous week. Cholera was fatal to 16 persons, 9 males and 7 females, showing an increase of 9 fatal cases compared with the preceding week. Four of the 16 deaths are described as "Asiatic," varying in the duration of the attack from 7 to 48 hours. The deaths from diarrhœa were 131, being a decrease of 53 on the previous return, and 14 below the corrected average of the corresponding weeks of the past 10 years.

Births.—Last week the births of 816 boys and 690 girls, in all 1506 children, were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1310.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·887 in. The mean temperature of the week was 57·6°, which is slightly above the average of the same week in 38 years. The highest temperature of the week was 73·0°, and occurred on Saturday; the lowest was 40·5°, and occurred on Wednesday. The direction of the wind was variable, at the average rate of 51 miles a-day. The electric condition of the atmosphere was positive on every day of the week except Monday.

DEATHS *in the Metropolis for the week ending Saturday, September* 17, 1853.

CAUSES OF DEATH.	SEPT. 17. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	453	316	174	949	10533
SPECIFIED CAUSES	449	315	174	939	10483
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	181	45	25	252	3777
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	20	16	37	449
3. Tubercular Diseases	62	101	7	170	1710
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	41	33	30	104	1100
5. Diseases of the Heart and Blood-vessels	1	20	14	35	276
6. Diseases of the Lungs and of the other Organs of Respiration ...	62	18	24	104	849
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	29	10	58	654
8. Diseases of the Kidneys, etc. ...	...	10	5	15	98
9. Childbirth, Diseases of the Uterus	...	10	...	10	106
10. Rheumatism Diseases of the Bones, Joints, etc.	4	2	2	8	81
11. Diseases of the Skin, Cellular Tissue, etc.	...	...	1	1	16
12. Malformations	2	...	...	2	39
13. Premature Birth and Debility ...	28	3	...	31	229
14. Atrophy	23	...	6	29	279
15. Age	...	...	28	28	464
16. Sudden	7	4	2	13	70
17. Violence, Privation, Cold, and Intemperance	18	20	4	42	286
CAUSES NOT SPECIFIED	4	1	...	10	50

MORTALITY IN PUBLIC INSTITUTIONS for the week ending September 17 :—

	Males.	Females.	Total.
Workhouses	42	44	86
Military and Naval Asylums.. ...	5	...	5
General Hospitals	18	13	31
Hospitals for Special Diseases ...	2	3	5
Lying-in Hospitals	...	...	...
Lunatic Asylums	2	3	5
Military and Naval Hospitals ...	1	..	1
Hospitals for Foreigners, &c. ...	1	...	1
Prisons	5	...	5
	76	63	139

BOOKS RECEIVED.

Beobachtangen zur vergleichenden Anatomie der Wirbelsäule. Von August Müller.

Homœopathy Fairly Represented. In Reply to Dr. Simpson's "Homœopathy Misrepresented." By W. Henderson, M.D., Professor of General Pathology in the University of Edinburgh. Second Edition Edinburgh: Constable. 1853.

Sandgate as a Residence for Invalids. By G. Moseley, M.R.C.S., etc. London: Churchill. 1853.

A Practical Treatise on Sea-Bathing and Sea Air. By George Harting, M.D. London: Highley. 1853.

Elements of Psychological Medicine. By D. Noble, F.R.C.S. London: Churchill. 1853.

Dublin Quarterly Journal of Medical Science. August, 1853.

The Code for Safety, etc. By G. F. Collier, M.D. London: Longmans. 1853.

Observations on the Remittent (So-called) and Yellow Fevers of the West Indies. By D. L. Finlay. Dublin: Fannin. 1853.

Thirty-third Annual Report of the Directors of the Dundee Royal Asylum for Lunatics Dundee. 1853.

Notes on the Climate and Diseases of the City of Cork. By John Popham, A.B., etc. Dublin: Hodges and Smith. 1853.

Report of the Anniversary Meeting of the Cavendish Society.

Some Observations on Fish in Relation to Diet. By John Davy, M.D., F.R.S. Edinburgh. 1853.

The Home Companion. August, 1853.

The Family Friend. No. 63.

The Family Tutor. No. 66.

The Sheffield Homœopathic Lancet. No. 2.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.

SIR,—The enclosed extract from your Journal of the 10th inst. calls for explanation on my part. In itself the question is of considerable importance, as it involves a principle of gentlemanly and upright dealing, which, now that the transfer of practices is so common, ought to be impressed upon all who seek to purchase a practice, and ought to be condemned when principle is overlooked.

Your Correspondent advertised on, I think, the 22nd of January, for a "Practice in the North of England, the counties of Cumberland or Northumberland preferred." I answered, that, on account of ill health, my friend Dr. L——, of ——, was anxious to transfer his practice; that he held the hospital physicianship, but could not guarantee the succession to it; also, through the recent death of Mr. D——, the surgeonship of the gaol and the barracks; that he only held the gaol appointment *pro tem.*, but that his successor would have a chance of it; that the barrack appointment could be secured. The advertiser, Mr. J. S. S——, S— H——, J——, after considerable delay, went north, nominally to look at the practice, but, I believe, in reality, to try and find the money for the purchase. Dr. L——'s high character was well known to Mr. S——'s connexions, and there could have been no possible objections to any proposal made on the part of Dr. L——. Mr. S—— was quite aware that the gaol appointment was held by Dr L—— as a temporary one, and he talked of the influence his family would have in the west of the county in securing the appointment, and he was also aware that Dr. L—— was not a candidate for it.

On March 4 Dr. L—— received a note from Mr. W——, solicitor to Mrs. S—— (the mother of your Correspondent), inquiring about the practice, etc., and in this note he says, "the gaol affair will be, I suppose, in the hands of the magistrates, but if Mr. S—— should join you, I fancy you or he would stand a good chance of the appointment."

Sundry negotiations went on, and at last, on March 24, Dr L—— met Mr W—— at Workington to arrange the terms of the sale of his general practice (he was to retain the consulting practice) to Mr. S——. Mr W—— expressed a hope, on the part of Mr. S—— and a cousin, that matters would be arranged, as they felt satisfied that the practice would be desirable. Mr. W—— had drawn up an agreement which Dr. L—— was unwilling to sign that day, but the solicitor assured him that all was arranged on the part of Mr. S——'s friends, and that his signature would settle it entirely. Mr. S——'s signature was expected in a week or ten days from that date, and, meanwhile, Dr. L—— was to look out for a house for him.

On April 7 a note from Mr. S——'s solicitor (Mr. W——) expressing annoyance at not yet having heard from his client, and says, "I am in a very bad humour with him."

On April 9 Mr. W—— announces that his client declines the practice, and says he "will rather risk the sum in waiting my own time in ——." Mr. W—— adds, "a proceeding which is condemned by both Mr. S—— and Mrs. S——, as well it may. As to his attempting to begin in —— after this negotiation, I consider it most dishonourable, and I question whether he could do so now without your consent."

This is his own solicitor's opinion of his client, who has now requested yours, and he has settled in ——. His own advertisement for a practice in Cumberland or Northumberland shows that he had not contemplated settling in ——.

Mr. S——'s conduct shows the necessity for caution in transferring a practice, and the risk one runs in admitting any one to your confidence, as in Dr. L——'s case, where his confidence was betrayed and advantage taken of the knowledge of his proposed retirement.

I enclose (in confidence) my card. I am, &c.

September 17, 1853. A SUBSCRIBER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall begin by thanking you for the kindness with which, in accordance to that impartiality which ought to be the principal characteristic of the Press, you have brought before our professional brethren a short statement of the behaviour of the authorities at Guy's Hospital with regard to me.

A fortnight has elapsed, and no answer has been made. I must therefore infer, that the authorities of Guy's Hospital, shrinking from a public examination, feel that they were not entitled to treat ill-naturedly a harmless foreign medical man.

This is more than a private affair; it involves grave questions of medical ethics and public duty. I should, perhaps, at the expense of some bad constructions, venture on treating the question at full length in the English papers; but it requires a greater nicety and precision of expression than my too slight knowledge of the English language will allow me to employ. It is, however, a duty incumbent upon me to explain it elsewhere, and I shall do it in the journals of my native country.

I am, etc. A. DEVILLE, D.M.P.

17, Gerrard-street, Soho, Sept. 14, 1853.

THE SYDENHAM SOCIETY.

[To the Editor of the Medical Times and Gazette.]

SIR,—Can you or any of your readers inform me whether this publishing Society is or is not defunct? We, *i.e.*, the members, are yet wanting one volume of the usual number of books for last year, nor have I as yet received any notice of the anniversary meeting, nor of what was said or done there, nor have I had any volume for the present year, nor, indeed, *mirabile dictu*, has any application been made to me for this year's subscription. If it be dead, what has been done, or is to be done, with the money so iniquitously abstracted year after year for the alleged purpose of publishing useless works of bibliography—useless, at all events, to the hard-working practitioner, who, gaining his guineas hardly, expects to have money's worth for his money, and all the income of one year expended on the subscribers of that year, and no part thereof to be reserved for the benefit of future years and of future members. I am, &c.

London, Sept. 9, 1853. A DISAPPOINTED SYDENHAMITE.

R.M.—The paper is too long. It is more adapted for publication as a pamphlet than as a communication to this Journal.

G. Selwyn M.—1. We think to the employer. 2. Vegetable.

W.B.—He cannot dispense the medicines he prescribes.

S. E. E.—In Jersey or Guernsey, Yes. In France, No.

G. W.—The more recent publication is preferable.

M.R.C.S., 1853, has not complied with our rule of having the real name appended to communications.

T. O. D.—Sending testimonials to the Directors and Commissioners is the only way to obtain the appointments in question.

A Country Surgeon.—The letter shall be inserted.

Crito.—The office of the Benevolent College is No. 4, Hanover-square.

Charles F. C.—We do not. McDougall's work on Spermatorrhœa would probably afford the information required.

Mr. Sibley's letter shall be inserted next week.

We will endeavour to publish *Mr. Paget's* case of hernia next week.

Mr. Chalk's interesting case of ulcer of the rectum shall be inserted shortly.

Errata.—In our Student's Number, Dr. Andrew Smith, Director-General of the Army and Ordnance Medical Departments, was erroneously entitled "Superintendent of the Army Medical Department" only. The name of Dr. G. Owen Rees should have been inserted as Examiner in Materia Medica to the University of London.

We regret that want of space obliges us to defer the publication of Mr. Sadler's valuable paper on the Infectious Nature of Cholera.

An Ill-used Apprentice could not be compelled to carry out medicine.

The notice of the Crewkerne and Yeovil District Medical Society arrived too late for insertion this week.

U. N. S.—The case shall be noticed prominently.

An Original Subscriber.—The chloride of zinc is the most effectual means of destroying the odour in question. The solution sold as Sir William Burnett's Disinfecting Fluid is the most convenient form for using it, as it requires only simple dilution with water.

Dr. Fuller's important paper on Cholera and Choleraic Diarrhœa was received too late for this week's Number.

The letter of *A Private Medical Practitioner* must be deferred until next week.

Lectures of Dr. Hofmann and Mr. Skey, and communications of Mr. Wilde, Dr. Philip Frank, etc. etc., are in type, but their insertion is unavoidably postponed.

COMMUNICATIONS have been received from—

Mr. J. DAY; E. L. ORMEROD, Esq.; D. H. WEBER; A. WALKER, Esq.; PRESIDENT AND TREASURER OF ST. THOMAS'S HOSPITAL; A SURGEON TO A LARGE PUBLIC CHARITY; Mr. C. D. COLLETT; H. R. DE RICCI, Ballymahon; J. I. IKINS, Esq.; Mr. BRODHURST; Dr. GEO. JOHNSON.

ORIGINAL LECTURES.

NOTES OF LECTURES ON SURGERY,

DELIVERED IN

The Theatre of the Royal College of Surgeons of England.

By FREDERIC CARPENTER SKEY, Esq., F.R.S.

Professor of Anatomy and Surgery to the College, one of the Surgeons of St. Bartholomew's Hospital, etc. etc.

Lecture IV.

Before making the attempt to reduce a dislocation of long standing, the surgeon should take into consideration the particular conditions of the limb that have been alluded to in the last lecture. Of the three supposed difficulties, two only demand especial management; the first is the formation of the new capsule, the second the condition of the muscular system of the limb. If several months have elapsed since the accident, the capsule will resist straight extension to a great degree, and no advance will be made towards reduction. If the bone dislocated be either femur or humerus, the capsule will be strong enough to demand for its free laceration the forcible rotation of the limb in all directions, preceded by extension. In fact, the head should be forcibly raised from its abnormal surface, drawn and twisted in all directions, till the capsule is rent asunder, and this sound and sensation will be palpable. Great mobility of the limb follows. This obstacle being removed, we have to contend against all the other textures of the limb. The muscles are reduced in muscularity of structure, but their inorganic components have become firm, and with them the general tissue, vessels, nerves, and integuments; to contend against which, deliberate and steady extension are required, in lieu of the more vigorous efforts applicable to more recent cases. This second part of the operation may be postponed till the day or day or two following, if required by the violence of the first operation, or if the patient exhibit signs of suffering. Before the effort is made, we should attempt all that is within our reach to obtain relaxation of the skin, which should be well and repeatedly fomented, and rubbed with warm oil. When the pulleys are applied, the extension should be very slow, but the effort should be persistent. Uninterrupted extension, though desirable, is not indispensable. This is only requisite when we contend against true muscular contractility. The extension may be continued for one or two hours, or more, reaching eventually the highest power ordinarily employed. Should the attempt fail, it may be repeated once or twice. In the requisite administration of chloroform, it should be remembered that its anæsthetic properties alone are employed, unlike that of recent cases, in which it exercises a paralytic influence on the contracting muscular fibre, by the agency of which large dislocations are often readily reduced by one person. If the head be drawn towards the direction of the socket, it is not important that the line of traction should be exact. When the obstacle is removed, and the level of the socket reached, the head will readily pass into it without aid from the surgeon. The sound, if any, will be nearly inaudible, and the shock very slight, in proportion to the time elapsed. Hence the necessity of watchful observation by the chief operator. Unless this movement be detected, extension may be continued after the reduction. This I have seen. If the agents of extension be carefully applied, and extension as carefully made, there is no fear of rupture. It should be recollected, that we are but extending to the natural length of the textures, and the limb may be safely elongated something beyond this.

It appears to me, that great objections may be justly entertained to the practice of drawing on the bone dislocated. In the case of the humerus, be it recollected that, unlike other joints, we are drawing on a moveable socket; that, by applying extension to the humerus above the elbow, we include the muscles arising from the scapula, viz., the biceps and triceps; and that we, in fact, are thereby drawing directly on the scapula itself. We are drawing on the trunk through the medium of the pectoralis major, trapezius, and rhomboidei, whereas our object is to separate the humerus from the scapula.

In the case of the femur, by applying our extending agents around the thigh above the knee, we are drawing, in common with the dislocated bone, on the rectus, semi-tendinosus, and all the muscles connected to the pelvis. The practice is objectionable also in this, that where the limb is large, too large a proportion of it is involved in the material for extension, and there remains too little space for observation. Thirdly, there remains this objection; that neither the elbow nor the knee-joints are sufficiently prominent to prevent the occasional slipping of the extending agents over them, to the great discomfiture of all parties, and to the discredit of some of them. The main argument in favour of this practice is, the fear of injury to the intervening joint; and that is an untenable one. The ligaments alone, as I have stated, will, in the case of the elbow, bear as much extension as is required for the largest dislocations. In dislocations of the humerus, the extending force should be applied around the wrist; in dislocations of the femur, around the ankle. In all dislocations, chloroform should be administered. Its merits are both positively and negatively valuable. In recent dislocations, it paralyses the muscles, and destroys suffering. In old cases, the latter only. These are its positive merits. Negatively, it supersedes the old system of depletion, by bleeding, tartar emetic, and warm bath. The quantity of blood removed for the purpose of obtaining relaxation of the muscles was formerly enormous. It would be an interesting subject of inquiry to ascertain the relation between the quantity of blood abstracted and the contractile power of the muscles, how much is required to be evacuated by the system to lessen the muscular power within the range of an ordinary extending force. Doubtless, a great deal more than the health of the patient could spare with impunity. What was proposed was deliquium. Short of this effect, the abstraction of blood was of little avail. Happily, we now possess a "royal road" to deliquium, or, rather, to a state far preferable, viz., of simple unconsciousness.

I do not consider it possible to lay down any law which shall determine the expediency or otherwise of an attempt to restore a dislocated bone, unless we allude to a period almost of years. Mr. Avery has reduced a dislocated humerus at the expiration of a year. I have reduced two at three months, and I know of the reduction of the femur at four months. If it be practicable to break down the adhesions that connect the head to the contiguous surface, and obtain mobility of the limb, the contracted structures must yield to gradually applied and persistent, though oft-repeated, extension.

Such, among others, are some of the important principles which are requisite to be kept in view by the surgeon in the attempt to restore dislocations of long standing. Had time permitted, I should have devoted it to the subject of dislocations in detail. I conclude this lecture by a few cursory remarks on two or three of the more prominent accidents.

In dislocation of the humerus, the arm is extended most efficiently in a direction parallel to the body. It is useless to attempt to fix the scapula. It is neither practicable nor desirable. As the arm is drawn downwards, the scapula will revolve by the traction of the deltoid, inserted into the acromion, and thus the glenoid cavity will be directed towards the head of the bone wherever it is placed. The socket will seek the head at the same moment that the head is drawn from its abnormal surface. In dislocations of the femur, it is a great error to suppose that the situation of the head is limited to the four positions dictated by Sir A. Cooper. There are no two examples of this dislocation alike, and few bear out the symptoms described by authors. If a large circle be drawn around the acetabulum, within that circle the head may lie, and does lie *anywhere*. Hence the modifications and the varieties of the appearances. On the dorsum ilii the bone may lie from one to three inches above the socket. Thrown backwards, it rarely reaches the ischiatic notch, but more commonly lies on the dorsum acetabuli; yet, in enumerating these dislocations, the name is unknown. In dislocation on the obturator foramen (thyroid), the head may be thrown more or less inwards or outwards. In one case, we have positive eversion of the limb; in the other, none. In one, we can feel the head from the perinæum under the origin of the gracilis; in the other, not. The same variety exists in dislocations on the os pubis. Sometimes the head is thrown upwards under the vessels, which are forced prominently forwards, sometimes on their inner side. We do not take sufficient cognizance of these varieties. All dislocations occurring at the elbow-

joint, that can be reduced at all, may be reduced by simple extension. In dislocation of the radius and ulna backwards, it appears to me most objectionable to attempt to bend the limb before the ulna is replaced. Fracture of the coronoid process, the fulcrum of the lever, is a probable consequence. I have seen it to occur, and renewed dislocation follow the reduction.

CLINICAL LECTURE ON THE DIAGNOSIS OF INCIPIENT LENTICULAR CATARACT IN ELDERLY PERSONS,

AT THE

Central London Ophthalmic Hospital.

By H. HAYNES WALTON, F.R.C.S.

Surgeon to the Hospital, and Assistant-Surgeon to St. Mary's Hospital.

[Reported by J. REED, Esq.]

Gentlemen,—When the student of surgery reads an account of hard cataract, he can scarcely fail to infer that its recognition is obvious, as the systematic descriptions usually apply to the most advanced stages of the affection; and certainly nothing can be easier than the detection of the fully-formed cataract, for the disease forces itself on the attention, being palpable alike to the unpractised as well as practised observer. But, with the incipient form, the reverse prevails; for it is most difficult to detect, and solely because, after a certain period of life, a change is effected in the eye that is similar to it, and because certain diseases, which in their commencement resemble in symptoms those of incipient cataract, having their origin in the posterior part of the eye, are, in consequence of this change, the more likely to be confounded with incipient lenticular opacity. I allude to the different forms of amaurosis and to glaucoma. The coloration of the crystalline lens that appears about the middle period of life, increasing as years roll on, and which is much more visible in some individuals, and always very apparent in the dark races of man, is the natural alteration in the eye to which I refer.

Now, as the value of what I shall adduce depends on the truth of the assertion, that the loss of blackness of the pupil is due to this change, I adduce as proofs, first, the well-known fact, that the crystalline lens, when removed from an old person's eye, is always amber-coloured; secondly, that blackness is always restored to the pupil of the aged after a cataract has been removed. I should tell you, that this differs from the commonly-received opinion, which is, that the pupil loses its colour in consequence of the choroid being deprived of its pigment. The late Mr. Dalrymple, of honourable memory, states, in his work on the Pathology of the Human Eye:—"When individuals become grey-headed, the choroidal pigment also becomes lighter, or perhaps deficient, as well as the colouring matter of the hair; and hence the membrane (the choroid) no longer absorbs all the rays of light which penetrate the eye; and the pupil, instead of the intense blackness of earlier life, appears greyish. If, at the same time, there be any defect of vision, arising from any other cause, some of the more obvious symptoms of early cataract appear, and give rise to erroneous opinions as to the nature of the disease."

Let us now examine the right eye of the patient, Elizabeth Mason, aged 59. The left is staphylomatous from an accident; for this she is in attendance. A better example of lenticular coloration I could not desire to show you. You may possibly remember that, a few days since, I asked a gentleman standing at my desk to name the affection of the right eye, and he said "cataract." You see that she can read off the instructions on her card of attendance in the several types, one of them small—"minion"—at a distance of ten inches, and that with her face to the light. This is so decisive of the greyness of the pupil being independent of cataract, that her own declaration of having nothing the matter with the eye, beyond being more "long-sighted" than when young, adds nothing as a confirmative.

Here the simplest investigation affords a correct conclusion. But let us contrast this with a similarly altered pupil, co-existing with imperfection of vision.

Jane Wilson, aged 60, complains of dimness of vision, of a kind not unusual with cataract, but which may depend on other causes. The pupils are, as you will observe, greyish; the practical point, therefore, in the present instance, is, in the absence of spots, or striæ of any kind in the lenses, to decide from their physical characters whether cataract is present or absent.

As a rule, the appearance presented by the pupil, rendered coloured from the natural amber change in the lens, differs from the loss of blackness consequent on cataract, in the colour being, as it were, reflected from a depth, whereas the opacity produced by cataract looks superficial, and the colour is deader. I should tell you, that an examination of the eye cannot be accurately made unless the pupil be dilated, so that the outer portion of the lens may be seen; for it alone may be pervaded by opacity, a condition of much more frequent occurrence than surgeons suppose. Then the posterior part of the lens may be partially opaque, and the detection of it might be difficult, except with the assistance of a dilated pupil. Besides this, you will derive advantage by throwing light into the eye from a magnifying glass. Now, with the application of all these means, no satisfactory conclusion can here be drawn, and at best I can only venture to suppose that there is not incipient cataract. The state of the vision of each eye being alike, turns the balance in favour of this opinion. I ascribe, therefore, the greyness of the pupil, marked as it is, entirely to the natural change in the lens—the natural coloration. What a stumbling-block this has been to surgeons! How it has puzzled them! How they have, from the weight of authority, been misled by it! I do not know of any writer who has attributed it to the correct cause; therefore it has never been regarded in the light we are considering it, and hence, also, it is not alluded to in the descriptions of cataract. It has, however, been much dwelt on as a symptom of amaurosis; and ingenious, but very false theories, have been suggested to account for it.

I regret to tell you, that our knowledge does not furnish us with any infallible marks of distinction for incipient cataract in the old subject. It must be apparent to you how great is the nicety demanded, how delicate the test required, to detect slight opacity supervening on an already coloured lens. Besides, you will see still greater difficulty, if this opinion—of which I entertain a strong conviction—be correct, namely, that the lenticular coloration from age may in itself be sufficiently intense to obscure sight.

It is only by watching a patient like that before us, in which doubt exists, that the truth can be learned. Here we find an explanation of the discredit that surgeons often reap when they will at once declare a positive diagnosis in a questionable case. The more I practice, the more careful am I not to speak definitely with such uncertain data before me. Moreover, my caution is heightened by the knowledge of errors in diagnosis, committed by older practitioners than myself in ophthalmic surgery, incipient cataract being regarded as amaurosis, and *vice versâ*.

I am just about to operate in private for cataract in a gentleman, 55 years of age, who had been, in the early stage of the disease, heroically treated for amaurosis. There is, too, now in attendance at this hospital, a man whose case has been similarly mistaken. In ignorance of the difficulty of diagnosis, you would, perhaps, think it a matter of marvel that the surgeon concerned in the latter could commit such an error, he being a practitioner of some reputation.

It must have occurred to you, that I have omitted all cognisance of the catoptric test for the elucidation of my subject; and it must appear an omission, inasmuch as it is supposed to be so serviceable in detecting cataract. I discard it as worse than useless. The natural coloration of the lens so modifies the reflections of the candle flame, as to render the test unavailing, and may even cause it to mislead.

I must not omit to mention one fact connected with the power of vision in association with the natural greyness of the pupil, or else you may often suppose cataract to exist when it does not. I mean the great variation in the presbyopia of the aged. On this account we must be guided by their power of vision at a distance, rather than near. If an object at several yards can be discerned with a definite outline—that is, if distant vision be good—no matter how much the visual angle may require to be increased by glasses for minute purposes, and however grey the pupil, you may conclude cataract does not exist.

In further proof of having correctly ascribed to the proper source all the uncertainty that surrounds the recognition of

incipient hard cataract, I refer you to the readiness with which lenticular opacity can be detected in early life.

The pupil in youth is so intensely black, that the least loss of the hue should be attributed to disease. A slight acquaintance with ophthalmic affections will enable you to determine the seat of the morbid change,—whether it be in the crystalline lens, or situated posteriorly.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS.

No. VI.

EXTRACTS FROM OFFICIAL REPORTS UPON THE EFFECTS OF CHLORIDE OF ZINC IN DEODORIZING OFFENSIVE EFFLUVIA FROM CESSPOOLS, SEWERS, ETC., AND IN DECOMPOSING POISONOUS EMANATIONS FROM THE BODIES OF THOSE AFFECTED BY CONTAGIOUS DISEASES.

Now that Cholera is again in the country, it is impossible to give too much attention to the subject of noxious effluvia, in relation to its origin and propagation, or to value too highly any simple, inexpensive, and harmless means of decomposing such effluvia, and thereby rendering them innocuous.

The emanations from sewers, privies, cess-pools, drains, collections of decomposing animal or vegetable matter, and the products of various chemical manufacturing processes are now universally recognised as—1st. The sole causes of certain forms of disease; 2ndly. By their debilitating effect upon the body, as predisposing it to the reception of infectious or contagious epidemics; and 3rdly. Possibly by admixture with some atmospheric impurity forming the poisonous admixture, which is the actual morbid principle of cholera and other epidemics.

The emanations from the human body in a state of health, —the carbonic acid and other gases, and the fluid charged with organic matter disposed to putrescence, both thrown off from the lungs and skin,—when introduced again into the body, are highly injurious. Hence the evil of overcrowding even of healthy persons. The gases become more or less diffused, but the organic matter is deposited upon bedding, clothes, etc., and is easily recognised for weeks or months by its peculiar odour.

Lastly. In diseases which, like small-pox, are unquestionably propagated from one person to another, the emanations from the bodies of the sick must contain some special poison, which, received into the body of a healthy person, or one unprotected by previous attacks, or one predisposed to disease by any cause lowering the state of general bodily power, produce the special disease.

The history of cholera, and of all epidemic diseases, proves that it is persons who breathe air polluted by one or other of these sources of impurity, or those who introduce putrescent matter into the system in some other way, as by drinking water contaminated by sewerage or other decomposing matter, or by eating tainted food, who are the victims.

We are now to show, that there are strong grounds for believing that each and all of these sources of atmospheric impurity may be decomposed by the use of the chloride of zinc. On the theoretical question, we may quote the following passages from letters from Sir William Burnett to the Secretary of the Admiralty, and from Dr. W. Lindsay, R.N., Deputy-Inspector of Hospitals, to the Earl of Auckland.

Sir William Burnett says, "There is not, so far as I am aware, any means known by which a specific contagion may be made perceptible to the senses, in contradistinction to a fever-exciting miasm; if such an entity does really exist in a separate form, Professor Liebig supposes it most readily attaches itself to certain noxious gases, and by that means propagates the peculiar disease to which it belongs. These gases, however, as previously observed, are capable of being destroyed by the solution, and, it seems not unreasonable to infer, the contagion also; but if this be not admitted, it is clearly demonstrable that, from the want of a proper vehicle of conveyance, it must be rendered, at all events, infinitely less diffusible."

Dr. Lindsay says, "In the present state of chemical science, it is impossible to say what action the chloride of zinc has upon that entity called miasma, or the matter or matters formed during the progress of diseases of a decidedly contagious nature, and only known to exist in the secretions and exhalations of the sick, from their power of transmitting disease from one individual to another; yet, from its powerful effect in arresting the process of putrefaction, and destroying the noxious effluvia arising from animal and vegetable matters, while in a state of decomposition, (universally acknowledged to be a prolific source of disease,) it is an agent of infinite value.

"It is a well-known chemical fact, that hydrogen in a nascent state combines with many bodies with which it is in contact at the moment of formation, and carries them with it into the atmosphere. Sulphuretted hydrogen is often formed under those circumstances, and, in small quantity, exercises a most deleterious influence on the health of man and the lower animals. When diffused through the atmosphere in a larger proportion, death itself often follows; more than one instance has occurred lately in London, where this latter effect was produced in a very short space of time. The energetic affinity of chlorine for hydrogen renders their existence in the atmosphere in a separate state impossible; and the re-action of the chloride of zinc on the gaseous compounds of hydrogen and of ammonia causes a mutual decomposition, by the combination of the chlorine of the one body with the hydrogen of the other, and thus neutralises the noxious influence of the compounds of the latter."

We shall now give some of the practical results which have followed the use of the chloride as a deodorizing and disinfecting agent.

The following notes by Dr. M'William will prove the power of the chloride of zinc in decomposing the effluvia liberated from feculent matter:—

"January 26, 1848. — Cesspool in Westminster-yard (which, from information from an official hard by, had not been opened for twenty years) 6 feet long, 4 feet broad, and 7 feet deep.

"The cesspool was brimful, therefore the mass to be operated upon by the solution consisted of a cube of ordure = 168 feet, which was treated in the following manner:—

"A quantity of paper, straw, and other fibrous matter, was raked up from the surface, with the effect of causing the mass to emit a most insufferable smell; I say insufferable, because the hydro-sulphate of ammonia and other gases were so abundantly evolved, as to drive us back from the privy-door. Mr. Glass, at this time, directed the nozzle of a tube connected with a forcing-pump, containing the solution (diluted with fifty parts of water) to the surface of the contents of the privy, and the power of the solution in destroying the gases was evident in a very few minutes, for all of us could enter the privy with little annoyance, while the smell in a coal-house next door was horrible, from the quantity of gas that had escaped before the chloride was applied. When a sufficient quantity of the solution had been poured in to fluidify and deodorise a stratum of ordure, say a foot deep, the nozzle of a hawse, perforated at the end with small holes, was plunged into the mass, and the fluid contents were drawn off by means of a double action pump. By continuing this process the cesspool was emptied. On breaking ground, at every fresh stratum, the stench was most noisome; but it was instantly annihilated the moment the solution fairly penetrated the mass. After this, I need hardly say, that when the privy was emptied it was perfectly free from smell.

"The quantity of solution used was less than I had expected, eight quarts only being required, thus—$8 \times 50 = 450$ quarts, or about 112½ gallons to liquefy, so as to be penetrable, a tolerably solid cube of 168 feet. On examining narrowly the matter operated upon, there was no ocular evidence of a chemical action. A sulphuret of zinc must, I presume, be formed, but the precipitate is white, and is not discernible in the colouring matter of the animal substance. There was not either, so far as any present could discover, any proof of the formation of a new gas (as in many instances of chemical re-action) appreciable by smelling, the only change being a gradual and steady diminution of the offensive smell, until this was completely annihilated.

"There were two other gentlemen present during about an hour; they went away quite satisfied with the experiment, even so soon as that; for the process occupied two

hours and a-half, the liquefied mass having to traverse about 180 feet of hawse before it was discharged into a drain outside."

It is most important, that in emptying and cleansing cesspools, the deleterious gases disengaged by the disturbance of the soil should not be allowed to escape and poison the neighbourhood, but that pumps, with tubes like fire engines, should be used, the soil being diluted with water, so that it may be more easily pumped and discharged into closed carts. It may be thus removed without any unpleasant or injurious effluvia escaping, if a sufficient quantity of Sir William Burnett's solution of chloride of zinc be mixed with the water used for dilution. Numerous instances will be found in the third Report of the Metropolitan Sanitary Commissioners, where remarkable improvement followed in the health of various districts, when cesspools had been cleansed by this process. On this point, we may quote an extract from a Report, by Messrs. Roe and Phillips, the surgeons to the Commissioners of Sewers:—

"As regards the cleansing of courts and alleys, and of cesspools, we have emptied the contents of cesspools into the sewers by means of pumping. For this purpose we have used a fire-engine, with hose attached, the end of the hose being inserted into the cesspool, and the other put down the nearest gully-drain. The New River Company kindly sent their turncock to supply water for diluting the contents of the cesspools. The experiment of conveying the soil from the cesspool to the sewer by the means employed was decidedly successful, and much less expensive than the ordinary mode of emptying them.

"Previously to commencing the cleansing, the stench was most obnoxious; but, upon a solution of Sir W. Burnett's chloride of zinc being thrown upon the surface of the soil, and upon the paving and walls around, it had the desired effect of destroying it; nor did any unpleasant smell arise during the process of removal."

The following statement of Mr. J. H. Haire, surgeon of H.M.S. Resistance will show the power of the chloride in decomposing the effluvia from the human body:—

"Her Majesty's ship Resistance having been employed in the conveyance of troops during the last eighteen months, has afforded me many opportunities of testing the influence of the solution of chloride of zinc as a sanitary agent.

"I may preface my remark by stating, that on more than one occasion there have been upwards of 800 persons on board, and that the women's room, from being situated in the after-part of the lower deck, and extending the whole length of the former gun-room, is, even under the most favourable circumstances, exceedingly close; but in bad weather, when the stern-ports have to be kept shut, the noxious effluvia are then intolerable. On visiting this apartment in the morning, accompanied by Dr. Robertson, surgeon of the 1st battalion 44th Regiment, shortly after the battalion embarked at Cork, in April, for a passage to Malta, such a vitiated atmosphere existed as to render the apartment unfit for occupation. However, after the application of the dilute solution, all unpleasant effluvia disappeared. It is also to be remarked, that this apartment was unoccupied throughout the day, except at meal hours, and a free current of air established through it by a wind-sail, when the weather admitted, and, in addition, the utmost attention to cleanliness was evinced daily by those who had charge of the keeping it clean; yet the unpleasant effluvia could not be removed until the dilute solution had been copiously sprinkled over the deck."

Mr. B. Verling, surgeon of H.M.S. Vengeance, writes: "On our passage from Halifax, with the 60th Regiment on board, the weather was so bad, and the ship working so much, that it was quite impossible to open any of the lower-deck ports, on which deck the whole of the people lived, troops as well as our own people, for eight days; the air throughout the deck was exceedingly vitiated with every mixture of noxious smell, but the free use of the chloride of zinc tended, in a most surprising manner, to do away with the bad smell,—so much so, that the Surgeon of the regiment came to me to get some to use in the part of the ship where the ladies of the officers were. The effect of the chloride of zinc is most obvious in correcting all bad and offensive effluvia; and, from the sudden and surprising manner in which the measles disappeared after its use, it is not, I think, too much to say that it must have been very instrumental in decomposing the miasm, or state of the atmosphere, in the ship, which tended to the generation of the disease."

Dr. Cronin, of the Cork Fever Hospital, says, with regard to its influence on typhus and dysentery: "I commenced its general and exclusive use on Sunday, the 20th of June, chloride of lime having been previously in use: and have no hesitation in distinctly stating, that I found it a powerful agent in speedily removing all noxious, unwholesome, and offensive smells, arising both from the external and internal excretions of a number of persons occupying the same room, and which will arise, no matter how well soever ventilated such apartments may be.

"The effect of the use of chloride of zinc was not only observable in all the wards of both hospitals, but in the yards, necessaries, and cesspools. That the purification of the air should have much influence in modifying the character, and in mitigating the severity of a disease, (by many, very many, supposed to be contagious,) is an axiom very extensively, if not generally, admitted.

"How far such influence has been exercised by the use of the chloride of zinc on the cases of disease under treatment, during the time before specified, I leave to you and others to draw your and their own conclusions from the facts which I am now about to state.

"In the month ending June 15th, 83 persons of both sexes were treated in hospital; of these, 10 died. Whereas, from June 15th, to this day, July 15th, there were admitted 162, of those 4 died (3 males and 1 female,) 94 were discharged cured, and 64 remain under treatment. In every case of public and private practice, whether of this disease or fever, the effect of the diluted solution of chloride of zinc, in removing the fetor arising from the excretions, and the noxious smells generated in the air of the wards and rooms, has been most magical.

"Although I have not been able to come to any more decided conclusion as to its curative powers in fever or dysentery, I must only allow you to deduce your own inferences from the fact, that in our hospitals, since I last wrote to you, over 350 cases of fever have been treated, and only six deaths have occurred; while outside, of over 400 cases of dysentery, not more than four deaths have occurred; two of those in very old people, and two infants."

Dr. James Hall, Medical Superintendent of the Convict Establishment at Bermuda, writes: "There lately lay in one of the wards of this ship a patient labouring under mortification of the lungs, from whose breath was exhaled an odour so putrid that I was obliged to remove the other patients from his vicinity; nor could any means be found, by open ports, chloride of lime, etc., of freeing the ward from the horrible nauseating odour that the surface of the body and breath of this patient emitted; but on using the chloride of zinc solution, and suspending over the patient a cloth wetted with it, in a few minutes the odour ceased, and, during the few days he lived, the chemical power of this solution destroyed the putrid gases most effectually."

With regard to dysentery, Mr. John Gallagher, surgeon of H.M.S. Arab, states: "In the dysenteric cases where the discharges were of the most fetid and offensive odour, and when it was occasionally necessary to keep them for a short time, (as it was only by a frequent inspection of the evacuations the progress of the case could be ascertained,) by pouring a small quantity of the dilute solution in each vessel, sprinkling the decks liberally, and occasionally the patient's bed-clothes, the bad smells were almost completely prevented, and a feeling of freshness in the air was often experienced after such application; and in this way it must prove a powerful adjuvant in the treatment of such diseases. Without its aid, I do not know what we should have done on a late occasion. We were at anchor for a week during a heavy gale of wind in the Yang-tze-Kiang, the hatchways covered over—there being a heavy sea at the time—and we had some cases of chronic dysentery confined to their hammocks on the lower deck. If by any neglect the use of the solution was forgotten on requiring the bed-pan, the smell became so intolerable, that it was impossible to remain on the lower deck; while, by taking the precaution of putting a little of the solution in the bed-pan previously, the bad smell was almost completely prevented. It is only on such occasions its real value as a deodorizer can be sufficiently appreciated."

All this will prepare the reader for the evidence that the solution of the chloride of zinc is a valuable agent in arresting the spread of cholera. This evidence is entirely practical.

Dr. A. M'Clure, Assistant-Surgeon R.N., writes, "In a house in St. Andrew's-street, Plymouth, occupied by 52 persons, it was sprinkled in every room except four. In these the occupants would not permit it to be applied; the result of which was, that in those parts of the house where it had been used, not a single case of cholera subsequently occurred, while in the four rooms above alluded to, the disease still exists, and some deaths have taken place. Two houses immediately opposite were supplied with a quantity, in neither of which has there as yet been a single case, although the disease is raging in the neighbourhood."

Dr. Benbow, surgeon to the Plymouth Board of Health, speaking of two houses long exposed to the effluvia arising from accumulations of filth, says, "In one of these houses diarrhœa had long prevailed, affecting the whole of the members of the family; since the use, however, of the chloride of zinc, the disease has subsided, and they now continue in good health."

Mr. E. Nolloth, surgeon, and Mr. F. Rayner, assistant-surgeon of the cholera ship Menelaus, certify as follows:—"A further employment of the solution of chloride of zinc for six weeks on board the Menelaus during the prevalence of cholera on board that ship, has tended to strengthen the favourable opinion we expressed of it on a former occasion, when cholera broke out at Woolwich (among the convicts) in October last. As a disinfectant its utility is in our opinion incomparably superior to anything of the kind we have ever employed, being perfectly free from all unpleasant odour, which is so much complained of in the employment of chloride of lime. We found it particularly useful in freeing the bodies of the patients suffering from cholera from that particular and disagreeable odour which arises from them during the latter stages of the disease.

"By placing it in close stools all effluvium was destroyed. After the process of purifying the hair which had been removed from the beds, no odour whatever could be perceived, although previously to its being washed with the solution the smell was most offensive."

John Bowler, Esq., surgeon R.N., writes, "My endeavours, of course, have been confined chiefly to the sick chamber, where, I am thankful to say, I have found its use of the utmost importance in almost magically dissipating the unwholesome and offensive smells arising from the external and internal excretions and exhalations of the human body suffering from cholera: its good effects were not only observable upon those already attacked with the disease, but in checking a further spread of this fearful malady among those in attendance about the sick; and I have no hesitation in bearing testimony, that many valuable lives have been spared by its use, which otherwise would have fallen a sacrifice.

"Since the 18th ultimo, I have had under my care nearly four hundred cases of cholera and choleraic diarrhœa, many of which were strongly marked by symptoms of extreme virulence and malignity. However, I am rejoiced to say, that only sixteen of that number have fallen victims to the disease."

The following is an extract from the Medical Report of Mr. B. Verling, surgeon of the Naval Hospital at Haulbowline:—"On the first appearance of the disease on the island, (Haulbowline,) I recommended among the people to pay all attention to the cleanliness of the localities about their houses, with as much ventilation through the houses as possible. On the houses being made clean, I supplied among them generally, and to a liberal extent, the solution of the chloride of zinc, diluted with twenty parts of water. I had tubs containing twenty gallons of the mixture placed near the houses, to be used by the people *ad libitum*. There were some old flannels and blankets remaining in store which had been condemned; these I divided among the people, with instructions how to use them with the solution; they did so use them with attention, and in the most appropriate manner. There are some sewers which were extremely offensive, running under the houses and terminating in a cul de sac,—large quantities of the solution were from time to time thrown into these sewers, and every taint of bad smell was thereby rapidly removed, and the atmosphere in the houses and about kept quite free from any offensive odour. After the first application of the solution, I had no occasion to urge its further use, as the people became so sensible of its good effect, that they continued its use in a satisfactory manner. The consequence has been, *that I am unable to say how many cases of cholera we really had;* for the disease became so mitigated in virulence, that there were many cases of vomiting, purging, lividness, and coldness of the surface, which can scarcely be put down to malignant cholera, yet, I believe, would have been so but for the precautions taken. On the Ordnance side of the island, separated from us only by a wall, the cases were much more numerous, and more malignant in character. The medical attendant on that side is a private practitioner, and, finding the disease extending, he applied for, and was supplied (per admiral's order) from the hospital with, the solution. After its use, he, I believe, found the disease checked; and the cases which did occur were of a milder type. We have had in the hospital typhus, small-pox, and nearly all the diseases of a contagious nature, and we have not had one single instance of any of these diseases being propagated by contagion. In isolating any cases, I have been more influenced by the consideration of the repose of the patient than by apprehension of the spread of the disease. From a good deal of experience, I feel very fully convinced of the efficacy of the chloride of zinc in counteracting the spread of contagion; and in the hospital, the nurses, who are not generally disposed to give themselves more trouble than they can help, use the solution most assiduously, which, I believe, arises from their own conviction, from observation, of its power."

Dr. John Paddon states:—"As consulting medical officer at Mevagissey during its late severe visitation from malignant cholera, I had most abundant proofs of its value in removing from the sick-rooms of the poor the nauseating smell so peculiar to dirt and disease, and am decidedly of opinion, that its free use was of the greatest service in arresting, in diseased localities, the progress of the disease.

"From the impossibility, at one time, of procuring nurses, the condition in which some of our patients died was most deplorable, and the removal of the body and destruction of the bedding could not have been safely performed but for the solution of the chloride, which was, in such cases, most freely used, and, in every instance, acted as a perfect deodoriser."

The following is an extract from a special Report on cholera, by Dr. Rae, Inspector of Hospitals, etc.:—"Of this powerful deodorant and disinfectant—having now had long experience—I cannot speak in too high terms. During the prevalence of the late pestilence, it has been used not only in the cholera wards, but in every ward in the hospital, as well as in the adjoining private dwelling, and the total immunity which we have enjoyed, both in the latter and within the walls of the hospital, would almost corroborate the fungous theory of the disease, and lead to the belief, that the minute spores or germs of these bodies are immediately annihilated the instant they come in contact with this fluid. It has been observed, that cholera has ceased in one part of a thickly-inhabited house in which the solution was used, and continued its ravages in another where the solution was not used. Mr. Bowden reports, that the washerwomen at Noss suffered from cholera, which led to the supposition of infection, but that, after the free use of the fluid, they entirely escaped, and the disease began to decline."

Captain Wriford writes to Sir William Burnett:—"Some of the attendants caught the infection previous to using the chloride, as directed by Captain Nicholas; and it is a strong proof of its efficacy, that none who washed the infected linen in the water prepared with zinc, died; but two that did not, fell a sacrifice to the disease."

Dr. Forbes, of Inverness, says:—"I employed it in purifying the houses of cholera patients, with the most beneficial results, both to the sick, and as a preventive of the spread of the malady. It was extensively employed by our police in our affected localities, and its influence in destroying all foul effluvia was truly marvellous. Its use had the effect of diminishing alarm, and creating confidence in the minds of the people."

The following is an extract from a Special Report on Cholera, by A. M'Clure, Esq., M.A.:—

"Two or three women who had been employed in washing the clothes of cholera patients, were, in a short time afterwards, seized with the disease, and fell victims to it. On learning this circumstance, I caused the bedding, bed-clothes, etc., of persons who had been affected with the malady, to be steeped for forty-eight hours in a solution of the chloride of zinc, previously to being washed; and, since this has been done, no such calamity has occurred. I have invariably used it on all occasions in the rooms of the sick

where it has had a most powerful influence in overcoming the unpleasant smell arising from the excretions of the patients, and in keeping the apartments comparatively pure."

Our last extract is taken from the Journal of Dr. David Geddes, Surgeon of H.M.S. Poictiers:—

"I consider it my duty especially to state, that, as soon as the use of the disinfectant had been regularly established in this and the other ships belonging to the ordinary at Chatham, diarrhœa, which had been prevailing epidemically, began to subside, and in no instance did it subsequently pass on to the stage of confirmed cholera."

These extracts, taken from a large number of similar reports, are quite sufficient grounds for inducing us to recommend our readers to urge upon all with whom they have influence the benefit they may confer upon the community by having the chloride of zinc freely used in all the necessary operations for cleansing cesspools, privies, drains, etc., in the purification of unclean houses, and in all places where many people are crowded together, especially if any of them are suffering from the prevailing epidemic cholera.

CHOLERA AND CHOLERAIC DIARRHŒA.

By HENRY WILLIAM FULLER, M.D. Cantab., F.R.C.P.
Assistant-Physician to St. George's Hospital, etc. etc.

The subject of cholera and choleraic diarrhœa is at the present time one of unusual interest to the Profession and the public. The disease has been stalking unchecked over the Continent, and has daily swept off hundreds of victims. Already it is raging severely at Newcastle, and we in the Metropolis have reason to expect to see the scenes of '49 re-enacted in the summer of '54. How piteous the tale of our past experience! and, unless some new mode of treatment can be devised, how gloomy must be our anticipations of the future! What is there that has not been fairly tried? What is there that has not failed? These are questions which admit, I believe, of satisfactory solution, and which it is my present purpose to answer.

In the summer of 1851, the attention of the Profession was directed to a strange and newly-discovered property of sulphuric acid. That which had been regarded as a frequent source of belly-ache and purging was vaunted as a certain cure for these evils; and medical men were called upon to examine and report upon this novel anti-cholera specific. It was not, however, until the month of September, 1851, that I had an opportunity of testing its efficacy in the cure of true choleraic symptoms. In that month, two most urgent cases of choleraic diarrhœa, attended by extreme collapse, violent and incessant cramp, pinched features, rice-stool evacuations, and matters resembling chicken-broth rejected from the stomach, were admitted about the same time into St. George's Hospital. Had these cases occurred in the autumn of '49, they would have been designated cases of Asiatic cholera; they differed in no respect from genuine cholera, and were entitled cases of choleraic diarrhœa simply because cholera was not then prevalent as an epidemic. In both these instances I administered sulphuric acid with complete success; and, as the action of the remedy could be attested by pupils and others, who witnessed the success of the treatment, I published in the *Medical Times and Gazette*, (January 10, 1852,) a detailed account of the effects observed, together with the general result of my experience. It amounted to this,—that the dilute sulphuric acid of the Pharmacopœia, administered in half-drachm doses, repeated at short intervals, has a powerful and immediate influence over the disease. The vomiting and purging cease, and the cramps subside, sometimes after the second, more usually after the third or fourth, dose of the medicine. The attack may leave the patient weak, and usually does so, in proportion to its severity, and the length of time which has elapsed before the administration of the remedy is commenced; but, within three or four hours, the disease is arrested, and convalescence follows speedily. Indeed, in ordinary cases, the change is effected with such marvellous rapidity, that he who in the morning is utterly prostrate, in the evening experiences little ill effect from his fearful seizure.

I had hoped that this circumstantial report, backed as it was by the result of my own experience, extending at that time to twenty-seven cases, and as it has since been by the concurrent testimony of several practitioners in different parts of the country, would have led to a recognition of the extreme value of this treatment in all instances of choleraic diarrhœa, if not of cholera; at all events, it seemed but fair to presume that testimony so decided, in favour of a remedy so cheap, so harmless, so extremely simple, so uniformly successful, and producing its successful and striking results within so short a time of its administration, would at least have insured a trial of its virtues. But, unfortunately, the Profession cling so rigidly to routine, that comparatively few have been induced to employ it, and thus its virtue as an anti-cholera specific remains almost unknown or disregarded. To give large and repeated doses of calomel, or opium, or cajeput oil, or chalk, or brandy, to employ saline injections into the veins, to wrap the patient in bran or mustard poultices, or to have recourse to one or all of the many expedients which are often resorted to in severe cases, has certainly a much more imposing effect, and is a proceeding more strictly "selon la règle," than the simple administration of sulphuric acid; yet, when it becomes known that the latter mode of treatment, albeit simple and unpresuming, effects its purpose perfectly, sometimes within one hour, usually within two, and always, I believe, within four hours; whereas the former, even when successful, (and that it is often unsuccessful the Registrar-General's Reports sufficiently attest,) requires many hours for the accomplishment of the same object, and leaves the patient in a state requiring as many days for recovery, it cannot be much longer a question as to which method of treatment shall be adopted. This is a matter in which, if the Profession will not act, the public will certainly take the initiative. If once it becomes known that a halfpenny-worth of acid is more than sufficient to effect a cure,—that the acid, when properly diluted with water, is so harmless, that it is not unfrequently drunk as a lemonade during the hot weather in the south of Italy, and, throughout the continental states, is served out in accordance with a police regulation, as a daily beverage to all persons engaged in the manufacture of white-lead, it will not be long before a bottle of the dilute sulphuric acid of the Pharmacopœia is duly installed in every housewife's medicine cupboard. The Profession have yet time to take the matter into their own hands; but, if they do not soon avail themselves of their privilege, the public will assuredly step in, and deprive them of the opportunity.

My own conviction is, that in sulphuric acid we have an antidote—a specific—against choleraic diarrhœa, if not against the worst forms of cholera, as powerful, as energetic, and as certain in its effect, as is cinchona bark, or quina, against a paroxysm of ague. In bilious diarrhœa, and in certain chronic diarrhœas, it is of little or no avail; and, in some, though in very few, according to my experience, it gives rise to pinching pain in the abdomen; but, in epidemic diarrhœa, in acute autumnal diarrhœa, if I may so term it, and in more decided choleraic diarrhœa, I have known no single instance of its failure; indeed, the more choleraic the diarrhœa, the more speedily are its curative effects produced. This fact will appear of greater value when it is known that I have notes of its administration in above ninety such cases, many of which have occurred among my own patients at the hospital or elsewhere, and some in the practice of my friends.

With this, however, even more than with other remedies, success depends upon the mode of administration. Given at intervals of three or four hours, it fails in exerting any curative influence in severe cases, and is seldom of much avail, even in milder cases; and, to insure its beneficial effects, it should be exhibited in full doses, repeated at much shorter intervals. When I first began to give it, I ordered two doses to be taken within the first hour, and a dose to be repeated every hour afterwards. But recent and more extended experience, together with the close and eager observation of its influence on my own person, has convinced me that, even in ordinary cases, twenty minutes form a sufficient interval between each dose. In severe cases, five or six doses may be given with advantage within the hour; and, should any dose be rejected by the stomach, another should be administered at once.(a) Rarely, how-

(a) Mr. Buxton, of Great George-street, Westminster, to whom the Profession is greatly indebted for having been the first to call attention to the anti choleraic properties of sulphuric acid, recommends the administration of half-drachm doses every quarter of an hour in severe cases. If those gentlemen who make trial of the remedy so strongly recommended by Mr. Buxton would use it as they ought, in the manner and in the dose he directs, and administer it only in proper cases, we should seldom, if ever, hear of

ever, is any dose rejected except the first, and the rejection of that is by no means common. While loathing the sight of other liquids, the patient, after he has tasted the first dose of the medicine, very generally craves for its repetition, and drinks it with avidity.

As the stomach is very irritable, and the acid taken in simple water is, under the circumstances, extremely palatable, I never mix it with syrup or other matters; and I strongly suspect the warm aromatic spices, with which some of my friends have flavoured it, are additions by no means agreeable to the patient. Unfortunately, I have had some personal experience in this matter, and so strongly was my distaste to the medicine excited by such flavourings, that for the future, whenever I am the patient, I shall certainly put my veto upon them.

The effects produced by this remedy are very remarkable. Sometimes, after the second dose, more commonly after the third, and almost always after the fourth, dose of the medicine, the patient experiences a grateful sense of warmth at the epigastrium; heat returns to the extremities; the nausea and vomiting immediately cease, even if they have not been arrested already; the purging is stayed, the cramps subside, and the countenance re-assumes its natural appearance. Very generally, perspiration breaks out, and the patient goes to sleep, and awakes refreshed, though feeling somewhat weak. The other symptoms betoken a like amendment. The tongue, which before was dry and furred, or shrivelled, becomes moist and but slightly coated; the evacuations from the bowels assume a healthy colour, and are accompanied by an unusual discharge of bile; and the pulse regains its normal steadiness.

Such being the case, it is unnecessary, in mild or ordinary instances, to have recourse to any further treatment. With due precaution as to over-exercise and fatigue, and strict attention to the amount and nature of the diet during the next few days, so as to allow the stomach to recover its wonted energy before its powers are again fully taxed, the patient usually recovers without let or hindrance. The bowels act regularly without the assistance of medicine, and the dejections are of a healthy colour and consistence. But in severe cases, if care be not taken to maintain the good effects already produced, a relapse may occur, or recovery may prove tardy. The patient, though no longer troubled with diarrhœa, may digest imperfectly, and suffer greatly from nausea. For some time after these severe attacks, the secretion of bile takes place irregularly, and the bowels become costive or irritable, and the motions dark-coloured and offensive. Hence it is sometimes expedient to follow the sulphuric acid by two or three grains of blue pill, or a grain of calomel, administered at bed-time for a few successive nights, taking care during the day to impart tone to the stomach by the exhibition of some light bitter infusion, combined with potash and ammonia, small doses of tincture of rhubarb, and, if necessary, a little chalk. By some such means as these, all unpleasant after-symptoms are prevented, and the patient proceeds steadily to convalescence.

On several occasions, it has occurred to me to try whether the same effects might not be produced by continuing the administration of sulphuric acid at intervals of six or eight hours. But the result of the experiment has not been encouraging. In some few instances the patient has improved steadily, but occasionally he has experienced a relapse, and has generally been longer arriving at perfect health than under the plan already indicated. Hence, as soon as the urgent symptoms have been subdued—*i. e.*, after the first few hours—I usually discontinue the acid, and, if necessary, have recourse to the treatment above recommended as most conducive to the maintenance of its good effects.

For some time after a severe attack, strict attention to the diet is of the utmost importance. The food should be light and nutritious, taken in smaller quantity than usual, and at regular intervals. As a general rule, everything which is "bilious" disagrees with the stomach; but perhaps nothing produces derangement more certainly than malt liquor. I have tried every kind of beer, both in bottle and on draught, on myself and my patients, and almost uniformly with bad results. Excellent as bitter ale proves as a stomachic under ordinary circumstances, it usually produces a strange commotion after one of these attacks. No beverage should be employed except water, accompanied by a due allowance of wine, or, if necessary, a little brandy. Fruit and vegetables should be altogether avoided.

One word as to the administration of sulphuric acid for the cure of cholera. I trust those who have recourse to its aid will not impair its virtues by any admixture. Given alone in sufficient doses in simple water, its efficacy in subduing the excessive nausea and vomiting which accompany attacks of choleraic diarrhœa, as also of true cholera, is quite surprising, and it were a pity to run the risk of keeping up this distressing symptom by any addition, however simple. Calomel is perfectly tasteless, and does not interfere with its action, and therefore, if thought necessary, may be given at the same time as, or after the acid; but the administration of brandy or any strong-flavoured stimulant or warm carminative is to be strongly deprecated.(a) The same objection does not apply to the application of mustard, bran, or other warm poultices or fomentations; they in no way interfere with the action of the acid or other internal remedies, and they usually afford relief. Indeed, during an attack of cholera which I experienced in '49, nothing afforded me greater comfort, or contributed, as I believe, more largely to my recovery, than a mustard poultice, kept applied to the epigastrium until the skin would no longer bear its irritative action.

This, then, is the treatment to which I shall have recourse in the event of the Metropolis being visited by Asiatic cholera. In my hands it has always proved successful as a cure for acute autumnal diarrhœa; it has never failed to act as a charm, even in most severe choleraic diarrhœa; is it not fair to hope, therefore, that it may prove equally efficacious in the more formidable type of the same disease? It may be said, that other remedies and other modes of treatment are usually of service in the milder forms of the disease, and that, as they fail in arresting the severer cases, there are no just grounds for expecting a more favourable issue from the action of sulphuric acid. But to such an assertion I entirely demur. There is no remedy and no mode of treatment which arrests an attack of true choleraic diarrhœa as does the administration of sulphuric acid. At the expiration of two or three hours, a period within which, under any other treatment, few symptoms of amendment will have shown themselves, the patient under the use of sulphuric acid will have almost arrived at convalescence. Hence I conceive its inestimable value in the treatment of Asiatic cholera. A remedy or a mode of treatment which requires ten or twelve hours for the fulfilment of its object may do very well in ordinary maladies, but is of little value in a disease which proves fatal before twelve hours have elapsed. No remedy, however appropriate, can be of much service in rescuing a cholera patient from death, unless its curative action be exerted speedily. Even in the administration of sulphuric acid, this fact should ever be borne in mind, so that, if two or three doses of half a drachm are given within the hour for the cure of ordinary cases of choleraic diarrhœa, five or six of ɱxl. or ʒi. should be administered in cases of genuine cholera, and should be assisted in their action by mustard and bran poultices, and by those other appliances which experience points out for the maintenance or re-establishment of the cutaneous circulation.

Once more let me beg my professional brethren to give this mode of treatment a trial. Cholera is actually staring us in the face, and this is a remedy which experience tells me will assuredly arrest it. Last year I spoke highly of its virtues; and now, with more extended experience, I bear still stronger witness to its efficacy. It is not a rash, untried remedy, fraught with danger to the patient, and likely to bring discredit on the physician; it has been extensively employed, and, in every appropriate instance in which it has been administered in full and quickly-repeated doses, has well sustained its character. Its administration may not be in accordance with routine; indeed, it is utterly at variance with pre-conceived opinions on the subject; but that is

its failing to arrest the course of the disease. In every instance within my own knowledge in which it has failed in its efficacy, the blame has been chargeable upon those who have administered it, rather than upon any want of virtue in the remedy itself. They have either given it in insufficient doses, or else in cases of bilious diarrhœa, with foul breath and loaded bowels, which would have been benefited by a brisk purge of calomel and rhubarb.

(a) If brandy, laudanum, or other matters are given at the same time as the acid, and the remedy fails in its effect, the blame is chargeable upon those who so administer it. We know nothing of the *modus operandi* of the acid, and nothing of the remedies which may counteract its good effects; and it is quite possible that matters apparently the most appropriate may interfere with its curative action.

hardly a sufficient ground for rejecting it without examination. Let a trial of its powers be fairly made, and I doubt not as to the issue.

13, Manchester-square.

HISTORY OF THE RECENT EPIDEMIC OF INFANTILE LEUCORRHŒA.

WITH AN ACCOUNT OF FIVE CASES OF ALLEGED FELONIOUS ASSAULTS

RECENTLY TRIED IN DUBLIN.

By WILLIAM R. WILDE, F.R.C.S.
Surgeon of St. Mark's Hospital, etc.

[Continued from page 262.]

I now come to the medical portion of the testimony, as well as to the details of the part which I myself, and so many of the Profession here, took in the subsequent history of these two cases. Having heard, early in the morning, of the man's arrest, and the crime of which he was accused, I wrote to Mr. Fitzgerald, the eminent solicitor, to request his attendance, and, proceeding to the police-office with a county magistrate who happened to breakfast with me, I learned the particulars of the charge, and that Dr. Ireland, the medical officer of the police, and the authority always consulted in such instances, was sent for to examine the children, and had appointed twelve o'clock for that purpose. I then made an application to Mr. Bourke, the presiding magistrate, to be present at that examination, a request to which he at once politely acceded, at the same time remarking, that he believed prisoners had a right to the benefit of a medical man upon such occasions. I next proceeded to that portion of the office where the children were in charge, and delivered the magistrate's order to the Superintendent of Police, who, through the medium of a Sergeant Fitzpatrick, subsequently delivered it to the medical officer. I did not hold any communication with the prisoner, nor see him, until he was brought to the bar during the subsequent investigation; but I returned at the appointed time, and remained with the magistrate until the medical officer had arrived, about an hour afterwards. He informed me, that he had received the message, but could not think of letting me be present, as he "was a public officer, and had a public duty to perform;" but that I might make my mind easy, as both the children had a most profuse purulent discharge from the genitals, that the man was perfectly free from any disease whatever, and that he was "under the impression that the magistrate would adjudicate summarily upon the case;" with all of which I acquainted the prisoner's solicitor. The medical officer, in his examination before the magistrate, said, he could not say whether the disease was gonorrhœa or not, but he subsequently swore, that although purulent discharges, redness, swellings, and excoriations, such as those children presented, might be occasionally the result of dirt or "riding upon a stick;" and, notwithstanding that there was "no laceration whatever," and "no appearance of an attempt at penetration," yet that such appearances might also be "*the result of violence;*" upon which the magistrate at once said, that he would take the informations, send the case for trial, and commit the man to prison, whom the medical examiner also swore to be perfectly free from gonorrhœa or any venereal disease; nor did he even appear, after the most careful examination, to have ever had any affection of that nature.(a) The prisoner was then removed. Shocked and distressed at the result of the investigation, I then left the office without offering bail for the prisoner, who was sent to prison. On conferring with the solicitor, he told me, that, from all he could then learn, he did not believe the man to be guilty; but that, at all events, the circumstance of both children swearing to the commission of the act upon the self-same day and hour, without either having seen the other, would acquit him. The solicitor took notes of the examination; so also did the police clerk, in order to save trouble in subsequently drawing up the children's informations. Fortunately for the cause of truth and science, the medical officer, contrary to his usual habit, swore an information in both cases, of which the following is an extract:—"There is a discharge of purulent matter, which may have been caused by some violence applied, or might have arisen from want of cleanliness, or from riding on a stick. There has not been any penetration of the vagina. Could not say whether the discharge is gonorrhœa or not. That there is some excoriation which is confined to the exterior parts of the private parts, but no laceration." The testimony was almost in the same words in both cases.

Much dissatisfied with the police investigation, and believing that the whole was a trumped-up story, especially as I was excluded from the medical examination, I immediately after called on Dr. Geoghegan, Professor of Medical Jurisprudence, and requested him to see the children; and I also waited on Dr. Ireland, as a matter of professional etiquette, and told him of my desire to see the children, along with Dr. Geoghegan and himself; and subsequently an appointment to that effect was made for three o'clock next day. As soon as I saw the children, and recognised the disease under which they laboured, I at once saw the mistake that had been committed; and, subsequently confirmed in my opinion by Dr. Geoghegan, I determined to offer bail for the accused, (which was required to a large amount,) and to defend him to the utmost of my power. The child Cosgrave appeared to be much out of health, and had recently lost a portion of the nail of one of her fingers from whitlow, which, she said, had caused her "great pain." This trivial fact is of great importance, as will appear in the sequel.

My next step was to request of Mr. Cusack, Dr. Churchill, and Dr. Hatchell, to examine the children. I chose these three persons on account of their peculiar positions in the Profession—a Professor of Surgery to the University; a lecturer and distinguished writer upon the diseases of children; and the Medical Officer to the Constabulary (not the Metropolitan police). I procured copies of the informations from the magistrates; from the same source I obtained the services of a police constable to conduct the medical men to the residences of the children, and having given bail for the prisoner, I took him out of prison. Placing the five informations which were sworn, in the hands of these gentlemen, and committing them to the guidance of the police-officer appointed by the magistrate, I sent them to examine the children; and I also submitted for their inspection the accused, about three o'clock upon the Monday after the Saturday upon which the case was investigated at the police office. In the course of the evening, I addressed a series of questions, twelve in number, to each of the four medical men who had examined the children and the accused, with respect to the diseased state under which they found the children—as to whether such could have been the result of violence or mechanical irritation—whether the assault could have been committed at the time specified, without producing so much pain and soreness as not to attract the attention of friends—whether the vaginal discharge and excoriation which these children presented, could have arisen from attempts at violation, etc.; and also as to the state of the accused, etc. It is unnecessary here to go into the minutiæ of these questions, or the answers returned, which, together with two short-hand writers' notes of the trial, I intend to publish hereafter. Suffice it to say, that the answers of these four eminent authorities completely exonerated the accused, and showed, as far as medical evidence could show, that the crime had never been committed, and that the whole was a misconception arising out of the popular delusion so graphically detailed by Cooper nearly forty years ago.

A few days after, I waited upon the Attorney-General, with a written statement of what I conceived to be the facts of the case—describing the popular delusion, giving a verbatim copy of the medical men's opinions; referring him to the various medical and medico-legal opinions upon the subject; and finally giving him the minutiæ and circumstantial details of an *alibi*, showing that the accused was not at the place specified, for four hours before nor three hours after the date assigned for the commission of the crime. He told me he had ordered the case for trial, possessed the most "corroborative proofs" of the children's statements, and could not possibly receive anything offered in the prisoners' defence. I endeavoured to argue the case, and show him

(a) I do not know what the usual form of examination of a man accused of this crime may be in England; but I believe the rule is, in all cases, to desire a prisoner "not to say anything which might criminate himself, or might afterwards be used against him." Upon the prisoner Kane being brought before the medical officer of the police, and after the inspection was instituted, he was asked by the physician, "When did you get this little running?" to which the man indignantly replied, "I beg your pardon, Sir; I have not had any running."

that the crime had not been committed, and that the whole was a popular prejudice founded in ignorance and superstition, and put to him several cases in which it would, I thought, be his duty, as a public prosecutor, to quash the proceedings; but these he said he could not in the present instance possibly entertain, and added that it would not look well to give up the trial of "a doctor's servant" because other medical men came forward in his behalf. I, therefore, took my leave, assuring my friend, the Attorney-General, that I would certainly defeat him at the prosecution; as, being fully assured not only of the man's innocence but of the non-committal of the crime, I was determined to defend the prisoner to the utmost of my power.

The Grand Jury found bills of indictment in both cases, and a day was fixed for the trial.

Two very eminent lawyers, whom I waited upon, refused to undertake the case; it was a nasty one; and crimes of that nature were not easily defended, etc.

Powerful advocates, well acquainted with such cases, were, however, obtained. A day was fixed for the three trials, one of which, that of Barber, has been already detailed; and Professors Cusack, Beatty, and Geoghegan, and Drs. Churchill, Hatchell, and Hughes, generously came forward, at considerable inconvenience, to bear testimony upon the subject at issue. The prisoner was given in charge for the full crime of rape, viz., that of carnally knowing and abusing a child under ten years of age; and it was evident, from the array of Queen's Counsel, that the Crown were bent upon attaining a conviction, in order, if possible, to put down that offence, which, from the number of cases which presented, appeared to be epidemic in the city, and in which they had already been foiled in the instance of Tracy. The Lord Chief Justice of the Queen's Bench (Lefroy), and the Chief Justice of the Common Pleas (Monaghan), presided. I procured the attendance of two special reporters from the newspaper offices, whose notes of the trial will appear in due course.

The Honourable Mr. Plunkett stated the case with exceeding moderation, remarking upon the previous exceedingly good character of the man, and saying most justly, that the principal question which would arise was entirely a medical one, being as to the nature and cause of the appearances which the child Cosgrave, the first case called on, presented. The prosecutrix, 9½ years old, who was an admirable witness, went through the recital already mentioned, and entered very minutely into her reasons for knowing the precise hour, such as looking at the clock upon her return home, and, in order to make sure, asking her mother what o'clock it was, etc.,—stated, that she walked over to her sister's, at a distant part of the city, shortly after the crime was committed; that the difficulty of making water, soreness, and discharge commenced the day after the committal of the offence;—denied that she hesitated for a moment telling her mother about the cause, but acknowledged, that it was her mother first asked her about the prisoner Kane. The mother and an elder daughter were examined; they, however, contradicted themselves and the child in many particulars, but were quite agreed in fixing the same day and hour as that stated by the child, and gave special reasons for their remembering them. The mother said the child came home to her "crying" at the time when the offence is alleged to have been committed; but acknowledged, that she asked her, was it her finger (then affected with severe whitlow, and from which she lost her nail) which was paining her, and she said it was. This crying was one of the "corroborative proofs" relied on by the Crown. Dr. Ireland, the Medical officer of the police, described the state of disease the children were in, and said, "I do not think a man's private parts could enter the vagina of this child; but the penis might go between the labia, which were the parts diseased. I cannot say what the nature of the disease was. It might have been produced by external irritation. The irritation produced by a man's penis might, I think, produce it." And again to the Court: "I am of opinion, that the discharge may have been produced by friction with the penis of a healthy man." This seemed to be, at that period of the case, the turning point of the evidence for the Crown. Mr. Curran then commenced to read the opinion of Sir Astley Cooper, to which I have already referred, but was stopped by the Lord Chief Justice, who said, that "it was not law nor evidence, but only a Medical man's opinion." The witness, however, upon being referred to the extract, said, "I perfectly concur in everything stated by Sir Astley Cooper; but, in the present case, I have formed my opinion without reference to the views of any other surgeon." Professor Harrison was in court to watch the proceedings. He had been sent by the Crown to examine the children; but, having done so, he reported to the authorities, that he could find nothing to warrant the conclusion, that any violence had been attempted. Had the case for the Crown not broken down, he would have been examined on behalf of the prisoner.

It is unnecessary here to describe the speeches of counsel, which were in their way admirable, and well calculated "to get off" a prisoner. I had, however, in common with my professional brethren who were present, a much higher object in view,—that of explaining to the Court, and the public, the delusion under which the whole case was got up, and of showing that the crime had not been committed. It was manifest, however, throughout, that the Court was rather against the prisoner, and that the Crown counsel earnestly sought a conviction.

The first witness examined for the defence was Mr. Cusack—that portion of his testimony which particularly bears upon the case is as follows:—"I examined the two children (Cosgrave, the prosecutrix, and Delmere); both were affected with the same complaint. They were filthy, and had a discharge from the pudendum. There was a crust surrounding the parts upon the true skin, which arose from the deposits from the discharge. This child had not the slightest mark of violence; and it was simply a case of a disease which all medical men have met with, and which is very common among children who are strumous, or badly cared, or who have been in contact with each other. It is usually found in low life, but sometimes it is found in the better walks of life, where children have suffered from other complaints tending to weaken the constitution; and, I confess, I was horror-struck at the time to hear that the prisoner at the bar was accused of such a crime. I was as convinced as I am of my existence that there was no violence offered, or attempted upon this child, and that this was a common disease which is universally known to the profession. I conversed with Sir Astley Cooper on this very subject, and I entirely concur with what appears in his lectures, that numbers have suffered unjustly from such charges as the present, being fabricated by the mothers of children." This evidence, which was given in a very decided and energetic manner, seemed to produce a considerable sensation in Court; on which the Lord Chief Justice and the Crown Counsel cross-examined the witness to a considerable extent, in order to show, that although there were no marks of violence, "a penetration between the labia, accompanied with force, but not sufficient to do any injury to the surface," might have occurred. In answer to this mode of putting the question, the witness said—"If the penis was brought into contact with the parts, and a discharge ensued in consequence, it would certainly be a species of violence; but, in the present case, there was nothing to show me that any friction had taken place externally, or that any attempt had been made to do anything wrong. I am confident that the discharge was not, in any respect, the consequence of friction from the penis of any man. If there is violence, it would cause pain, but I could find not a trace of violence upon this child." One would have thought that this evidence might have induced the Crown to give up the case; but the lawyers only took it up the more determinedly, and, seeing that disease from natural causes was established, changed their hand, endeavoured to prove, by the subsequent witnesses, that, acknowledging the child was in the diseased state described at the time the crime was committed, still that penetration between the labia, without what might be styled violence, but as a simple application of the parts, might have taken place,—as the Chief Justice described it, the introduction of the parts without force, and even to the "hundredth part of an inch."

Professor Geoghegan swore with regard to the state of uncleanliness in which he found the child, and said she had "a chronic disease of, I should say, several weeks' standing. In my opinion it was not possible that the disease could be of one week's standing, and I am further of opinion that the disease could not have resulted from violence of any undiseased man. Had the assemblage of appearances I witnessed resulted from violence on the part of an undiseased man, there would have been other signs of violence present, which were not visible in this case. If violence had been committed upon this child by a man lying on her upon the hay, so as to hurt her in that way, I think she would not be

able to walk over to Ship-street in the evening, and home again the next morning." The Crown pressed this witness also upon the subject of the friction alluded to by Dr. Ireland. His answer was:—"In my opinion, violent friction by a man against the private parts of the child could not have possibly produced the disease I saw, because—first, it was of long standing—and second, if there had been sufficient violence to produce such a copious discharge, it would have produced other signs that were not present in this instance." Mr. Corballis, Q.C. then put the following question, which evidently threw overboard all the previous medical testimony, and is one upon which the most serious consequences may hereafter hinge. "Is it possible that, supposing the child to have had this disease at the time of the alleged offence, a man might, on the 15th of July, have introduced the extremity of the penis between the labia and no further?" Dr. Geoghegan said, "It is; but if such an attempt were made, considering the great disparity of the parts of the man and child, I think it could not be done without a certain degree of laceration."

Dr. Churchill was next examined, who gave similar testimony to the foregoing with respect to there not being the slightest evidence of violence, and that the disease was ordinary infantile leucorrhœa. He was cross-examined at considerable length, in order to elicit an admission of the point on which the Crown then relied—That "slight penetration without giving pain" might, notwithstanding the state in which the children were, have taken place. His answer was:—"I think penetration in a child so young and where the organs are so disproportionate, would give pain." Each of these three medical men also deposed as to the healthy state of the prisoner, whom they had minutely examined.

The counsel for the defence now said, they saw clearly that, notwithstanding the high medical evidence which was brought forward, that the Crown were determined upon a conviction, that the Court were with them, and that, if the jury brought in a verdict of guilty, the man would certainly be transported; that there was no use in offering more medical testimony, and that nothing but the *alibi*, to which I have already alluded, could possibly save him. It was therefore thought advisable not to produce any more medical witnesses, but to have recourse to the *alibi*, which was not brought forward in the first instance for two reasons,—first, because it would be necessary to produce in Court a lady whom the prisoner was driving through the town at the time of the alleged offence, and for more than two hours afterwards; and, secondly, because I myself, and a large body of the Profession here, were most anxious to have a full medical inquiry into the case, in order to show what the disease really was which had been mistaken by the infatuated mothers for the result of violence; and also to show that no crime had been committed. Fortunately, the Court retired for a short space, and time was thus allowed for sending for the lady who was the principal witness for the *alibi*. Regarding this portion of the defence, it will be enough to say, that it was satisfactorily proved that from half-past nine in the morning until half-past three in the afternoon of the day upon which the crime was said to have been committed (between twelve and one o'clock) the prisoner was engaged driving, and never returned to his stables. The Crown, thus foiled, endeavoured to break down the *alibi* by a lengthened cross-examination, but ineffectually, as, by a very remarkable concatenation of circumstances, the usual time for the man's return to the stables was interrupted upon this particular day, and he was, upon the whole, nearly seven hours without returning to the stables. A child might possibly mistake or forget the day, but the mother and sister had fixed the precise date with such certainty as to leave no loophole for escape upon this point.

Upon seeing the turn the *alibi* took, the Lord Chief Justice rather testily said to Mr. Rolleston, one of the prisoner's counsel, "Why didn't you give us the *alibi* first, instead of treating us to a medical dissertation?" He very properly answered, that he did not like to produce a lady in Court, and that he thought the medical evidence would have been quite sufficient. The Court then appealed to the Crown Counsel as to whether they could possibly go on with the case after the *alibi*. The case was then given up, and an issue having been handed to the jury in both cases, that of Cosgrave just related, and also the child Delmere, the jury, by direction of His Lordship, acquitted the prisoner.

[To be continued.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED DURING AUGUST.

THE subjoined report comprises, it is believed, all the more important operations performed, during the month of August, at the following hospitals:—University College, King's College, St. George's, St. Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, the Westminster, Charing-cross, St. Mary's, and the Metropolitan Free.

Lithotomy.—Number of cases, 5; of which 4 have recovered, and one is progressing favourably under treatment.

Lithotrity.—Number of cases, 1. The patient remains under care, and is suffering from cystitis. The case reported last month as under the care of Mr. Avery, in Charing-cross Hospital, has since been discharged, and there is reason to believe that no part of the calculus now remains in the bladder.

Herniotomy.—Number of cases, 11; recovered, 3; under treatment, 1; died, 7. In but one of these was the sac not opened. The patient was under the care of Mr. Cutler, in St. George's Hospital, and recovered well. In another, under the care of Mr. Paget, in St. Bartholomew's Hospital, the sac ruptured spontaneously just as the bowel was passing up; the patient is doing well. Of the unusual number of fatal cases, the majority are susceptible of easy explanation. One was an operation performed *in extremis*, on a man who had refused to submit to it when first proposed, and in whom there was, in fact, some doubt as to the existence of a stricture, as the protruded portion had been reduced several times. A second was an instance of umbilical hernia in the male. In a third, although at the operation the stricture had seemed freely divided, and the bowel was easily returned, yet at the autopsy it was discovered that strangulation had been still kept up by a band of membrane within the abdomen. Death occurred three days after the operation, and the symptoms of strangulation, which had previously existed for thirty-six hours, persisted through that time. In a fourth, strangulation had existed *six days* before the operation. In a fifth, the hernia was very large, and had been strangulated several days before the patient's admission. The *post-mortem* showed the intestines matted together with lymph, and gangrenous in several circumscribed patches. The two cases which we reported last week as remaining under treatment have since been discharged.

Ovariotomy.—This operation has been performed once in the Metropolitan Free Hospital, by Mr. G. Borlase Childs. The major incision was adopted, and a large multilocular and thick-walled cyst removed. It required to be separated from the great omentum, to which it had contracted adhesions, and a vessel in the latter which bled had to be ligatured. After the operation, the patient, a middle-aged woman, lived nine days, during which she suffered much from diarrhœa and sickness, and took very little food. The wound, with the exception of a small portion, had united by first intention. At the *post-mortem*, peritonitis was found only around the track of the ligatures; death appeared to have resulted from exhaustion. A case operated on at this hospital, a few months ago, by Mr. Childs (the lesser incision), recovered satisfactorily, and is now quite well.

Trephining the Skull.—Number of operations three, two of which were for compound fracture, with depression, and one for abscess between the dura mater and skull. The patient, in the latter case, had been admitted on account of a scalp wound (bone exposed), which subsequently took on phagædenic action. Symptoms of compression ensued, and the trephine was accordingly resorted to. Death occurred two days after the operation, and five weeks after the original accident. In one of the cases of compound fracture with depression, the symptoms of compression did not show themselves till the second day, when the operation was at once performed. Death took place two days later. In the third case, the operation was performed by Mr. Poland on one of the sufferers from the late accident at the Sydenham Crystal Palace, who was admitted into Guy's Hospital in a state of insensibility, and with compound fracture of the skull and depression of the bone. The dura mater was not injured. The man recovered his consciousness soon after the operation, and has since proceeded without a single bad symptom. He may now be considered quite out of danger.

Ligature of Arteries, etc.—On a patient in King's College Hospital, who had received a stab in the fore arm, probably wounding the ulnar and interosseous arteries, Mr. Partridge performed ligature of the brachial, on account of very profuse bleeding. The operation succeeded in every respect, and the patient recovered without any drawback. In St. Bartholomew's Hospital, Mr. Lloyd was obliged

to perform ligature of the femoral artery for popliteal aneurism, in a case in which compression had been perseveringly tried, with at first much hope of success. Since the ligature, the man has done well. He is still in the Hospital. The case of Mr. Le Gros Clarke's, with a similar history, which remained under treatment at the time of our last month's report, has since been discharged well. During the last month there have been in St. George's Hospital one, and in Guy's Hospital two, cases of popliteal aneurism undergoing treatment by compression. The case in St. George's is under the care of Mr. Hewett: the pulsations in the tumour have become much more feeble than they were at first, and the size of the whole is diminishing; pressure is still kept up, and with every prospect of a pleasing result. Both the Guy's cases are under the care of Mr. Hilton: one of them has left the hospital, the aneurism having become quite solid, and much contracted; the other remains under treatment.

Amputations.—Number of cases 15. Recovered 1. Under treatment 13. Died 1. The case which has terminated fatally was an amputation in the upper third of the leg, on account of disease of the tarsal bones and ankle-joint. The patient was an old and irritable man, whose arteries were much diseased. Some difficulty was encountered in endeavouring to arrest the bleeding immediately after the operation, which was only accomplished by the assistance of an unusually large number of ligatures. Death took place on the sixth day, in consequence of secondary hæmorrhage. The case which has recovered is one of amputation of the fore-arm for diseased carpus, performed by Mr. Pollock, in St. George's Hospital. Of the thirteen cases still under treatment, four are primary amputations, three of the fore-arm, and one of the arm; eight are operations performed on account of diseased joints, and one on account of a large ulcer left by a burn. Of the latter, two are amputations in the thigh, six in the leg, and one at the shoulder joint. All the cases are progressing favourably. The details of the last may be found in the *Medical Times and Gazette* for Sept. 24. Exclusive of the above, six or seven primary amputations of considerable portions of the hand or foot have been performed; they are all recovering, or have recovered satisfactorily. Of the eight cases left under treatment by our last month's report, four have been discharged well, and the other four are proceeding satisfactorily.

Excision of Bones.—In St. Thomas's Hospital, Mr. Solly removed by operation the carious portions of the astragalus and os calcis from a diseased foot. In the Westminster Hospital, Mr. C. G. Guthrie removed two metacarpal bones, on account of strumous disease. Both these patients have progressed remarkably well, and, it is hoped, will save their respective limbs. Mr. Solly's patient is still in the hospital; Mr. Guthrie's has been sent into the country.

Removal of Necrosed Bone.—Number of cases, 10; recovered and discharged, 1. The nine remaining under treatment are all doing well. Of the eight cases under treatment at last report, three have since been discharged.

Excision of Malignant Growths.—Number of cases, 11. Of these, four have been for epithelial cancer of the lower lip, and three of the patients have been discharged well; in the fourth, the disease is already returning. One of these, in St. George's Hospital, under the care of Mr. Johnson, involved almost the entire lower lip, and required very free removal. The patient was an old man, and had, fortunately, lost all his front teeth, so that, with a little trouble, the edges of the incision were brought into apposition by means of hare-lip pins, which, under other circumstances, would have been impossible. A very respectable lip was formed. Another case, under the care of Mr. Le Gros Clarke, in St. Thomas's Hospital, differed from what is usual, in that the patient was a woman. She was in advanced life, and had for many years been accustomed to smoke her husband's pipe. Of the other cases, three were excisions of the female breast, on account of scirrhous cancer; two amputations of the penis; one the removal of a cancerous growth from the thigh; one the removal of a testis affected with medullary cancer; and, lastly, one, the excision of a growth of malignant character but of very slow formation from over the wrist-joint. All of these, excepting two, are still under treatment. One case of removal of the breast reported last month has since died; the others are all convalescent.

Excision of Non-malignant Tumours.—Number of cases, 17; cured, 6; under treatment, 11. Two of these were fibrous polypi of the uterus; one removed with the scissors by Mr. Wormald, from a patient in St. Bartholomew's Hospital; the other—an unusually large one—by Mr. Shaw, in the Middlesex Hospital. Of the six cases reported under treatment last month, four have been discharged cured.

Operations for Urethral Stricture.—Perineal section (Syme's) by Mr. Quain in University College Hospital; the patient remains under treatment. Mr. Simon's patient in St. Thomas's Hospital, alluded to last month, is still under treatment.

Paracentesis Thoracis.—In a case under the care of Dr. Chambers, in St. Mary's Hospital, of pneumo-thorax, and secondary empyema, probably from the opening of a phthisical vomica into the pleural sac, the operation of puncturing the affected chest was performed at two distinct places by Mr. Coulson. The condition requiring it was one of great difficulty of breathing, from the compression of the left lung by the air and fluid, which distended the right pleural sac. From the first opening, which was low down, on the side, only thin pus escaped; from the second, which was higher up, and in front, a copious stream of air rushed out. The patient—an Irish lad, of about 14—has been considerably relieved by the measures adopted; he is still in the hospital. Dr. Bennett's patient, in St. Thomas's Hospital, on whom this operation had been twice performed at the date of our last report, continues under care. The lung has considerably expanded, though the chest yet remains three parts full of fluid. The opening was closed immediately after the puncture, and the operation has not been again repeated.

Paracentesis Abdominis has been performed fifteen times; once for a very large hydatid cyst; six times on account of ovarian dropsy; and eight times for ascites. One of the latter died of peritonitis three weeks afterwards; but, as he had been without any symptom of that affection during the first fortnight, there did not appear any reason for connecting it with the operation; from all the others the patients recovered without ill consequence. The case of hydatid cyst was under the charge of Mr. Holthouse, in the Westminster Hospital. The tumour was situated in the right hypochondrium, and the trocar opening having been enlarged, several pints of fluid were evacuated, containing great numbers of hydatids. The man has been made an out-patient, and is now convalescent.

Ligature of Nævus.—The case left by last report is still under treatment. No others have been performed.

Radical Treatment of Hydrocele.—Number of cases, 5; 4 of which are well; and one is still under treatment. One of the successful cases was treated by Mr. Statham, in University College Hospital, by means of the seton. A case mentioned last month as still under care has since left the hospital for a time, the treatment pursued (injection of port wine) having failed to effect the obliteration of the sac.

Trachrotomy.—This operation has been performed three times; in each case for the relief of extreme dypnœa, consequent on syphilitic laryngitis. All the patients are convalescent, but two of them are as yet obliged to retain the canula. In the third, however, the wound has healed. (For details respecting two of these cases see *Medical Times and Gazette* for Sept. 10.)

Tenotomy.—Division of the tendo-Achillis for talipes equinus, by Mr. Solly, in St. Thomas's Hospital. The patient's deformity has been cured.

Operation for Fistula in Ano.—Seven cases have been operated on: all have recovered. Of the three cases remaining by last report two are now well, and one is still under treatment.

Puncture of Bladder.—Once by Mr. Coulson, in St. Mary's Hospital. See *Medical Times and Gazette* for Sept. 3, p. 244.

Operation for the Cure of Ununited Fracture.—In a case now in St. Bartholomew's Hospital of ununited fracture of both bones of the forearm in a healthy woman, Mr. Paget has made trial of setons introduced between the ends of the bones. They were withdrawn on the ninth day, and did not occasion any excess of inflammation or other ill consequence. It is too early yet to know whether union is in progress; the arm is kept strictly at rest on a splint.

Neurotomy for the Relief of Neuralgia.—In a case of severe neuralgia, now in King's College Hospital, Mr. Fergusson has divided the mental branch of the inferior dental nerve. A similar proceeding had, on two previous occasions, given relief to the pain for several months.

Plastic Operations.—Hare-lip.—One case by Mr. Paget, in St. Bartholomew's Hospital, still under treatment. *Staphyloraphy.*—4 cases, one of which in a lad of 14, has failed from sloughing; the other three have been successful. The operators on the three latter were Messrs. Fergusson, Lloyd, and Avery. Vesico-vaginal fistula, two cases, one by Mr. Pollock, in St. George's, and one by Mr. Baker Brown, in St. Mary's Hospital; both cases remain under treatment. A transplanting operation for the closure of a large opening into one side of the nose, left by ulceration, has been performed by Mr. Erichsen, in University College Hospital, and is still under treatment. Another transplanting of skin has been performed by Mr. Fergusson, in King's College Hospital, for the relief of a deformity produced by the contracted cicatrix of a burn; and it, together

with a similar one by Mr. Hilton, in Guy's Hospital, mentioned in our last report, still remains under treatment.

Extraction of Cataract has been performed three times with success,—once by Mr. Wharton Jones, in University College Hospital, and by Messrs. Tatum and Johnson, in St. George's. Mr. Johnson's patient was a woman of upwards of seventy. The case mentioned last month as remaining under care has been discharged well.

Operation for Artificial Pupil.—One by Mr. C. G. Guthrie, in the Westminster Hospital, still under treatment. The pupillary margin of the iris was drawn outwards and downwards, and left adherent to the wound.

ST. THOMAS'S HOSPITAL.

PARAPLEGIA.—PARTIAL RECOVERY.—RELAPSE.—DEATH.—AUTOPSY.—SCROFULOUS CARIES OF THE VERTEBRÆ.

[Under the care of Dr. PEACOCK.]

THE following case affords an example of the occurrence of scrofulous disease of the vertebræ at an age, under circumstances, and in a constitution in which it might least have been expected, and illustrates very instructively the peculiar difficulties and uncertainty which sometimes attend the diagnosis of affections of the spine.

William Bristowe, a tall, well built man, aged 25, was admitted on March 24. He stated that he had been ill for four months, and that his first symptoms had been pain in the left shoulder and side, which had sometimes rendered his breathing difficult. After a short time both legs had been seized with numbness, and become considerably swollen. Having followed the laborious occupation of a coal waggoner, he had been accustomed to drink freely of beer and spirits, but previous to the present attack "had never known what it was to be ill." He was not aware of having ever received any injury to his back. Since the commencement of his illness he had lost flesh somewhat, but was still tolerably stout.

Present Condition.—There is not now any marked degree of swelling in the legs, but in both of them the power of motion is entirely lost, and that of sensation much impaired. For the last week the urine has passed involuntarily, and still continues to do so, but the patient is able to retain and expel his motions. On percussion of the spine there does not appear to be any pain produced, except over the lower part of the lumbar region, where, also, it is but slight. There is some little tenderness in the course of the sciatic nerves, and the patient complains a good deal of pricking pain in various parts of the legs and feet. He is extremely helpless, lies easiest on his back, and complains of great pain when he is moved. Tongue furred; bowels costive; skin hot and dry; urine not albuminous; pulse 108, soft and compressible. There is a large bed-sore on each buttock.

Dr. Peacock remarked to those present, that, although the question of diagnosis was confessedly involved in much doubt, he was inclined to the opinion that the disease was of rheumatic origin, (rheumatic meningitis of the cord.) The patient was a robust man, without a single sign of scrofula about him, and, excepting what might be expected from continued pain and confinement to bed, he was still in pretty vigorous health, and entirely free from hectic. No displacement whatever of any of the vertebræ could be detected, nor was there marked tenderness over any particular part. The disease had commenced with symptoms—pain in shoulder, etc.—which were very likely to have been due to rheumatism.

Ordered to have a water bed. C. C. ad ʒvi. reg. dorsal. Empl. lytt. reg. dorsal.

℞ Pot. iod. gr. iv.; tinct. colch. mx.; liq. potassæ mxx.; dec. cinchon. ʒj. ter die. Milk diet.

26th.—Is in much pain, and has slept badly. Under the influence of aperient medicine the bowels have been freely open.

℞ Pulv. Doveri gr. viij.; hydr. chlorid. gr. ij. Ft. pulv. o. n. sumend. Rep. haust.

30th.—The first night that he took the powder he slept much better, but latterly the increased pain has prevented him. There is now an occasional spasmodic jerking of the lower limbs.

℞ Pulv. Dov. gr. x., hydr. chlorid. gr. ij., o. n.

April 1.—Condition much as before; feels very weak, and has a worse appetite.

℞ Quin. disulph. gr. ij., acid. sulph. dil. mij., inf. quass. ʒiss. ter die. Rep. pulv.

5th.—During the last two days has had a sharp attack of diarrhœa, which is now checked. As regards the paralysis, considerable improvement has suddenly taken place; he can retain his urine and is conscious of its escape; has much more sensation in his legs; appetite good.

Rep. medicamenta.

8th.—In the right leg sensation is now morbidly acute, and pain is complained of if the sole be ever so gently touched; in the left leg, although less so than in the right, sensation is still acute. The patient is much annoyed by the almost incessant jerkings of the limbs, which occasion great pain. Very frequently they are so forcibly drawn into the flexed position that he is obliged to call the nurse to straighten them. This tendency to spasm appears to be on the increase; a cough or the slightest motion is sufficient to excite it into action. Many experiments were tried in irritating the feet, the result of all which seemed to show that the right leg was the more sensitive of the two. The mouth has been rendered slightly sore, and the pills are accordingly to be discontinued.

℞ Pulv. ipec. co. gr. x., o.n. Rep. mist. quin.

18th.—The patient has much improved since last note, but the tendency to convulsive twitchings of the legs is greater than ever. He has gained in strength, and the bed-sores, which are large, look very healthy. Although still unable to move the thigh or leg, he can move the toes of the left foot tolerably freely, and those of right foot more slightly. Pt.

May 13.—During the last fortnight but little progress has been made. The patient now has perfect sensation in both limbs, and is but very seldom troubled with the spasmodic twitchings, which may however still be produced by tickling the soles. His voluntary power is confined to moving the toes, more especially those of the left foot. The bowels have a tendency to be confined.

From the great improvement which had resulted, first, from the use of the iodide, and then from the continued exhibition of mercury, there appeared to be derived satisfactory evidence as to the correctness of the original diagnosis. There seemed also reason to believe that these remedies had done their work, and that the remaining paralysis might result, not from still existing compression of the cord, but from the atony of that structure consequent on its previous and long-continued compression. In this supposition, Dr. Peacock determined to try cautiously the effect of a nervine stimulant.

Omit the mixture. Capiat pil. strychniæ (gr. 1-16th) j. ter die.

20th.—Some improvement in the power of motion, and a much greater degree of morbid excitability, as shown by proneness to spasmodic action. He is by no means so helpless as he was at the time of admission.

Auge dos. strychniæ ad gr. 1-12th.

June 3.—A few days ago the power of motion had so much increased, that he was able to flex the ankle-joints; but the undue sensibility to slight impressions has since become so extreme, that it appears desirable to discontinue the medicine. A slough has formed on the right heel, in consequence of the pressure of a bandage placed on it by the nurse at the patient's request, in order to prevent the leg from being painfully drawn up.

℞ Mist. quin. cum ferr. ʒj., tinct. hyos. ʒss., ter die. Pil. morphiæ, o.n.

7th.—Is not so well; still rather feverish, and suffering from the great irritability of the legs, which he is unable to keep quiet for a single moment.

14th.—Since the last note the patient has progressively got worse; he has been slightly delirious at night, and during the day stupid and inclined to doze. The pupils are of moderate size, but fixed, and not contractile under the influence of light. The right eyelid is dropped, but can occasionally be elevated. The twitchings of the limbs have ceased to occur, but he has very slight power over them.

17th.—From the last date, in spite of counter-irritation to the nape and other remedies, the cerebral symptoms increased in severity, and he gradually sank into complete insensibility; death took place this morning.

Autopsy.—The whole body was carefully examined, but excepting in the head and spinal canal nothing worthy of note was observed. There was no evidence of the existence of tubercle in any organ excepting on the peritoneal investment of the liver, which displayed a number of minute, yellowish-coloured granulations, and in the left lobe of the prostate, which contained a small mass of yellowish-white substance.

Head.—The vessels on the surface of the brain were congested, and there was some subarachnoid effusion. The convolutions were flattened, and the hemispheres adhered together at their anterior part. The lateral ventricles, by the breaking down of the septum lucidum, communicated with each other, and contained at least two ounces of semi-opaque fluid.

Spine.—The inter-vertebral cartilage between the bodies of the ninth and tenth dorsal vertebræ, was soft and broken down, and the adjacent surfaces of bone rough and carious; the posterior surfaces of the bodies of the eighth, ninth, tenth, and eleventh vertebræ were also diseased, and between them and the spinal sheath was a collection of thick purulent matter. The sheath itself, at this part, was thickened and opaque, and adherent to the cord, from which, however, it could be separated by slight traction. Various portions of the cord were submitted to microscopic examination by Dr. Bristowe, the Pathological Curator to the hospital, from whose report we extract the following:—In the neighbourhood of the tenth dorsal vertebra the structure of the cord displayed a very considerable number of compound granular cells, which were very abundant for two or three inches below that part, and at least six inches above it; they diminished gradually upwards, so that in the cervical region there were none, or next to none. The cervical portion of the cord was, however, the most softened of any, and the evidence of the microscope was thus extremely valuable in furnishing the means of distinguishing between inflammatory disorganisation, and that due to *post-mortem* violence. Throughout the entire cord there appeared to be a greater tendency than usual, on the part of the nerve tubules, to become varicose, and this tendency was the most marked in those parts of the cord in which the compound granular or exudation cells abounded.

It will be observed, that the low arachnoid inflammation to which the fatal termination was immediately due, does not appear to have had any very close connexion with the original disease, since the affection of the cord had not advanced sufficiently high to be supposed capable of spreading to the brain or its membranes.

Dr. Peacock is accustomed to insist strongly on the absolute necessity for always examining by the microscope portions of spinal cord or brain reputed to be in a state of softening, and the above case furnishes a full confirmation of the truth of his observation. So impossible was it to distinguish, by the unassisted eye, between true softening and that consequent on artificial bruising, that had instrumental aid not been resorted to, an erroneous conclusion would undoubtedly have been recorded.

GUY'S HOSPITAL.

PARALYSIS FROM CHRONIC SOFTENING OF THE SPINAL CORD, APPARENTLY INDUCED BY PERIPHERAL INJURY.

[Under the care of Dr. BARLOW.]

We record the facts of the following most interesting case very briefly, as we believe it is Dr. Barlow's intention to publish it *in extenso*, at some future time. The patient, Abraham Chandler, then aged 25, a labourer, of strong constitution, was admitted, under Dr. Barlow's care, in July, 1851, paralytic in both legs and in the left arm. He stated, that he had been quite well up to the early part of 1849, when he had the misfortune to have his left hand severely crushed by a piece of timber. The injury involved much bruising and some laceration; inflammation followed, and it was six weeks before he had recovered from its effects, after which he returned to work. Having been at work for a short time, he found himself gradually losing power, first in the injured hand, and afterwards in the whole arm. The loss of sensation followed closely on this; and, after about six months, he was incapacitated for his work, and obliged to give it up. From this time to the date of admission, he had been at home, attended by a private practitioner. The paralysis had become complete in the arm, and had gradually invaded both legs,—beginning in the feet as a sense of numbness, and progressively creeping up the limbs, involving both sensation and motion. He had throughout suffered but little pain in the back. Dr. Barlow prescribed a course of the bichloride of mercury, given in small doses, and, under its influence, much improvement ensued. The treatment was continued, with slight interruptions, and during, of course, strict confinement to bed for seven months; at the end of which time the patient left the hospital, able to walk with the assistance of a crutch; his arm, however, remaining paralysed. In May, 1852, in consequence of the very imperfect power he possessed over his lower extremities, he had a fall, which shook him very much, and seemed, shortly afterwards, to have been the means of inducing a return of the previous symptoms. On account of these, he was re-admitted on July 8, 1852, again completely paraplegic. In spite of treatment, the paralysis continued to advance from below upwards; the integument of the scrotum and abdomen lost sensation; and the right arm having also lost both feeling and the power of motion, the patient was reduced to a most pitiably helpless condition. His intellects, however, remained, for the most part, unimpaired up to the time of death. The *post-mortem* disclosed most extensive disorganisation of the dorsal and lower parts of the cervical spinal cord, which was, in most parts, rendered almost pulpy by softening.

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Medical Times & Gazette.

SATURDAY, OCTOBER 1, 1853.

ON THE ADMISSION OF CHOLERA PATIENTS INTO PUBLIC HOSPITALS.

We last week published a letter, written by Dr. Babington to Dr. Milroy, advocating very strongly the admission of cholera patients into our public hospitals, like cases of ordinary disease. During the last formidable epidemic of cholera in 1849, when the Metropolis suffered so alarmingly, the question of the admission into those charities of persons suffering from the disease was freely canvassed; but the result was, that although in some cases wards were set apart for the reception of cholera patients, yet in general the doors of the great hospitals were closed against them. We earnestly hope that, during the present season, we may be spared from a similar visitation; but as it is undoubtedly our duty to guard against any possible recurrence of this mysterious malady, the letter of Dr. Babington is worthy of serious attention, and more particularly as it comes, not from a private or obscure individual, but from a Physician to one of our largest hospitals, and the President of the Epidemiological Society, who, in virtue of his position, must exercise very considerable influence upon the public mind.

We admit, at once, that many of the arguments used by Dr. Babington are irresistible; that the severity of a disease is the strongest claim to its treatment in an hospital; that in such an establishment alone can all the appliances be found which are necessary in the treatment of cholera; that by the concentration of cases under one roof, medical labours are economised; and that the teachers at the great schools of practical medicine are the persons who should be best qualified to treat the malady effectually, and to reduce its mortality.

Nevertheless we cannot coincide in the opinion, that in the event of cholera again raging in London we ought to convert our great hospitals into receptacles for the treatment of that disease; and our objections are based upon the following grounds. In the year 1849, we find that the mortality during one week was 1272, during the succeeding week it was 1663, and in other weeks the mortality was proportionally high. Now, assuming that the number of attacks was only double the number of deaths, we should have in one week a number of cholera cases amounting to 3326—a mass of disease which would fill all our Metropolitan

hospitals, to the utter exclusion of all other cases. Again, the congregation of a vast number of cases of this disease in an hospital containing persons labouring under different maladies tending to reduce the bodily powers, must necessarily lead, whether we do or do not admit the contagious nature of the epidemic, to the spread of the choleraic miasm among patients who might otherwise escape, and thus increase instead of diminish the mortality. It must also be recollected, that most of our hospitals are situated in close and crowded localities, as St. Bartholomew's, Guy's, St. Thomas's, and others, and therefore are very ill adapted for the accumulation of cases in the treatment of which extensive ventilation and isolation (as far as practicable) are of paramount importance.

Such are a few of the objections which may, we think, be fairly urged against the extensive admission of cholera patients into our great hospitals; and the same remarks will apply with still greater force against the appropriation of the workhouses to a similar purpose; for the unfortunate inmates of the latter institutions are usually the old, the destitute, and the victims of chronic disease; and the Poor-law Dietary is not of such a nature as to fortify their bodies against the absorption of an epidemic poison.

It is quite essential that, if we should again experience a renewal of cholera in London, the Boards of Guardians of the different parishes should unloose their purse-strings, and provide such additional accommodation for the suffering poor as the exigency may demand. Buildings should be appropriated for the reception of the sick; and they should be situated, as far as possible, in healthy and isolated localities; they should be furnished with all such appliances for the treatment of the disease as the experience of past years has suggested, and they should be directed by competent medical officers, selected from the most eminent in the Profession. We would also suggest that the treatment of the cases should be confided to properly qualified persons, and the remuneration be such as would compensate them for the talents they exert and the risk which they incur, and not to those who are compelled by necessity to accept the paltry terms which are now offered for the most valuable services, and which are insufficient to induce well-qualified men to undertake the arduous duties which must devolve upon them.

THE "DIRECTIONS AND REGULATIONS" OF THE BOARD OF HEALTH.

The Board of Health are not to be blamed because their powers are not equal to the present emergency. They are blamed because they do not exercise the powers they undoubtedly possess, or exercise them in such a manner as to render them useless or injurious to the community.

The provisions they have made against Cholera after it has appeared, not when it was threatening us from Copenhagen and Hamburgh, are to be found in the "Directions and Regulations" which we have printed in another part of this week's impression. These we now proceed to review.

The first Clause is an amusing instance of the self-appreciation of Mr. Edwin Chadwick and Dr. Southwood Smith. Parliament has ordered the provisions of an Act to be enforced by certain local authorities. The two members of the Board of Health authorize and confirm the Act of Parliament by their influential sanction! The local authorities will doubtless attend much more to the edicts of the Board than to any Act of the Legislature.

No one can complain of the matter of the 2nd, 3rd, and 4th Clauses; but the manner is surely calculated to excite the Guardians of the Poor to resistance or disobedience.

The 5th Clause, directing Local Boards, Town Councils, etc., to see such places cleansed as Medical Officers may report to be dangerous to health, if it were attended to, would limit the power of these Boards or Councils, who already possess the power of cleansing, without waiting for a medical certificate of the necessity for such cleansing.

Nothing is said in the 6th and 7th Clauses as to what is to be done if the occupiers of the adjoining houses refuse to undertake the task of purifying those certified by the Medical Officers to be in a state dangerous to health. When poverty is the reason of the neglect, the Guardians are to perform the duty, and have also to perform any scavenger's duty neglected by Town Councils or other bodies, although imposed upon the latter by law.

The 9th Clause limits, instead of extending, the powers the Guardians and Town Councils hold under the first section of the Act of 1848 for the removal of nuisances. Local authorities may infer from this Clause, that they cannot interfere unless the occupier is *unable* to abate a nuisance, and that they cannot compel an *unwilling* man. If Local Boards act under the present directions of the Board of Health, they set aside greater powers with which they were previously invested by Act of Parliament. By a singular mistake in copying the words of the Act, the Board lead those they are directing to imply that they can only remove "swine, or any accumulation of dung, manure, offal, filth, refuse," etc., from premises which are near or adjoining to any "foul and offensive drain, ditch, gutter, privy, cesspool, or ashpit," whereas the Act is directed against nuisances on *any* premises within the jurisdiction of the Local Boards.

The 11th Clause is objectionable, as the Guardians are only required to enforce purification of houses when the occupiers are *unable* to purify them.

We need say little about the other Clauses, but cannot refrain from expressing our opinion that the whole mass of "Directions and Regulations" is far from creditable to a Board empowered by an order in Council, under an Act of Parliament, to issue such "directions and regulations" as they shall "think fit for the prevention, as far as possible, of the prevailing epidemic," particularly when the Board is specially directed to superintend not only the cleansing of streets, but "the cleansing, purifying, ventilating, and disinfecting of houses, dwellings, churches, buildings, and places of assembly,"—"the removal of nuisances,"—and "the speedy interment of the dead."

The powers entrusted to the Board have clearly been exercised in a bungling, inefficient manner, limiting instead of extending the purifying powers of the Local Boards. They have done nothing towards assisting those Boards in the suppression of noxious trades, or of factories which poison the neighbourhood by their pestilential effluvia, and they are wholly silent upon the very important subject of the "speedy interment of the dead."

We have also printed another official paper, entitled, "Plain Advice to All During the Visitation of the Cholera," which, though generally good, is marred by mistakes. For instance, the plain advice,—"It would be good to make a hole, three or four inches square, near the ceiling, into the chimney: a very easy ventilator,"—if followed, would fill the room with smoke. Directions should have been given to supply the hole, when made, with a simple valve. This might be done for less than sixpence.

The medicine recommended by the Board of Health,—a

scruple of confection of opium, with peppermint-water, and hot brandy-and-water, with *smaller doses to children*, in the premonitory diarrhœa, might perhaps be used by a medical man, but is not a safe weapon in the hands of the public.

Another paper, which we have not thought it necessary to print, has also been issued by the Board, containing directions to "Captains of Merchant Vessels, Steamers," etc. One sentence in this paper must not be passed over without notice. It stands thus:—"MARK THIS WELL.—The cholera is not contagious; so no one need be afraid of catching it. There is no danger in waiting on or nursing any one of the crew who may unfortunately be attacked." If followed, this advice might lead to culpable carelessness. The Board of lawyers are non-contagionists; but Medical men have very good grounds for refusing to join in the absolute dictum of the Board. It would have been much better to say, that in a well-ventilated, clean apartment, there was little or no danger of the disease spreading. Dr. M'William's rule to be observed by officers of the customs is to be commended far above that of the Board of Health. It is printed, with a number of other useful cautions, as follows:—"It is not expected of any one to enter the apartment of a person labouring under cholera, unless his presence there be necessary: but it is presumed that no officer, through any apprehension of infection, will be found to hesitate in rendering assistance to his fellow, wherever that assistance is in any degree required." We believe, that a "pestilence walking in darkness" is far more dreaded by the public than one which, under certain preventible conditions of dirt, or crowding, is believed to spread from one person to another.

The direction of the Board to use chloride of lime in merchant-ships is also unfortunate, as the fumes of chlorine are both disagreeable and noxious. As may be seen by our Navy Report, the chloride of zinc has all the advantages of the other preparation, without its injurious properties.

CLINICAL MEDICINE AND SURGERY AT THE LONDON SCHOOLS.

IN a leading article published lately (page 270), we mentioned, in terms of approbation, the system of Clinical instruction pursued at the Medical Schools of Bombay and Bengal. We have lately looked over the Prospectuses issued by the London Schools of Medicine, and regret to find that this most important branch of Medical science has by no means attained the degree of importance to which it is entitled, and which the immense facilities afforded by our great Hospitals would soon enable it to reach, by a very small effort on the part of the Metropolitan teachers.

Notwithstanding the fact that in almost all the chief capitals of Europe, Clinical Professors of Medicine and Surgery are appointed in the great Hospitals, our own Schools are still deficient in this respect. But as the office of praise is more pleasant than that of censure, we are happy to find that in addition to University College Hospital, which first set the example of appointing a distinct Professor of Clinical Medicine, and another of Clinical Surgery, whose duties are to lecture regularly and at stated intervals on the cases actually under treatment, another Metropolitan School has followed the example, and the great hospital of St. Thomas now announces the appointment of a distinct Professor of Clinical Medicine. We hope soon to see the example followed by all our great Hospitals, and the resources of those vast establishments would then be far more profitably employed than they now are, in making known to the present generation of Students and Practitioners, the leading characters in the history and treatment of disease.

We need hardly repeat, what we have before more than once admitted, that Clinical teaching is not altogether neglected at our great Hospitals. Indeed the able and excellent Lectures on Clinical Medicine and Surgery, published in our own pages, afford sufficient proof that neither talents nor capabilities are wanting in this department. What we complain of is, that this excellent method of imparting instruction is not made incumbent upon the mass of Students; and what we desire is an extension of its advantages on a very large scale. It is notorious, that the Lectures are usually delivered at long and sometimes irregular intervals, and are attended by comparatively a very small number of students; while we maintain that the Clinical Lectures are deserving of at least an equal degree of attention to those on Anatomy, Physiology, or the Theory of Medicine.

The remedy for the existing defects is really so easy, and the benefit so apparent, that it is a matter of extreme wonder that the University and St. Thomas's Hospitals should be the only schools where this mode of instruction is fully carried out. The staff attached to our London hospitals is far too small, but it would be surely very easy for each to appoint one Professor in Medicine and one in Surgery, whose especial duty it should be to instruct the pupils regularly and systematically upon the cases *actually under treatment;* and, considering the enormous number of beds at some of the hospitals, there would be a continual supply of the most valuable materials for practical instruction.

At St. Bartholomew's Hospital we are told in the prospectus, that "the hospital contains 650 beds, of which 420 are allotted to surgical cases and the diseases of the eye, and 230 to medical cases and the diseases of women. The number of patients is nearly 90,000 annually, the in-patients amounting to nearly 6000, the out-patients and casualties to more than 80,000."

What an immense field for clinical instruction is here afforded, and what a valuable course of lectures might be delivered upon the cases occurring in one year in this great establishment! Yet we find that the lectures on the theory and practice of medicine, and on surgery, which are of course the same year after year, with slight alterations, are each delivered *three times a-week*, while the clinical lectures upon 90,000 cases annually under treatment are each delivered *once a-week*, by different lecturers, and without any system at all, so far as we can understand.

We hope to be able, at no distant period, to record an improvement in this most defective system, and to find our own plan of clinical instruction more and more approximated to that which exists in the Continental schools. The Examining Bodies must take the initiative by making a regular course of clinical instruction a part of the course of study they compel their Graduates to undergo.

THE LORD-ADVOCATE OF SCOTLAND has ordered a full inquiry into the subject of medical evidence in criminal cases.

COURT OF SEWERS.—On Tuesday, a special meeting of the Metropolitan Commissioners of Sewers was held. Numerous applications were made, by persons from various parts of the Metropolis, complaining of nuisances in the shape of cesspools and drains. In every case the Court issued a peremptory order for the abatement or removal of the nuisance.

YELLOW FEVER.—AMERICA.—Mobile papers of the 12th state, that the fever was bad in that city, and the number of deaths on the increase. There were no later accounts of the fever in New Orleans.

THE CHOLERA.

DIRECTIONS AND REGULATIONS OF THE GENERAL BOARD OF HEALTH.

(From the Supplement to the *London Gazette*, September 21.)

The following directions and regulations of the General Board of Health have been issued under authority of the Nuisances Removal and Diseases Prevention Act, 1848, Section X. :—

To local Boards of Health acting under the Public Health Act, 1848;

To Town-Councils or other bodies acting under the authority of local Acts of Parliament, in which the provisions of the Public Health Act are included;

To the Guardians of the Poor of the several unions in England and Wales named in the first schedule hereunto annexed;

To the Guardians of the Poor of the several parishes in England and Wales named in the second schedule hereunto annexed;

To the Overseers of the Poor of all parishes, townships, and places not comprised in the unions and parishes mentioned in the first and second schedules hereunto annexed;

To the Mayor, Aldermen, and Burgesses of cities and boroughs, Commissioners under local acts, the Surveyors of Highways, their deputies and assistants, Road Trustees, commissioners, county surveyors, and other persons by law entrusted with the care and management of all streets, public ways, and places in any parish or place in England and Wales;

To the Owners and Occupiers of Houses, Dwellings, Churches, Buildings, and Places of Assembly within the said Unions and Parishes, and others having the care and ordering thereof;

And to all whom it may concern:—

Whereas, by the provisions of "The Nuisances Removal and Diseases Prevention Act, 1848," for the prevention of epidemic, endemic, and contagious diseases, we, the General Board of Health, are authorised to issue such directions and regulations as we shall think fit for the prevention (as far as possible) or mitigation of epidemic, endemic, or contagious disease; and whereas by the said Act, it is provided, that the directions and regulations to be issued, as aforesaid, shall extend to all parts or places in which the said provisions of the said Act shall, for the time being, be in force, under the Order of Her Majesty's Privy Council, unless such directions or regulations shall be expressly confined to some of such parts or places, and then to such parts or places as in such directions and regulations shall be specified;

And whereas, by an order of Her Majesty's Most Hon. Privy Council, bearing date the 15th day of September, 1853, the said provisions of the said Act were directed to be put in force throughout the whole of Great Britain, for a period of six calendar months thence next ensuing;

Now, in exercise of the authority vested in us as aforesaid, we, the General Board of Health, do issue the directions and regulations hereinafter contained, to extend to all parts and places within the several unions, parishes, and places, throughout England and Wales, that is to say:—

I. We direct that all the local authorities charged by the Common Lodging-houses Act, 1851, with the execution of that Act, shall see that the provisions of the said Act, and any Act amending the same, are enforced forthwith.

II. We direct the guardians, overseers, and persons as aforesaid, to order the clerk to the guardians of any such union or parish, forthwith upon the publication of these directions, to make out, from the medical officers' books, or other sources of information readily obtainable by him, a list of the places within his union or parish where cases of cholera, diarrhœa, typhus fever, or epidemic, or any endemic disease, may have lately been frequent; and to give the list, or portions of the list relating to particular districts, to the medical officer of each district to which it shall relate. And the medical officer of every union or parish shall visit the places within his district named in such list, and any other places within it, and examine the houses situate in such places, as to their present condition in respect to cleanliness, or as to any existing predisposing and removable causes of disease likely to affect the inmates thereof.

III. We direct the guardians, overseers, or persons to whom these regulations may apply, to order the said medical officer to inquire into the state of the health of the inhabitants of all such places, and into the state of health of the children in schools, of the work-people in places of work, and of the inmates of common lodging-houses, and where he shall ascertain that any case of diarrhœa, or of any premonitory stages of an epidemic disease, exists, to treat, or direct the treatment, of the same at once.

IV. And such medical officer, where it may be necessary, shall certify in writing to the Guardians of his Union or parish all such places as are in a state dangerous to health, or as need frequent and effectual cleansing by way of preservation against disease, and such dwelling-houses as are in a filthy and unwholesome condition, and all such nuisances and matters injurious to health as ought to be abated, cleansed, and removed under these regulations.

V. We direct that all Town Councils and other governing bodies of cities and boroughs, Commissioners under local Acts, local Boards of Health, surveyors, and district or assistant surveyors of highways, road trustees or commissioners, county surveyors, and others now by law entrusted with the care and management of the streets and public ways, and places within the parishes and places to which these directions and regulations extend, shall see to the effectual and continued cleansing of all such of the streets, rows, lanes, mews, courts, alleys, and passages, and public ways and places, under their respective care and management, as by the medical officers of the guardians or others authorised to superintend the execution of these directions and regulations shall be certified in writing to be in a state dangerous to health, or to require frequent and effectual cleansing by way of precaution against disease, and shall cause all filth, ordure, and nuisances to be removed therefrom.

VI. We direct, that where any such streets, rows, lanes, mews, courts, alleys, and any passages, public ways, or places, to which any houses or tenements adjoin, which have not been entrusted by law to the care or management of any Town-Council, Local Board of Health, Commissioners, Surveyors, Trustees, or others, have been certified in writing by such Medical Officer as aforesaid, to be in a state dangerous to health, or to require such frequent and effectual cleansing, every occupier of a house or tenement so adjoining, shall keep, or cause to be kept sufficiently cleansed, every part of the street, row, lane, mews, court, alley, or passage, way, or place, which adjoins the house or tenement occupied by him, which works of cleansing and removal of filth, ordure, and nuisances, required by these directions and regulations, shall be done by effectual washing, or otherwise, and with the use of fluids or substances for preventing the escape of noxious effluvia during the operation, when the Medical Officer of the Guardians, or others authorised to superintend the execution of these directions and regulations shall direct and prescribe the same.

VII. We do hereby require the said Guardians and Overseers, and all other persons to whom these present regulations are addressed, by themselves or by their officers or persons already employed by them, or to be specially appointed by them in this behalf, to superintend and see to the execution of the foregoing directions and regulations within their respective unions, parishes, or places over or in which they may legally have jurisdiction.

VIII. And where it shall appear that by want or neglect of the town-council of any city or borough, local board of health, commissioners, surveyors, trustees, or others entrusted with the care and management of streets and public ways and places as aforesaid, or by reason of poverty of the occupiers, or otherwise, there is any default or delay in the cleansing of or removing nuisances from any street, row, lane, mews, court, alley, passage, or public way or or place certified as aforesaid, within any of the said unions, parishes, or places, we direct the guardians of such union or parish, or the overseers of such parish, and all other persons having legal authority within such parish or place, to cause such street, row, lane, mews, court, alley, passage, way, or place to be effectually cleansed, and all nuisances to be removed therefrom, and to do all acts, matters, and things necessary for that purpose.

IX. We also direct,—

That when and so often as any dwelling-house in any part or place to which these directions and regulations extend is in such a filthy and unwholesome condition as to be a nuisance to or injurious to the health of any person; or

Where, upon, adjoining to, or near any premises, or any part or place as aforesaid, there is any foul and offensive drain, ditch, gutter, privy, cesspool, or ashpit, or any drain, ditch, gutter, privy, cesspool, or ashpit, kept or constructed so as to be a nuisance to or injurious to the health of any person; or

Where, upon, adjoining to, or near any such premises, swine, or any accumulation of dung, manure, offal, filth, refuse, or other matter or thing is kept, so as to be a nuisance to or injurious to the health of any person; or

Where, upon, adjoining to, or near any such premises, being a building used wholly or in part as a dwellinghouse, or being premises underneath any such building, any animal is kept so as to be a nuisance to or injurious to the health of any person;

In each of the above recited cases the owner or occupier and persons having the care or ordering of such dwelling-house, or of the premises where the nuisance or matter injurious to health may be, or where they by reason of poverty or otherwise are unable, then the town-council, local board of health, guardians, commissioners, or overseers, shall cleanse, whitewash, or otherwise purify, as the case may require, such dwellinghouse or building, or abate or remove the nuisance or matter injurious to health as aforesaid, with all reasonable speed after the publication of these our directions and regulations, or after the nuisance or matter injurious to health shall have arisen.

X. Wherever there shall not be a Town Council, Local Board of Health, or other governing body of a city or borough, or Commissioners having jurisdiction for the removal of nuisances, or where such Council, Local Board of Health, governing body, or Commissioners shall not cause to be effectually executed such directions, we direct the said guardians and overseers, as the case may be, to visit, from time to time, or cause to be visited, the several dwellings and places where there may be ground for believing that necessity will arise for executing such directions.

And where, from the poverty of the occupiers or otherwise there may be default or delay in the cleansing or purifying of any such

dwelling-house, or the abatement or removal of any such nuisance or matter injurious to health, and the Medical officer, or other person duly authorised as aforesaid, shall have certified that the same requires immediate attention, and where, from want of co-operation of the owners or occupiers, there is any default or delay in cleansing any foul and offensive drain, ditch, watercourse, or gutter into which several dwellings or tenements may drain, to cause such dwelling-houses to be cleansed and purified, and such drain, ditch, watercourse, or gutter to be frequently and effectually cleansed, and such nuisance or matter injurious to health to be abated and removed respectively, and to do all acts and provide all matters and things necessary for that purpose.

XI. Every medical officer shall forthwith, upon any unusual amount of diarrhœa, any case of cholera, or of typhus, or other epidemic, endemic, or contagious disease, becoming known to him within his district, report the same to the board of guardians of his union or parish.

XII. On the occurrence of any unusual prevalence of diarrhœa, or of severe premonitory symptoms of the disease of cholera, or any severe epidemic disease, in any school or place of work, or among the inmates of any establishment, which shall appear to be overcrowded, the medical officer shall, so soon as he shall be informed thereof, and if he deem it necessary, order the separation of the inmates of such school, place of work, or establishment, and direct such measures to be taken as shall appear to him to be expedient to prevent the spread of the disease.

XIII. And where it shall sufficiently appear to such guardians, overseers, or others to whom these regulations apply, by certificate of their medical officer, or of the Medical Superintending Inspector of the General Board of Health, or otherwise, that cholera, or any other severe epidemic, endemic, or contagious disease, is present or imminent in any union, parish, or place, and that extraordinary medical aid is required for persons resident within such union, parish, or place attacked or threatened to be attacked by cholera, or other severe epidemic, endemic, or contagious disease, or for the discovery and treatment of persons so attacked or threatened, we direct such guardians, overseers, or persons aforesaid, to provide, as soon as may be practicable, sufficient medical aid for examination, by house to house visitation, of the state of the inhabitants of the union, parish, or place, and for medical treatment of persons found to be threatened or affected with cholera, or such epidemic disease, or symptoms premonitory thereof, and for warning and instruction of such persons, and for the provision in suitable places of such medicines as may be required within their respective unions or parishes for necessitous persons attacked by cholera, or by premonitory symptoms, and to make arrangements for the distribution of notices stating the places where such aid and medicines shall have been provided.

XIV. To insure proper treatment in their own houses to many of the poorer class, we require the said guardians, where it shall appear to their medical officer, or to the Medical Superintending Inspector of the General Board of Health, that such extraordinary aid is requisite, to provide suitable rooms or places capable of accommodating necessitous cases, to which persons attacked by cholera, who cannot be properly treated in their own homes, may be conveyed.

XV. We direct the said guardians, where it shall appear to their medical officer, or to the Medical Superintending Inspector of the General Board of Health, requisite, to provide rooms or places of refuge, to which may be removed the families of such necessitous persons as have been attacked with cholera, and also such necessitous persons living under the same roof with, or in the vicinity of, persons attacked, as the medical officers, acting under the authority of the said guardians, may deem it necessary to remove, and to cause the houses, rooms, or dwellings, from which persons may have been so removed to the houses of refuge, to be cleansed and purified by the owners or persons having the care or ordering thereof, or, in their default, by the said guardians.

XVI. On the occurrence of any case of cholera, or other epidemic, endemic, or contagious disease, in any room occupied by one family or more, the medical officer of the union or parish attending the case shall cause to be removed either the patient or so many of the occupants of such room as he shall consider would, unless removed, tend to prevent the recovery of the patient, or endanger the spreading of the disease.

XVII. In case of death by cholera, or any other severe epidemic, endemic, or contagious disease, the last medical attendant upon the person of the deceased, or, in case of there having been no medical attendant, the housekeeper or person present at the death, or who shall be in charge of the body, shall forthwith notify the fact of the death to the medical officer of the district charged with the execution of these orders, for the prevention of the spread of such disease, and the medical officer shall give such directions as may appear to him needful in respect to the care, removal, and the time of interment of the body, for preventing the communication or spread of disease.

And we hereby authorise and require all persons to give such information or such assistance to such medical officer, and to be otherwise aiding him, as he may need in the execution of these orders.

XVIII. In the event of the fatal termination of any case of cholera, or of severe epidemic, endemic, or contagious disease, in any room occupied as a living or sleeping room by one family or more, or by numerous persons, the medical officer of the district, so soon as he shall be informed of the death, shall cause to be removed, as speedily as may be, the corpse from the same premises, or, if this be not convenient, shall cause the persons occupying such rooms to be removed therefrom until the corpse can be conveniently removed and properly interred.

XIX. And we direct the said guardians to make arrangements for obtaining daily lists of persons attacked by cholera or other epidemic disease within their respective unions or parishes, with the particulars of their cases and treatment, and for communicating the same daily to the General Board of Health.

XX. And we desire the said guardians, where it may appear needful, to appoint such additional medical officers, and also to appoint such other officers as may be necessary to execute and superintend the execution of these regulations, and to publish and circulate, by private handbills or other means, notices of the provisions of the said Act for the prevention of nuisances, and of our directions, regulations, and instructions, or of such part or any of them as it may appear to them expedient to make publicly known.

XXI. And we direct that in these directions and regulations the words "Guardians of the Poor" shall mean the guardians, directors, wardens, governors, or other officers having the management of the poor of any union, parish, or place where the matter requiring the cognizance of any such officers arises; and the word "parish" shall include every place where the relief of the poor is administered by a board of guardians for such place.

Given under our hands and under the seal of the General Board of Health, this 20th day of September, 1853.

EDWIN CHADWICK.
T. SOUTHWOOD SMITH.

PLAIN ADVICE TO ALL DURING THE VISITATION OF THE CHOLERA.

[The following appears as an official paper in the *Times*, but it is not stated by what authority.]

1. Conform to, and assist, every measure of prevention or remedy put into operation by the local authorities; for such measures are founded upon knowledge and experience, and are enforced by the direction of Government for the public good. If you sustain inconvenience, or apprehend danger, from any public nuisance, immediately complain, either to your Local Board of Health, your Town Council, or your Board of Guardians, as the case may be, either of whom are fully empowered to enforce a remedy.

2. Apply yourself, as far as lies in your power, to render the chief duties of parochial and other public officers unnecessary, inasmuch as regards your own home, by the instant removal of every nuisance about it and in it.

3. It is the special duty of the authorities at all times, but imperatively so now, to have all streets, alleys, and courts, daily cleansed. But it is your duty to throw no refuse into the streets, nor to collect any in your back premises. Have no dung-heaps, no ash-heaps. Keep no pigs in close places. Make the scavenger and the dustman take away whatever is annoying. Have no sloppy holes in your areas or back yards, but get them paved or levelled. Insist upon your landlord making your house water-tight. See that your windows will open and shut, so as to admit air, and exclude moisture. Every epidemic, whether fever or cholera, rages amid dirt and damp, and where there are stinking kennels and open ditches, foul with dead animals and decayed vegetables. Avoid all such places to dwell in; and make your children, when they go out, avoid all bad-smelling places.

4. Look to the inside of your dwelling, as well as outside, to get rid of nuisances. Are the walls and ceilings dirty or mouldy? At the cost of a shilling or two they may be lime-whited. This has been found one of the most effectual preventives of cholera. Avoid, if possible, crowding your sleeping-rooms. If there is a chimney in a bedroom, keep it open, and have no chimney-board, or chest of drawers, to stop it up. It would be good to make a hole, three or four inches square, near the ceiling, into the chimney—a very easy ventilator. Get pure air into your rooms by every possible means, and get rid of the foul air in the most effectual manner. If there is a constant offensive smell within your dwelling, which other people as well as yourself notice, be sure that there is danger at hand; and never rest till you have ascertained the cause, and have got it removed, as far as possible. Complain to the landlord; if he neglects you, complain to those who have to enforce "The Nuisances Removal Act." If you cannot get the nuisance removed, you ought to prepare to remove from the nuisance. If you go to other lodgings or houses, go to those where there has been no fever. There are houses, with no fault of construction, that are always disagreeable to the senses. They are the abodes of sluttishness—the forerunner of disease. The person is seldom clean when a dwelling is dirty. Personal cleanliness and house cleanliness are both health-givers, and are of vital importance when the elements of disease and death are around us.

5. This advice, with regard to your dwelling, assumes that you live in a populous town; but the principles on which the advice is founded hold good, whether you dwell in a village, or even in a lone cottage. All places, it is to be feared, have their nuisances. If there is a dung-heap at your threshold, remove it to a distance. If

a foul ditch, or cesspool, stir yourself to have a change. If the pigsty is offensive, cleanse and wash it daily. Have no poultry or rabbits within doors. In a word, get dirt and damp away from your house, and out of your house, and get pure into it. Be clean yourself, and have everything clean about you.

6. Having looked to your dwelling within and without, consider what is best for your welfare as to food and clothing. Whenever cholera is present in a locality, there is a general tendency to irritation of the bowels, and warm clothing and wholesome food are more than ever necessary. These, happily, are within the reach of the great body of the people. The extreme poor must be righteously cared for in these respects out of the abundance of the more fortunate; but all have in their power to avoid what is hurtful. Avoid cold; but make yourself strong by exercise in the open air, if your employment is within doors. The same duty of exercise applies to all your family, male and female. If there is any food or drink injurious at ordinary times, it is doubly injurious when there is pestilence in the atmosphere. Be very careful not to drink impure water; and take heed that wells are not polluted, and that water-butts and cisterns are kept cleansed. Spend less money on beer and other drinks, and spend more on flannel and coals.

7. The following personal precautions against cholera proceed from the General Board of Health:—

"Cholera is not so suddenly fatal as is supposed; it comes on with looseness or bowel complaint, which goes on for some hours, or even for a day or two. There is often no pain; but no one must be put off his guard by this circumstance, but must immediately, when purging comes on, apply for proper medicine, by which the disease is usually stopped. Where cholera is prevalent in a district, the neglect of this caution for a few hours may be fatal.

"Cholera is often brought on by improper diet. Tainted meat and fish, and damaged vegetables, should be carefully avoided.

"Cholera is often brought on by excess, even of wholesome food. The greatest moderation should be practised both in meats and drinks, always avoiding long fasting. Ardent spirits should be taken only under medical advice; drunkards always suffer most.

"Cholera is often brought on by cold. Wet clothes should be immediately changed; the feet especially should be kept warm and dry. The most violent attacks often come on immediately after incautious exposure to damp, foggy night air."

8. If an attack, even the slightest, should come on in your household, you must immediately apply for medical assistance. Arrangements will be made in every locality to render such assistance promptly and effectually; there is no disease which can be more readily met than cholera in its first or premonitory stage. In cases of diarrhœa, or looseness of bowels, the following medicine is recommended by the Board of Health, but avoid, if you can, exercising your own judgment in giving medicine at all:—

"20 grains of opiate confection, mixed with two table-spoonsful of peppermint-water, or with a little weak brandy-and-water, and repeated every three or four hours, or oftener if the attack is severe. Half the quantity to persons under 15; smaller doses to children."

9. If the disease assume a violent form before help can be obtained, put the sufferer into a warm bed, apply bottles of hot water, or heated flannel, to the stomach and feet, and along the spine. A dessert-spoonful of brandy may be given from time to time in hot water. Constant friction with flannel dipped in hot vinegar is recommended, as well as the application of a vinegar and mustard poultice over the belly. A prudent person will have the necessary articles at hand; but promptitude in getting assistance is the first duty. By night or by day send for the doctor; and such is the zeal of the Medical Profession that the humblest person will not send in vain.

10. If any of the evil habits and neglects referred to in this advice exist in yourself or your family, begin to alter such habits, and avoid such neglects, without an hour's delay. The desired change to enable you to meet this epidemic disease is good for every other; and an immediate preparation may save a vast amount of misery. The condition of the human body cannot be altered at once, but the practices which tend to an evil condition may be instantly changed. In days you may effect a change which you cannot effect in hours.

11. Whether the disease of cholera come into your household or you be spared, keep up your spirits; have no vain fears; relax no industry; shrink not from assisting your neighbours; and put your trust in Him in whose hands are the issues of life and death.

MEETING OF THE PROFESSION AT NEWCASTLE.

A meeting of the members of the Medical Profession at Newcastle was held in that town on Monday evening, the object of which was to express disapproval of the arrangements made by the Board of Health in reference to the cholera, and to remove the impression that the Medical men of the town were unable to cope with the disease, or unwilling to give their co-operation. The chair was taken by Mr. C. Potter. Dr. Robinson censured the arrangements made by the gentlemen sent down to Newcastle by the Board of Health, and denied that there was any want of unanimity on the part of the Profession; but contended that all voluntary effort had been frustrated by the measures adopted under the sanction of that Board. Dr. Robinson then made an allegation of the insufficiency of Mr. Grainger, and complained that the Medical men of the town had not been consulted in reference to the arrangements made by the Board of Health. He also argued, that the local knowledge of the Medical men of Newcastle and their acquaintance with the habits of the people would have enabled them to suggest many measures of importance during the present crisis. Resolutions were proposed and agreed to, condemning the arrangements adopted at Newcastle and Gateshead for the prevention and treatment of the epidemic cholera; and stating that, as the Medical men of those towns had not been consulted in those arrangements, they disclaimed responsibility for them. Several Medical men spoke in support of these Resolutions, one of whom (Mr. Newton) complained of personal discourtesy on the part of Dr. Gavin, and alluded to several members of the Medical Profession in Newcastle who had had much experience in the treatment of cholera, but who had not been consulted. Mr. Newton gave his opinion that, if some of those gentlemen had been allowed to act, hundreds of lives would have been saved, and that the disease was to be managed as easily as the hooping cough or scarlatina. Mr. Newton also disapproved of the remedies administered by the gentlemen sent down by the Board of Health, who, he said, "instead of bringing with them health and protection from disease, scattered around them the most deadly poisons." Mr. Rayne gave his opinion that the Resolutions were not sufficiently severe, and suggested that Lord Palmerston should be requested to institute a public inquiry into the subject. Mr. Furness complained that precautionary measures had not been taken to prevent an attack of cholera, especially when the epidemic was observed to be travelling over Europe, in a direction towards this country; for that the Town Council was no doubt to blame, but certainly not so much so as the General Board of Health in London, who, while engaged in watching its progress on the Continent, appeared to be quite indifferent as to the lives of the people in this country. (Hear, hear.) He adverted to the supply of impure water to the inhabitants of the town by the existing Water Company, as being calculated to derange the health, and be a great predisposing cause of cholera. The Town Council were to blame, the Board of Guardians were not altogether blameless, but the Board of Health in London was the most deeply implicated in the guilt of this melancholy transaction. A Committee was then appointed, and it was agreed that suggestions should be made to the inhabitants of the town who took an interest in this important subject, with the view of inducing them to join the Medical Profession in their prayer to Government for a public inquiry into the course adopted by the Board of Health.—*Times.*

IMMUNITY OF JEWS FROM CHOLERA.

Mr. Wolff, Surgeon to the Poor of the Spanish and Portuguese Synagogues, thus endeavours to explain the immunity of Jews from cholera:—

"The comparatively small number of the Jewish community, and the almost unbounded charity of its more opulent members, enable the vestries of the various Synagogues to exercise so complete a supervision over the poorer members, that abject poverty is unknown among them; and there is, probably, no Jew in this country so poor as to be unable to procure a plentiful and wholesome meal. They do not suffer from the depression caused by habitual intoxication. These circumstances in their favour, enabled them during the epidemic of 1849 to enjoy an almost complete immunity from the disease, which raged with fearful violence in the immediate neighbourhood of the district where they most congregate, and the sanitary condition of which, as regards cleanliness, ventilation, &c., was decidedly unfavourable."

METROPOLIS.

The following are some particulars of 29 deaths by cholera in the Metropolis:—Kensington, sub-district of Saint John, Paddington, at 15, Elms-place, on 17th September, the widow of a cabinet-maker, aged 62 years, "Asiatic cholera (24 hours)." The Registrar, Mr. C. Holloway, adds:—"Her health has been generally very good Her son states, that opposite No. 6 is an open cesspool, from which there is a great stench. This is the second death that has occurred in this house from cholera, and the fourth in this place. Several other persons are lying ill." In Saint Mary's Hospital, from 9, Elms-place, on 17th September, the daughter of a carpenter, aged 9 years, "cholera (11 hours)." [These cases were detailed in our Report of St. Mary's Hospital last week. Elms-lane, which is the lowest part of the parish, as regards site, abuts upon the Bayswater Tea-gardens, and consists of twenty-one small, one-storey cottages, occupied by poor, but respectable families, belonging to the working classes, who are crowded and huddled together, so that the locality is never free from disease of some kind or another. The lane itself is in a horrid condition, being neither flagged nor paved, and the yards or gardens at the rear of the hovels are filled with every species of filth and rubbish, which, according to the residents, emit a stench in warm weather sufficient to poison and knock them down; in addition to which, there are mushroom-beds in front of the cottages, the stench from which, in rainy weather, is overpowering. There is, also, after heavy rains, such a conflux of water in this swamp, that it flows into the cottages,

flooding them, and carrying away the furniture. In consequence of the present frightful state of the neighbourhood, the Inspector of Nuisances lately inspected the locality and houses, with the view of enforcing the orders contained in the "General Board of Health Notification," and which are imperatively called for, as the cottages are wholly void of drainage, and are, literally speaking, surrounded by poisonous exhalations, which are greatly aggravated by the stagnant cesspools that abound in all directions.]

Marylebone, sub-district The Rectory, in the Workhouse, from 6, Pritchard's-place, on the 19th September, a gardener, aged 41 years, "disease of the brain, cholera (22 hours.)" The Registrar, Mr. E. Joseph, adds:—"This patient had been in the parish infirmary for six weeks from disease of the brain; on Sunday last he appeared well up to 6 o'clock p.m., when diarrhœa came on, first of a bilious, then of a watery character, followed by vomiting, a succession of fits, urgent cramp, coldness of the surface, with a blue appearance about the extremities. He died 22 hours after the first seizure."

Islington, West sub-district, in the London Fever Hospital, from George-street, New-road, on 17th September, a female servant, aged 17 years, "malignant cholera. In hospital 40 minutes." The medical attendant reports:—Collapse; skin blue; perfect consciousness; vomiting and purging; pulseless at wrist; was at work on the previous day.

Stepney, sub-district of Mile-end Old Town, Upper Part, at 16, Charles-street, on 23rd September, the wife of a mariner, aged 45 years, "cholera (19 hours)." The Registrar, Mr. T. Baddeley, observes:—"The deceased was the wife of a mariner, who left her for the purpose of joining his ship the night before she was attacked. The informant states, that the deceased was of the most intemperate habits, selling every particle of furniture for the purpose of obtaining drink, and, when her apartment was entered, it presented the most wretched appearance, scarcely an article of furniture being therein."

St. Saviour, Southwark, at 56, Ewer-street, three deaths are registered from cholera, namely, on the 16th September, the daughter of a labourer, aged 3 years, "cholera (9 hours)." In the same house, on the 19th September, the son of a labourer, aged 7 months, "cholera (9 hours)." And in the same house, on the 20th September, the son of a labourer, aged 3 years, "cholera (4 days)." The Registrar, Mr. F. Parr, adds,—"This house is situated in one of the worst streets in the district, the houses being old, dilapidated and dirty, inhabited by labourers and costermongers."

St. George, Southwark, Borough-road sub-district, at 7, Gun-street, Friar-street, on 21st September, the wife of a stonemason, aged 62 years, "diarrhœa (19 hours), Asiatic cholera (15 hours)." The Registrar, Mr. H. C. Elliott, states,—"This death occurred very near the spot to which reference was made in last week's return, and I much fear, this case may be regarded as another melancholy instance in which a disregard of the premonitory symptoms is followed by fatal results. The informant stated, that deceased was in good health up to the attack of diarrhœa, which she allowed to go on between seven and nine hours before application was made for medical assistance."

In the sub-district of Lambeth Church, 1st part, at 9, Vauxhall-square, on the 23rd of September, a labourer, aged 44 years, "diarrhœa (4 days), cholera (36 hours)." The Registrar, Mr. T. Greathead, adds: "This man was at work in a bone-yard on the 21st inst., with an attack of diarrhœa; he became worse on the 22nd, when medical aid was called in, and he died on the 23rd."

Wandsworth, Battersea sub-district, at the emigrant station, Nine Elms, on the 16th of September, the son of a labourer, aged one year, "cholera (72 hours.)" In the sub-district of Clapham, at St. Ann's House, Old Town, on the 20th of September, a female servant, aged 50 years, "cholera (5 days)." The Registrar, Mr. J. Frost, adds: "St. Ann's House is an asylum for female servants out of place; there are between forty and fifty inmates. The deceased was taken ill on the evening of Monday, the 12th instant; she was then attacked with vomiting and purging, but made no mention of her ailment, took no medicine, and sought no relief until the morning of Friday, the 16th, when the medical attendant found her in a collapsed stage of cholera. The drainage is not good, the drain, being too small, is often stopped, and the soil flows into the cellar of the next house."

Greenwich, West sub-district, in the Dreadnought hospital ship, on the 15th of September, an apprentice, aged 19 years, "Asiatic cholera (3 days);" on the same day a seaman, aged 45 years, "Asiatic cholera (26 hours);" and on the 23rd of September, an apprentice, aged 19 years, "cholera, in a state of collapse when admitted;" survived ten hours. In the sub-district of St. Paul's, Deptford, on board the "Sophia Marie" in the Thames, on 23rd September, a Norwegian mariner, aged 25 years, "Asiatic cholera (11 hours.)"

THE CITY OF LONDON.—On Friday, a case of Asiatic cholera occurred in White-street, Moore-lane, a very close and densely populated part of the City. The deceased, a young married woman, 28 years of age, was seized on Tuesday. Mr. Davis, the medical man of the family, used every means in his power, but without success, as she died on Friday morning. The husband of the deceased had just recovered from a slight attack. The house in which they lived is very clean, but in the immediate neighbourhood there are several cesspools overflowing.

M. LE DOCTEUR MELIER, on a mission from the French Government to watch the progress and mode of treatment of cholera in this country, had an interview on Monday with the General Board of Health at their offices, Whitehall.

THE EARL OF SHAFTESBURY took his seat at the General Board of Health on Monday, for the first time since his return from the Continent.

IN ST. PANCRAS, diarrhœa and low fever are very prevalent, especially in Agar-town, the den of filth and mire, where some cholera cases savouring of an Asiatic type have already appeared; but owing to the energy and promptness of the medical officers, none terminated fatally. Still, in the district, diarrhœa is very prevalent.

THE PROVINCES.

The following are the Board of Health returns of deaths from Cholera (C) and Diarrhœa (D):—

	Sept. 22	23	24	25	26	27	28
	C. D.	C. D.	C. D.	C. D.	C. D.	C. D.	C. D.
Newcastle ...	59 1	63 4	72 6	46 1	53 3	36 2	20 1
Gateshead ...	28 4	16 2	14 1	14 0	20 1	18 2	—

NEWCASTLE.—The weather is most favourable, and people are becoming more re-assured. The local papers give a fearful middle-class obituary. The *Chronicle* has about three-fourths of a column of deaths in Newcastle, nearly all middle class people. The town has lost two Medical men—Mr. Irons, surgeon, and Dr. Malcolm; the former gentleman falling a martyr to his duty as a union surgeon. Eight deaths have occurred in the gaol; no part of the town escaped. Mr. Fairbridge, surgeon, has died at Hexham. His wife and two daughters were afterwards attacked, and the latest accounts state, that they also have since died. The cholera has visited nearly all the villages by the side of the Tyne. Morpeth seems to have escaped.

The total number of deaths from cholera and diarrhœa in Newcastle, during the present outbreak, has been 1,280. In the same period, (viz., the first 27 days), during the prevalence of epidemic cholera there in 1831-2, the number of deaths was 204.

The total number of deaths from cholera and diarrhœa, in Gateshead, up to Sept. 25, has been 292. During the like period (viz., the first 18 days) in 1831-2, the deaths amounted to 130.

HEXHAM, Sept. 21.—The medical officer reports, that not less than 500 cases of diarrhœa have been treated, of which several have passed into cholera. During the last five days, several deaths from cholera have occurred, making 11 deaths since the first appearance of the epidemic. There are at present 160 cases of diarrhœa and 11 of cholera under treatment. One of the surgeons who signed the last report has been attacked.

HOWDEN.—Thirteen deaths from cholera were reported on Wednesday from Howden, near Manchester.

DURHAM.—Three more cases have occurred here, one on Wednesday, terminating fatally. In other respects the town is remarkably healthy.

SHIELDS.—Two children, daughters of a man named Orme, living in Hill-street, South Shields, have died during the night. The residence of the parents is filthy. The authorities are watering the back lanes with a disinfectant chloride of iron, procured from the Jarrow Alkali Works.

SUNDERLAND.—This town has had a comparative immunity from attack. Five cases have occurred in Deptford, a village on the Wear; three in one family. The person originally attacked, who has recovered, imported the disease from Newcastle. A sailor lad, brought ashore from a ship, has died; and another person was fatally seized in the Low-street. There has been another death, a fishwoman, in Whitburn.

SHEFFIELD.—A fatal case of cholera occurred in this town on Sunday. The locality of the outbreak is in Brown-street—a low part of the town, and in the vicinity of a large open sewer. It was in this same locality that the epidemic appeared to rage with the greatest violence in its previous visitations. The case is that of a girl. Her parents, poor Irish people, neglected to call in medical aid.

RAWMARSH (YORKSHIRE).—A fatal case of cholera occurred in this village, which is chiefly inhabited by colliers, on Wednesday morning.

HULL.—There is, at present, less sickness in Hull than general at this season; though, we regret to say, there have been lately two or three fatal cases of cholera—one, at least, being Asiatic.

LIVERPOOL.—No new cases of cholera have occurred in Liverpool, and the town is in an unusually healthy state.

MANCHESTER.—It becomes a very difficult matter to say whether the cholera is in Manchester or not, considering the contrary statements made on the subject. Medical men speak of numerous cases which have come under their cognizance.

COPENHAGEN.—Intelligence of the 18th mentions only two cases of cholera, and no deaths.

CHRISTIANA.—On the 14th, numbers of cholera-sick were 89, and of dead 59; making a total of 1693 cases, of which 1079 have been fatal. Several other Norwegian towns are suffering in proportion.

SWEDEN is still enveloped by the disease. In Carlskrona, on the 13th, the deaths had reached 982, out of 1823 sick. In Ystad, 339 sick had given 194 deaths. In Gothenburg, up to the 17th, 455 cases, and 239 deaths. The adjoining Majorna, 316 sick, and 128 dead.

—In Stockholm, on the 15th, there were 148 new cases of cholera, and 84 deaths; total, 3016 cases, of which 1698 have ended fatally. In Norkoping on the 14th, the number of total cases was 1077, and of deaths 353. While the epidemic is thus raging in Sweden, it would seem to have nearly disappeared in Finland.

HAMBURG.—The cholera has been raging here now for eight weeks, but the epidemic appears sensibly to decrease. In the last three weeks the proportion was 80, 72, 36 cases.

ODESSA.—The cholera is prevalent and fatal at Odessa. Ten vessels from that port had, at the date of last advice, arrived off Constantinople, where they were put into quarantine.

REVIEWS.

Elements of Psychological Medicine. An Introduction to the Practical Study of Insanity, adapted for Students and Young Practitioners. By DANIEL NOBLE, F.R.C.S., Medical Officer to the Clifton Hall Retreat, etc. Pp. 340. London: J. Churchill, 1853.

Mr. Noble was requested by his colleagues at the Chatham-street School of Medicine, Manchester, to deliver a brief course of lectures on the pathology and treatment of mental disease; and at the conclusion of the course he was requested by his hearers to publish it. The present work consists of the lectures delivered on the occasion referred to, and is intended by its author to be an introduction to the study of insanity.

The following is Mr. Noble's definition of insanity:—

"Chronic disorder of the brain, inducing perversion of ideas prejudicial to, or destructive of, the freedom of the will."

Observations explanatory of the various points embraced or advanced in this definition occupy the chief part of the Introductory Lecture. The second lecture is devoted to the physiology of the brain and nervous system.

Mr. Noble was in times past a strong partisan of Dr. Gall's; he now abjures the doctrines of the phrenologists, although he still holds that the brain is the organ of the mind.

"That a very small forehead never characterises persons eminent for their thinking, but that usually a capacious front and vigorous intellect go together; that a head very high and broad in the coronal region, is commonly associated with great natural morality in particular individuals; and, on the contrary, that a low contracted head is most ordinarily found upon the shoulders of depraved criminals. Again, it will be seen, that a large occipital and basilar development is very generally found in persons of strong animal propensities. More particular correspondences, indeed, may be noticed; for instance, the crown of the head is usually very much elevated from the opening of the ear in persons of great natural self-reliance. Again, as regards the intellect and the forehead, the higher region comes out principally in those who are remarkable for the powers of thought and reflection, and the lower region in such as are inquisitive and distinguished for their stores of knowledge."—Pp. 42, 43.

It is the theory of separate cerebral organs which Mr. Noble says is unproved.

"I feel myself bound to say," he writes, "the organology of Gall's doctrine must be abandoned. Honesty and candour compel me to this admission, though with some reluctance, for it involves the recantation of opinions for many years entertained and avowed."—P. 48.

The following is an abstract of what Mr. Noble deems to be the existing state of our knowledge upon the physiology of the brain and nervous system:—The grey nerve tissue, or ganglionic structures, are the source of *functional change*, the white, or fibrous nerve tissue, being simply for the conduction of impressions originating in the former. The several ganglionic masses in the encephalon subserve different functions; the office of the white matter is to bring these masses into mutual relation and harmonious action. Distributed largely along the whole cutaneous and mucous surfaces, there is vesicular neurine, forming the peripheral expansion of nervous filaments. The impression wrought upon this substance is conveyed by white nervous filaments to the grey matter of the spinal cord, in which a vital change arises,—an influence which expands itself in a downward direction, and, through other filaments, induces muscular contraction. Movements thus excited have been termed reflex, excito-motory, and automatic; they do not necessarily involve any consciousness whatever.

The functions of the ganglia of the sympathetic system of nerves are somewhat obscure. Consciousness certainly has no place at least in its ordinary exercise. It probably communicates a susceptibility to certain motions involved in the organic functions of circulation, nutrition, and secretion. In regard of common sensation, this much Mr. Noble says is certain, "the communicated impression ascends along the posterior columns of the spinal cord, and attains a grey, vesicular centre; the ganglia of common sensation."

Mr. Noble adds, that he is "disposed to think that some portion of the cerebellum constitutes the encephalic centre of common sensation." The sensory ganglia re-act upon the muscular system when stimulated from without; and that, too, in apparent independence of thought or volition. These movements have been designated consensual; they differ from the spinal reflex acts in being, in their nature, attended with consciousness; and they differ from ordinary movements, in as much as neither will, ideas, nor mental emotions are concerned in their production. Conscious impressions received by the sensory ganglia, are transmitted by the white fibres to the grey matter of the convolution, *i.e.*, the hemispherical ganglia; changes ensue in the grey matter which minister to the intelligence. Ideas arise.

Actions may be determined by ideas, where neither sensation, emotional states, nor volition, exert any influence; the accomplishment of such actions seems to be quite as automatic as the movements which are consensual.

In the transition state, between waking and sleeping, actions determined by ideas alone are frequent. So-called electro-biological phenomena furnish abundant illustrations of this class of actions; "they are in a manner reflex, and Dr. Carpenter proposes to designate them ideo-motor."

Speaking of the optic thalami and corpora striata, Mr. Noble says, "I have myself a strong persuasion, that the structures under consideration form the ganglia of that inner sensibility, which ideas, rather than external impressions, call forth; I regard them as the seat of the emotions." (P. 72.) And again, "I regard the optic thalami and corpora striata as the organic site of all sensibility that is internal and emotional."—P. 73.

Dr. Carpenter, Mr. Noble thinks, does not sufficiently recognise the specialty of emotional sensibility, "for which, on account of its distinctness and separateness, there must, I conceive, be proper nervous centres."

Mr. Noble exemplifies his own view of the cause thus:—

"If I am made to laugh through being tickled, the ganglia of common sensation re-act consensually; if I laugh from suggestion of a ridiculous idea, some other ganglionic structure, I submit, must physiologically be concerned in the production of the laughter."—P. 74.

The results arrived at are thus summed up:—

"Reflex movements without consciousness issue from the grey matter of the spinal cord, and from the sympathetic ganglia; consensual actions from the sensory ganglia; ideo-dynamic phenomena result from limited influence of the hemispherical ganglia; and those which are emotional from the optic thalami and corpora striata."—P. 79.

It is the immaterial spiritual entity which receives and recalls ideas; loves, fears, and hopes; reasons and judges; and, finally, that WILLS.

The third lecture is on the General Pathology of Insanity. "Insanity consists," says Mr. Noble, "in disorder of the functions of the brain," (p. 84;) but "so long as we can ally the cerebro-mental perversion with causes transient and obviously removeable, we call it delirium; when there exists, underlying the phenomena, something beyond these, we pronounce it insanity."—P. 96.

As, according to Mr. Noble, the ideas are always perverted in insanity, and the hemispherical ganglia are the portions of the brain connected with the origin of ideas, he "attains the conclusion, that the organic seat of insanity is in the grey substance of the cerebral hemispheres."—P. 99.

Several apt illustrations of the modes in which perverted sensations may lead to perverted ideas, or insanity, occupy the concluding half of this lecture.

The fourth and fifth lectures are headed, "Varieties and Particular Characteristics of Insanity."

After criticising the divisions of insanity at present adopted, Mr. Noble proposes the following arrangement:—

Notional Insanity.—Under this head he groups those cases in which erroneous notions rivet themselves strongly on the mind, the result being confusion between the products of imagination and positive realities.

Intelligential Insanity.—Under this head he brings together those cases "in which, from some weakening or deprivation of intellectual energy, there is a primary perversion of the intelligence, quite irrespective of any fixed or characteristic delusion."

Emotional Insanity.—Here the prominent derangement is obviously in the emotive sense.

These forms of insanity are, however, mixed, and run into each other.

Illustrations of these three forms of insanity occupy the greater part of these two lectures.

The Sixth Lecture is on the Diagnosis, Prognosis, and Etiology of Insanity; the Seventh on the Exciting Causes of Insanity, and the Physical Treatment of the Insane; and the Eighth on the Moral Treatment of the Insane. These Chapters will be found exceedingly useful to the class of the Profession for which the Work before us has been written; but Mr. Noble might with advantage have devoted two or three more lectures to the questions of Diagnosis, Prognosis, and Etiology.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ON A NEW METHOD OF INDUCING PREMATURE DELIVERY.

By SCANZONI.

The author was induced, by observing the active sympathy between the breasts and the other parts of the sexual apparatus, to try to produce premature delivery by irritating the nerves of the mammary glands. The first experiment was made upon a young woman, aged 24, who, two years ago, had been delivered by perforation, in consequence of contraction of the pelvis. In the thirty-second week of utero-gestation, apparatus constructed of caoutchouc, forming sucking-pumps, were put upon the nipples. During three days they were used about seven times, the process going on upon each occasion for two hours. After the third application, the neck of the uterus became shortened; after the sixth, severe labour-pains came on; after the seventh, the child was born.

The only danger likely to ensue from this very simple method of treatment is inflammation of the mammæ; this can be met with proper treatment.

A second case, of similar kind, occurred to the author. A young woman, *enceinte* for the first time, suffered so severely from dyspnœa, connected with organic disease of the chest, that premature delivery was necessary for the preservation of her life. After the third application of the sucking-pumps, an apparently dead child was born; respiration, however, was soon re-established. The author remarks, that this case is not quite conclusive, because premature delivery occurs often in connexion with severe dyspnœa, independent of other influences.—*Verhandl. der Med. Phys. Ges. zu Würtzburg*, 1853.

PRACTICAL REMARKS UPON POLYPI OF THE UTERUS.

By HELFFT.

The fact, that uterine polypi grow rapidly during the period of gestation, and constitute a very dangerous complication, makes it advisable to remove even small polypi, when they are discovered, although there may have been neither hæmorrhage nor symptoms of pressure. When a polypus is seated at the neck of the uterus, and protrudes into the vagina, it can give rise to hæmorrhage during pregnancy; or it may lead to abortion, or, at a later period, it may interfere with delivery. If it be in the uterine cavity, dangerous symptoms occur, for the first time, after the birth, when hæmorrhage takes place; or the uterus becomes inverted; or the polypus forms a swelling, which closely resembles, and may even be mistaken for, an inverted uterus.

A polypus, discovered in the early months of pregnancy, of moderate size, and attached by a narrow peduncle, can be removed by torsion. Usually this operation has but little effect upon the uterus. When the polypi are larger, and are attached by a broader base, the ligature is unnecessary; but, in this case, inflammation of veins is a possible occurrence, or there may ensue a direct absorption of the putrid matter caused by the strangulation of the ligature; abortion, too, is to be feared.

Polypi within the uterus do not occasion any serious inconvenience during pregnancy, in spite of the great size which they sometimes acquire. It is only after the removal of the placenta that their presence becomes known, by the swelling which still remains. In lucky cases, the polypus comes down of itself into the vagina a longer or shorter time after delivery, either without hæmorrhage or any unfavourable symptom, or attended with severe pain and copious loss of blood. When the presence of an intra-uterine polypus has been made out, it is best to leave the organ to itself, should it be disposed to contract; in which case there is no fear of hæmorrhage. When, however, severe bleedings come on, the polypus must be removed, either by torsion, or by the ligature and the knife.

CHRONIC HYDROCEPHALUS DURING PREGNANCY.

By HECKER.

A girl, aged 26, who had previously enjoyed good health, exhibited symptoms of cerebral disease upon her admission into the Lying-in Institution. The expression of the face was listless, the complexion dull, the globe of the eyes protruded, the pupils were dilated and sluggish; her mind was inactive, but she answered questions rightly, and complained only of impairment of vision and of a feeling of lassitude. She was properly delivered of a fine and healthy child; everything, for a short time, went on well, but she displayed great indifference to her offspring. Upon the eighth day, in consequence of the constant passage of urine and fæces in the bed, (an occurrence which the patient told the nurse with laughter,) bed-sores formed on the sacrum, fever ensued, and she died on the eleventh day.

By the section, there was found great thinning of the skull cap, which, in some places, seemed deprived of its earthy matter, and almost transparent. Thin fluid blood escaped upon its removal. The dura mater was studded with glandulæ pacchioni. In each lateral ventricle there were found about two ounces of clear fluid, which had caused pressure and flattening of the supra-ventricular cerebral matter, and distension of the third ventricle. The substance of the brain was tolerably firm. The contents of the chest were sound. The uterus was well formed; abdominal viscera healthy.—*Mon.-Schrf. für Geburtsk.*

UPON TYPHUS FEVER IN CHILDREN.

By BERTON.

While it was formerly a matter of dispute if, or at what age, typhus fever had been observed in children, at the present time we are told, that the disease may occur at the earliest period of life, when its symptoms often mask themselves under those of simple enteritis, or assume the characters of some cerebral affection. But typhus symptoms occur in infants in whom, after death, nothing is discovered save some redness of the mucous membrane of the intestines, or in whom there is no lesion whatever to indicate the previous disease. The author then enumerates three forms of typhus fever in children. The first, closely or altogether resembling in its characters common entero-colitis, occurs at the age of 2 to 3 years; the second, bearing the characters of encephalo-meningitis, prevails mostly at the age of 2 to 6 years; the third, remarkable for the uncertainty, or the absence, of many of the usual symptoms, occurs from the 6th to the 12th year. The author has not quite established his point, that these forms of disease should be ranked under the head of typhus fever, although it might be difficult to select any fixed place for them in the nosological system. He is a great advocate for the use of asses'-milk in all stages of typhus.—*Gaz. des Hôp.* 1853.

UPON HYPERTROPHY OF THE MAMMARY GLAND.

By W. JOACHIM.

Hypertrophy of the mammary gland is described as general increase in volume of the organ, from excess of nutrition of its constituent parts, which, in other respects, retain their normal characters and consistence. The author endeavours to establish two forms of the disease. In the first, called simple or true hypertrophy, and corresponding with the preceding definition, all the constituent parts retain their normal characters; in the second, called compound hypertrophy, there is observed a deposit of some unhealthy product in the texture of the gland. The commonest form of the latter occurs from infiltration of milk, deposit of fat, lypomatous tumours among the tissues of the organ. It is often difficult to distinguish the simple from the other form of hypertrophy, but the mode of treatment in the two cases may not be quite the same.—*Ungar. Ztschrf.* 1853.

GENERAL CORRESPONDENCE.

UNIVERSITY EXAMINATIONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg the favour of an insertion of the following summary of an examination for the degree of M.D., at King's College, and University, Aberdeen.

It may be of interest to some your readers, who, in preparing themselves for graduation, are desirous of comparing the various styles of examination to be expected at each of the Universities.

I am, &c. A SUCCESSFUL CANDIDATE.

CHEMISTRY.

Name the pharmacopœial preparations of mercury.
What is its state in pil. hydr. and ung. hydr.?
What is the chemical composition of white precipitate?
Describe the process of making it.
What is meant by an equivalent?
What by an atom?
State the composition of sesquioxides.
What are the tests for calomel?
What are the tests for bichloride of mercury?
What are the tests for arsenic?
Describe the modes of performing them.
What other metal simulates arsenic in its reactions?
By what special tests are arsenic and antimony distinguishable?
What is orpiment?
How is it procured?
What is ammonia, and how is it obtained?
What are the relations of ammonia and ammonium?
How do oxyacids and hydracids differ?
In what manner does each combine with metals?
What is amidogen?

ANATOMY AND PHYSIOLOGY.

Describe the minute anatomy of the stomach.
Describe the arteries which supply it.
How is the stomach held *in situ*?
How is its position affected in diseases of the liver and chest?
Describe the duodenum and its relations.
From what cause, and in what manner, does the bile pass from the gall-bladder into the duodenum.
How is the food acted on in the stomach?
What changes does it undergo in the duodenum?
How is the absorption of chyle effected?
Describe the anatomy of the mesenteric glands.
Trace the course of the chyle from the lacteals to the blood circulation, and explain the changes it undergoes.
Is nutriment absorbed by any other vessels?
Trace its course to the vena-cava, and state what changes it undergoes.
Describe the process of secretion of bile.
How is sugar formed in the liver?
When more nutriment is taken than is required by the system, what effects are produced?
How would you treat the lithic diathesis?

PATHOLOGY AND PRACTICE OF MEDICINE.

Name the vesicular diseases of the skin.
Name the scaly diseases.
What are the general principles of treatment of scaly diseases?
Of what is liquor arsenicalis composed?
What are its doses and the rules for guidance in its administration?
What of liq. potassæ and iod. potassii?
Describe a case of rubeola.
What complications may exist?
How would you treat them?
Describe a case of small-pox.
Give the symptoms and course of scarlatina, with the varieties and sequelæ of the disease.
What is the condition of the urine?
How is the brain affected?
How would you treat this cerebral affection?
Write in Latin, in full, a prescription for a diaphoretic mixture in such a case.

SURGERY.

Enumerate the diseases to which the rectum is liable.
Describe the varieties, causes, nature's cure, and the surgical treatment of hæmorroids.
Describe the varieties, causes, and treatment of fistula in ano.
In what portion of the rectum does malignant disease more frequently occur?
How would you treat ulceration of the rectum?
What are the ordinary causes of spasmodic stricture of the rectum?
How is it to be treated?
In what direction would you make an incision in strictured rectum in the female?

OUT-PATIENTS AT HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In one of the leading articles of your Journal, for the 3rd inst., there is the statement: "But very lately, we endeavoured to obtain the proportion of out-patients treated at our hospitals for venereal diseases, and found that this simple piece of information could not be procured for want of proper records." And again—"We do not hesitate to say, that on whatever point of inquiry any one seeks for positive information at any of our hospitals, with the exception perhaps of St. George's and St. Mary's, he will come away disappointed."

What may be the case at other hospitals, I do not know, but as regards the Middlesex Hospital, you have certainly been misinformed; books are kept in which the names and diseases of all out-patients are accurately noted; in addition to which, notes are kept of all the important cases among the out-patients, by the Assistant Physicians and Surgeon. Had application been made at the hospital, the information required regarding the venereal cases, would have been readily afforded.

As regards other points of inquiry, I may state, that besides the private case-books of the Physicians and Surgeons, an official abstract of the case of every patient admitted into the hospital is kept, together with records of the *post-mortem* examinations, and that information from these official records is at all times freely obtainable. I am, Sir, your obedient servant,

SEPTIMUS W. SIBLEY, Registrar to the Hospital.

Middlesex Hospital, September 19, 1853.

THE VACCINATION EXTENSION ACT.

[To the Editor of the Medical Times and Gazette.]

SIR,—The Vaccination Extension Act does not by Section I. imply that the Guardians of the Poor shall only contract with the medical officer of their respective districts. It says:—"Medical officer or practitioner contracted with." Yet the Poor-law Commissioners are recommending to the Guardians to contract only with the parish surgeons, as under the old Act, and naming the same stations, etc. Why is this? Why are not all practitioners to be contracted with, and thus every man dealt justly with? Why is one set of practitioners to be selected and paid, and the remainder to be compelled to do the same work for nothing? and this in spite of an Act which, with all its abominable faults and flagrant injustice, does not imply that. Let the parish surgeon vaccinate all the pauper children in one return, his private patients in another, and every other practitioner likewise; or else parish surgeons should have a fair salary, and be debarred from private practice altogether. It appears to be the policy of Guardians and Commissioners to insult, in whatever way they can, the General Practitioner; and yet there is no member of society who renders the State so much work for nothing as the private Medical Practitioner, as one of which body I subscribe myself.

September 19, 1853.

HOMŒOPATHY.—DR. HENDERSON AND DR. SIMPSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—Allow me to request the insertion of the subjoined quotation from Dr. Henderson's reply to Dr. Simpson's exposure of homœopathy. Writing of vaccination in relation to small-pox he makes the following statements:—"Dilute small-pox virus with water, and thus weaken it to the lowest potency, still capable of acting by inoculation, and it will still produce small-pox, not the solitary vaccine vesicle." . . . . "Dilute small-pox virus with cow's milk, and according to the experience of Dr. Basil Thiele, in 3000 cases, inoculation with the mixture will produce the vaccine vesicle and not the small-pox eruption." . . . . . "Am I not, then, amply entitled to say that the two diseases are not identical, that, in a word, vaccination acts homœopathically, or according to one rule of the law of similars?" I should be glad to learn, when, where, and how, the aforesaid experiments were conducted by Dr. Thiele, as the asserted results are quite new to me, and require further confirmation than Dr. Henderson has given, before they will obtain credence from

INQUIRER.

MEDICAL NEWS.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Sept. 22, 1853 :—

BROWN, THOMAS, Burnley, Lancashire.
PENDLEBURY, WILLIAM HITCHIN, Bolton-le-Moors, Lancashire.

APPOINTMENTS.

MEDICAL.—Mr. Filliter has been elected Resident-Surgeon to the Marylebone Infirmary, in the place of Mr. Squires. There were four candidates for the vacated appointment.

NAVAL.—Surgeons John H. Carruthers (1841), to the Winchester, 50, flag-ship, on the East Indies station; Andrew Batwell, M.D. (1851), to the Bittern, 12, sloop, on the East Indies station; James Laird (1852), to the Ferret, 8, sloop, on the West Coast of Africa station; John Cockin (1852), to the Polyphemus, 5, paddle-wheel steam-sloop on the West Coast of Africa station.

MILITIA.—West Suffolk: John Kilner, to be Assistant-Surgeon.

BEQUEST.

BROMPTON HOSPITAL.—The funds of this hospital have just received a princely addition, in the shape of a bequest of nearly 15,000*l.*, under the will of the late Mr. John M'Cullum, of Bedford-place. The accommodation of the hospital is about to be increased by 140 beds.

DEATH.

KRAMER.—Sept. 16, at Milan, M. Antonio Kramer, the distinguished chemist.

ROYAL COLLEGE OF SURGEONS.—It will, no doubt, surprise many of our readers, particularly the visiters to the Library of the College, to whom Mr. T. M. Stone is so well known, to hear that, after upwards of twenty years' faithful services in this department of the College, he has been removed to another office in the same Institution; and Mr. John Chatto, a Member of the College, has been appointed his successor as Librarian. It is due to Mr. Stone, to state, that this alteration is not owing to any want of a due estimation of the services of that gentleman; on the contrary, we have reason to know, that his conduct has always been highly approved of by the Council, who have recognised it by several pecuniary grants.

CREWKERNE AND YEOVIL DISTRICT MEDICAL SOCIETY.—This prosperous and beneficial Association held its sixth meeting at Crewkerne, on the 15th inst. Among other subjects, the Medical Reform Bill was discussed, and hopes were expressed, that another year would not pass away without its becoming the law of the land, and thus put an end to much of the imposture now existing. The subject of the Medical Benevolent College was introduced by the local Honorary Secretary, Mr. G. F. Wills, who read a letter from the worthy founder, Mr. Propert, urging medical gentlemen to subscribe to a "home" for their unfortunate brethren, or the desolate widow and orphans. This excellent appeal will, it is to be hoped, prove efficacious. A leader in the *Medical Times and Gazette* on the subject, recommended by Mr. Propert for perusal, was warmly approved. A deputation from the Provincial Association attended the meeting, to urge on the Profession the advantages which would be obtained from a more efficient organization of its members. Mr. Gillett, the President, and Dr. Woodforde, the Secretary of the West Somerset branch, detailed the working of the Association, and the improvement which might be effected by the unanimous assistance of medical men in making this Association the powerful medium of communication with Government, and, through representation, with Parliament. It is to be hoped that the Medical Practitioners of West Somerset will join this national Institution, and not deserve the reproach which has been cast upon them, that they are backward in assisting those who are endeavouring to benefit them in common with all other duly qualified Practitioners.

MEDICAL SOCIETY OF LONDON.—The first ordinary meeting of this Society for the session 1853-4, will be held on Saturday, October 8th, at 8 p.m., when the following paper will be read :—"On Some Unrecognised Forms of Mental Disorder." By Forbes Winslow, M.D., D.C.L. (President.)

MR. BLOUNT, Surgeon to the Birmingham Gaol, has resigned the appointment.

THE DEAF AND DUMB IN LOUISIANA.—An Asylum for the Deaf and Dumb and the Blind was opened, early in December last, in Louisiana, U.S., when thirteen candidates were admitted. By the first report, which has recently appeared, it is shown, that there are in that State about 200 persons entitled to instruction. A new and commodious building is about to be erected for their reception.

THE *Constitutionnel* states, that a European physician, who, in concert with Russian spies, had engaged to poison the Turkish General, Omer Pacha, was compelled to drink the medicated draught he had prescribed, and died a few hours afterwards.

THE LATE CHARGE OF PROCURING ABORTION, referred to in our last, has produced the following letter to the Editor of the *Times* :—Sir,—My attention having been directed to a police report in the *Times* of the 20th inst., in which a person named "Henry Hamilton" is mentioned as a surgeon holding an Irish diploma, I shall feel obliged by your stating that there is no such name upon the lists of this College.—I am, Sir, your obedient servant, H. MAUNSELL, Secretary. Royal College of Surgeons in Ireland, Dublin, Sept. 23.

HOMŒOPATHY.—The following extract is taken from a clever letter in the *Leicester Journal*, signed "Chirurgicus."—"Homœopathy has had its day. Excepting in Vienna, it is now comparatively little heard of in Germany, and notwithstanding Leipsic is the head quarters of the doctrine, the homœopathic hospital of that city, a small house in the suburbs, contains only eight beds, of which Mr. Lee, who lately visited it, found only two or three occupied. In Paris, M. Andral put it to the test of experience in one of the general hospitals, and the result was a total failure. It was therefore discontinued. He treated 130 to 140 patients in the presence of the homœopathists themselves, adopting every requisite care and precaution, yet in not one instance was he successful. In Russia, a German homœopathist was invested by the Grand Duke Michael with full powers to prove, if possible, its advantages over ordinary treatment on a certain number of patients in the wards of a military hospital. In two months, however, he was not allowed to proceed further. The Russian Government tried likewise the comparative treatment in two hospitals of a number of patients with homœopathic globules, and a number of other patients with no drugs of any kind; and the results were found very similar in both instances. A trial was given at Naples by Royal order. The results of the observations were :—1st. That the homœopathic treatment produced no effect; 2nd. That it had the serious inconvenience, in several of the patients, of preventing the employment of remedies by which they might be cured. In London, there are two homœopathic hospitals, both of which are in a declining state, and one I hear is now about closing, if not closed, for want of funds. A celebrated physician speaks of it thus :—'Everything in it, and out of it, fully confirms the view, that, as to practice, homœopathy is truly a nonentity; it is literally, as your author Hue says (see p. 86), the swallowing of names only.' To swallow the name of a remedy, or the remedy itself, comes (says the Tartars) to precisely the same thing. Homœopathists cannot point out a single medical authority now authorising homœopathy. So much for its decline. The gradual progress of medical science sufficiently shows that we do not let our patients die, as homœopaths do. Witness such facts as the following :—

IN LONDON.

	Died under 5 years.
From 1730 to 1749, out of every 100 children born	73
,, 1750 to 1769, ,, ,,	63
,, 1770 to 1789, ,, ,,	51
,, 1790 to 1810, ,, ,,	41
,, 1810 to 1829, ,, ,,	31

Regarding the capability of the public to judge the value of medical remedies in curing disease, I quote Archbishop Whately :—Nothing is more common than to hear a person state confidently, as from his own experience, that such and such a patient was cured by this or that remedy; whereas, all that he knows is, that he took the medicine and recovered. A termination and a cure are two vastly different things."

MORTALITY NOTABILIA.—969 deaths from all causes were registered in London during the week ending the 24th September. In the corresponding week of 10 previous years 1843-52 the average corrected for increase of population is 1163. The deaths ranged from 808 in 1846, to 1611 in 1849, at which latter period the mortality was much increased by cholera, then on the decline. The deaths in the present return are therefore less than the average by 194. Cholera was fatal to 29 persons, 15 males and 14 females, an increase of 13 deaths from this disease compared with the previous week. 12 deaths from cholera occurred on the north (the same number as were recorded in the previous week) and 17 on the south side of the Thames, where the number registered in the former week was only 4. Of the 29 fatal cases of cholera, 16 are described as "Asiatic,"—an increase of 12 cases so designated compared with the week preceding. 6 children fell victims to this disease under the age of 15 years, and 23 adults at 15 years of age and upwards. The deaths registered from cholera in the last six weeks have been 10, 18, 16, 7, 16, and 29. Diarrhœa was fatal to 89 persons—an increase of 11 on the previous return; during the last six weeks the deaths from this disease have been 126, 137, 152, 131, 78, and 89. The present return of deaths from diarrhœa is 12 above the corrected average of the corresponding weeks of the last 10 years. The births registered in the week were 1619, or 650 more than the deaths.

Births.—Last week the births of 824 boys and 795 girls, in all 1619

children, were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1396.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·826 in. The mean temperature of the week was 54·6°, which is slightly above the average of the same week in 38 years. The greatest difference between the dew-point temperature and air temperature was 12·0° on Monday and Thursday; the least 0·0° on Sunday and Wednesday. The wind blew from the west and south-west on an average of 89 miles a-day. The electric condition of the atmosphere was positive on each day of the week.

DEATHS *in the Metropolis for the week ending Saturday, September* 24, 1853.

Causes of Death.	Sept. 24. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	485	299	185	969	10577
Specified Causes	483	299	185	967	10538
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	199	64	25	288	3134
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	18	14	37	428
3. Tubercular Diseases	64	92	5	161	1781
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	38	25	29	92	1131
5. Diseases of the Heart and Blood-vessels	2	14	18	34	353
6. Diseases of the Lungs and of the other Organs of Respiration ...	73	29	21	123	995
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	20	30	14	64	649
8. Diseases of the Kidneys, etc. ...	2	2	6	10	92
9. Childbirth, Diseases of the Uterus	...	9	...	9	106
10. Rheumatism Diseases of the Bones, Joints, etc.	1	3	...	4	76
11. Diseases of the Skin, Cellular Tissue, etc.	1	...	...	1	14
12. Malformations	5	...	...	5	40
13. Premature Birth and Debility ...	26	3	...	29	246
14. Atrophy	30	1	9	40	245
15. Age	...	...	42	42	424
16. Sudden	1	1	1	3	209
17. Violence, Privation, Cold, and Intemperance	16	8	1	25	615
Causes not Specified	2	...	...	2	39

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I was called to attend upon a lady in Regent's-park-terrace, who had been attacked with diarrhœa. The gentleman, her husband, drew my attention to the accompanying printed circular, which had been left at the house, addressed to his mother, with Mr. Weston's compliments, and without an envelope.

The gentleman's remarks were these: "I suppose this is a puff to obtain practice, for I do not see that Mr. Weston holds any official appointment, neither do I understand how, in the pursuance of his duty, he considers it necessary to send us this information."

After reading the circular, I soon came to the same conclusions, and did express my regret that the author, a gentleman and a respectable member of our Profession, as I thought him to be, should descend to such a means of obtaining practice. I find, in the second annual Report for 1851 of St. Mark's District Visiting Society, that Mr. E. J. Weston's services ceased in that year, upon the Committee resolving to substitute a moderate subscription to the Camden-town Dispensary.

Mr. Weston takes no title in his circular after his name: and, very much to my surprise, I find not the name of Mr. E. J. Weston in the "Medical Directory for 1853," as either a Member of the College of Surgeons, or a Licentiate of Apothecaries' Company.

Independently of all professional irregularity, the circular itself appears to me to be capable of alarming timid minds, and of doing more harm than good.

Perhaps, Sir, you will favour us with your opinion, and if you think proper to publish the thing *in extenso*, you can do so.—I am, &c.

A Reader of the "Medical Times and Gazette."

[Copy.]

"17, St. Mark's-crescent, Sept. 10, 1853.

"Sir,—In pursuance of my duty, I beg to inform you that I have received through the kindness of the Registrar-General, a report of the cases and number of deaths from Cholera and Diarrhœa at this time, and have much to regret that the first complaint numbers 18, and 137 the latter. Under such an alarming visitation of the epidemic, I forward for your consideration an extract from his judicious suggestions, that we may insure, if possible, an exemption from an attack.

"The public should at this moment bear in mind that nearly every fatal case of Asiatic (*i. e.* epidemic, spasmodic, blue, pestilential, and malignant) Cholera is preceded for a few hours, only, by a painless diarrhœa, and that in its first stages the diarrhœa can generally be cured by medical men, and the threatening attack of cholera be averted.

"They should, therefore, in all cases of diarrhœa, whether occurring in children or in adults, immediately apply for medical advice. The importance of this rule has been exhibited in several fatal cases, where diarrhœa occurred in the morning, but, being unheeded, death terminated the sufferings of the patient in six or seven hours after the first evident symptoms of cholera appeared.

"I have to remind you, that when the small-pox was so prevalent in 1851, as Vaccinator and Honorary Medical Officer to the District Visiting Society, I first publicly urged the necessity of precautionary measures, and I have the gratification to add, that their adoption was attended in this district with the best results, as I had no fatal cases to record.

"We will, therefore, earnestly hope that the admonition given by the Registrar-General, will, after this notice, receive due consideration from you in the hour of need.—I remain, your obedient and faithful servant,

"E. J. Weston, Surgeon to the Royal Humane Society for Camden-town and Regent's-park, &c. &c."

[Such a circular is a most unprofessional Advertisement. It confers an unenviable notoriety on its author.]

We have received another communication from a gentleman, who says:—"I have seen a Member of St. Mark's District Visiting Society, who informs me that Mr. Weston has a licence to practise as an apothecary from the Society of Apothecaries, of a recent date. I am also informed that Mr. Weston supplied the medicines to the poor he attended, and was paid for the same. In reference to the bills for medicine, the report runs, 'Since the resolution was passed (of substituting a moderate subscription to the Camden Town Dispensary for the Honorary Surgeon's assistance), the bill for medicines for the last seven months of the year has been rendered to the Society, the amount of which, and its increase in proportion to the bill of the five months preceding, has shown an additional reason to justify the step which had thus previously been taken.' I will only add, that Mr. E. J. Weston being a licensed practitioner, makes the attempt to obtain practice by the circular I have transmitted still more derogatory."

J. M.—By the error of a Correspondent, which was overlooked, the "Anatomy of Drunkenness," and "Philosophy of Sleep," written by the late Dr. Robert Macnish, of Glasgow, was ascribed to the late "Delta," of "Blackwood."

H.—He cannot dispense his medicines legally. We cannot say what the Apothecaries' Company would do if our Correspondent were to practise illegally.

Dr. Darkin, of Morpeth, informs us, that the two cases of Cholera reported there were not cases of Asiatic Cholera, but of Sporadic Cholera, occurring in intemperate and debilitated subjects.

Mr. Teale's Cases of Ulcer shall be inserted as soon as the engraving is ready.

We have not room to insert Dr. Kirk's letter this week.

C. Melancthon.—Because the recognition of the College of Surgeons had been withdrawn.

C. D. Steele, Esq.—Besika Bay. The report shall be inserted.

H. V. suggests, that a decimal system of weights should accompany one of demical coinage.

A New Correspondent says:—"Has it ever occurred to you that the uterus, before the membranes are ruptured, acts exactly as a hydrostatic press; after their rupture, the expulsive power is then like the heart? I have not met with the idea in the course of my reading."

E. J. B.—We never insert communications without knowing the real name of the writer.

W. E. C. Nourse, Esq.—Communication received.

James Dixon, Esq.—The letter shall be published next week.

An Old Subscriber.—Oxley's filter is sold at 15s. Water, passed through a mixture of sand and charcoal in an earthenware jar, is what our Correspondent seems to require.

Mr. Sadler's Observations on the spread of Cholera are in type, but are unavoidably postponed.

Dr. Rowland's cases are in type, and will shortly appear.

[To the Editor of the Medical Times and Gazette.]

Sir,—By this post I send you the *Northampton Mercury*, in which you will see the following Advertisement of Dr. Faircloth, of Northampton. Now, I do think that his professional brethren should have the advantage of knowing, through your Journal, and Notices to Correspondents, the circumstance of his qualifications being of that grade as to inform the public that he has *commenced* practising in the *higher* branches of his profession. I should be glad to know what the lower branches are.

I am, &c., A Subscriber and M.D.

Addington, near Wellingboro.

"Dr. Faircloth, M.D., Marischal College and University, Aberdeen, Fellow of the Royal College of Surgeons of England, Senior Medical Officer to the Northampton Royal Dispensary, and formerly a Resident House Pupil in the General Infirmary at Northampton, etc., respectfully announces that he has commenced Practising in the Higher Branches of his Profession.—Northampton, 16th Sept., 1853."

The letters of "A Medical Student," Mr. T. C. Shinkwin, and Mr. Woodman, are in the hands of the printer.

Our "Quondam Reader."—We know of no single work which contains the desired information.

COMMUNICATIONS have been received from—

A Reader of the Medical Times and Gazette; J. M.; H.; Dr. Darkin; Mr. Teale; Dr. Kirk; C. Melancthon; Mr. Steele; H. V.; A New Correspondent; E. J. B.; Mr. Nourse; Mr. Nixon; An Old Subscriber; Dr. Fuller; Mr. Sadler; Mr. Wilde, of Dublin, etc. etc.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture XIII.

ACETIC ACID AND ITS SALTS.

Gentlemen,—The acidification of alcohol, which I have explained and experimentally illustrated to you in the last lecture, forms the basis of the manufacture of vinegar, according to the so-called German plan.

In this process, which is now carried out upon a gigantic scale, the conditions are essentially the same as in the experiment which you saw, only the finely-divided platinum is replaced by a coarser material. The details of the operation, of course, change in different localities and with different manufacturers. The following is the manner in which the process is conducted in the works of Messrs. Hill, Evans, and Co., in Worcester, the largest vinegar-manufacturers of this country, whose liberality has furnished the model which is upon the table. The manufacture of vinegar involves, in the first place, the production of an alcoholic liquid. This, however, must not claim our attention at this moment, explained as it has been at some length in one of the preceding lectures; in fact, the antecedent operations of mashing the grain in water at a temperature of from 71° to 76·6° C. (160° to 170° F.), and fermenting the sweet infusion (wort) thus obtained in large vats, by the aid of yeast, so as to convert the saccharine matter into alcohol, are necessarily the same as those of ordinary brewing, as seen practised in distilleries. The spirituous liquid thus furnished is suitable for acidification without any further preparation. This process is conducted in immense closed vats, containing in some instances from 8000 to 10,000 gallons. The alcoholic liquor occupies only the lower half of the vat; the upper half is filled with faggots of birch twigs, such as are in general use for brooms and besoms. The whole apparatus being heated to an appropriate temperature, by a coil of tin steam-pipes, the liquid is now raised, by a powerful pump placed in the centre of the arrangement, to the top of the vat, and showered by means of a rotatory apparatus over the surface of the birch. The liquid trickling through the bed of twigs, meets with a slowly-ascending current of atmospheric air, which enters at small apertures in the vat, between the level of the liquor and the lower surface of the faggots, rises in consequence of the difference of temperature inside and outside the vat—exactly as the air rises in a chimney—and passes away by openings in the cover of the vat, more or less deprived of its oxygen. This process is continued for twenty or thirty days, according to the season, during which time the liquid, continually trickling through the faggots, has absorbed as much oxygen as can combine with it. The alcohol is completely converted into vinegar. The proper adjustment of the current of atmospheric air, *i. e.*, of the temperature, is the most difficult part of the operation. A considerable loss is incurred by evaporation, if the oxydation goes on too fast, while too slow a reaction may diminish the product by the formation of a large quantity of aldehyde, which is carried off by the exhausted air. Vinegar thus obtained, is called malt-vinegar, the saccharine matter which furnished the alcoholic liquor being derived from malt. I need not tell you, however, that alcoholic liquors, obtained from any source whatever, may be made to yield vinegar in exactly the same manner. In France and Germany, the wines of bad vintages are very commonly converted into vinegar, which is then called wine-vinegar. Vinegars, therefore, cannot be viewed as pure acetic acid, containing, as they do still, certain substances derived from the grain or grapes, which, however minute their quantity may be, impart a peculiar flavour to these liquids.

The acidification of alcohol is by no means the only source of acetic acid. The destructive distillation of a great many organic substances likewise gives rise to the formation of acetic acid. Billets of wood, enclosed in iron cylinders, and exposed to a high temperature, furnish a brown acid liquid, containing much tarry and oily matter, which is impure acetic acid, commonly called pyroligneous acid. In this crude state, the acid is scarcely fit for any application. But, more or less purified, it is extensively used by the calico printer, dyer, and by the manufacturer of white lead. The purification is chiefly effected by combining the acid with bases, and liberating it again from these saline compounds by the addition of a stronger acid. Generally, the crude pyroligneous acid is saturated with lime, whereby a dirty brown powder is obtained,—crude acetate of lime. From this the acid is separated by distillation with concentrated sulphuric acid. In this process a considerable quantity of impurities are charred by the concentrated acid, of which a slight excess is used; the acid thus separated is, however, still very impure; it is now saturated with carbonate of soda, whereby the acetate of soda is formed. This salt is remarkable for the high temperature to which it can be exposed without being decomposed. In fact, it may be heated nearly to redness, when it fuses to a clear liquid, which, on cooling, solidifies to a hard crystalline mass. At this temperature, especially when it is maintained for some time, the whole of the impurities are charred, and the black mixture has now only to be dissolved in water, and the solution after filtration to be evaporated, in order to yield splendid colourless and transparent prisms of the pure soda salt, which are often remarkable both for their size and perfection. From this salt, by another distillation with sulphuric acid, pure acetic acid is obtained. If the several operations have not been conducted with sufficient care, the vinegar thus produced may even now contain a small quantity of empyreumatic matter, which may be recognised by the odour, readily perceived after the acid is neutralised by an alkali; or it may contain a small quantity of sulphurous acid, arising from the decomposition of the sulphuric acid used in the distillation; this is indicated by a lead-salt, producing a white precipitate, which is re-dissolved upon addition of dilute nitric acid. But with sufficient care, pyroligneous acid may be made to yield an acetic acid of great purity, which then bears to wine and malt vinegar the relation of alcohol to wine or other fermented liquids, each of which possesses a flavour and bouquet of its own, in addition to the alcohol.

In the introductory lecture to this course, I have mentioned, that acetic acid is one of those organic substances the artificial construction of which, from its very elements, has lately been accomplished by the progress of chemical science. Having already explained in detail the series of intricate reactions by means of which this great result has been effected, it would be needless to do more than to remind you of the fact.

Acetic acid obtained by either of the above processes, contains more or less water. Of the liquid obtained in distilling acetate of soda with sulphuric acid, the last third is very concentrated acetic acid, which is, however, generally contaminated with a large quantity of sulphurous and even sulphuric acid. This acid, when purified by rectification over acetate of soda, is exposed to a low temperature, such as is obtained by a mixture of salt and ice. At this temperature, the crystals of pure acetic acid formed in a mother liquor of dilute acetic acid, when drained, fused, and re-solidified in the same manner, furnish an acid of absolute purity.

Crystallised, or glacial acetic acid, as it is likewise called, remains solid at temperatures below 16° C (60·8° F); but, when once liquefied, it requires often a considerable depression of temperature before it re-solidifies; but, as happens in the case of a super-saturated solution of sulphate of soda, this super-refrigerated—if I may use this word—acetic acid solidifies at once when it is touched with a point of glass. The boiling point of acetic acid is 120° C. (248° F.) The pure acid has the specific gravity of 1·063 (at the common temperature). The specific gravity rises to a certain extent, on the addition of water, an acid containing three equivalents of water possessing the specific gravity 1·079. On further dilution the specific gravity diminishes again. The concentrated acetic acid, as I have mentioned already in the preceding Lecture, is represented by the formula

$$C_4 \quad H_4 \quad O_4$$

Saturated with bases, it furnishes a series of very charac-

teristic salts, many of which are remarkable, either for their useful applications, or for the interesting changes which they undergo under the influence of heat. Acetic acid is a monobasic acid, *i. e.*, in the formation of a salt, this acid exchanges one equivalent of hydrogen for one equivalent of metal.

Acetic acid $C_4 H_4 O_4$ or $H C_4 H_3 O_4$

Acetate .. $C_4 (H_3 M) O_4$ or $M C_4 H_3 O_4$

Many chemists are inclined to assume, in acetic acid, the existence of ready-formed water; in fact, to consider acetic acid as a compound of one equivalent of water with absolute or anhydrous acetic acid—

Acetic acid $HO, C_4 H_3 O_3$

and to view its salts as combinations of this anhydrous acetic acid with metallic oxides—

Acetates $MO, C_4 H_3 O_3$

But this view is not supported by experimental evidence of any force. For a long period all attempts made to isolate such a compound as $C_4 H_3 O_3$ entirely failed; and when, at last, in the hands of M. Gerhardt, the formation of such a compound actually took place, it was under circumstances which altogether excluded the assumption of water in acetic acid, and served more, perhaps, than any other argument, to establish the antagonist opinion. I must not, however, now enter more fully upon this subject, since the line of reasoning would be, at present, less obvious to you than at a later period of this course, when I hope to return to a more minute examination of this question.

The acetates are generally soluble in water, some of them also in alcohol. *Acetate of silver* is the salt least soluble; it falls as a white crystalline precipitate on addition of a concentrated silver solution to an acetate. This precipitate, together with the red-colour acetic acid or acetates strike with a solution of sesquichloride of iron, frequently serves for the indication of acetic acid. In a technical point of view, the most important salts of acetic acid are those of copper, of lead, and of alumina. The commercial *copper salt*, known by the name of verdigris, is a mixture of several basic acetates, $Cu C_4 H_3 O_4 + mCu O + nHO$; it varies in composition, and is generally prepared, in wine countries, by stratifying plates of metallic copper with the *marc* of grapes, the residuary sugar of which, spread as it is over a very considerable surface, is rapidly converted into alcohol, and subsequently into acetic acid, by the continued action of the atmospheric air. After several weeks the copper is covered with thin layers of verdigris, which are collected. The neutral acetate, $Cu C_4 H_3 O_4 + HO$ is readily obtained by dissolving commercial verdigris in acetic acid, and allowing the solution to cool, when beautiful dark-green crystals are deposited. The solution of this salt is chiefly employed in making the well-known "Schweinfurt Grün," (so called from a town in Franconia, where the manufacture of this colour is extensively carried out,) which is a combination of acetate of copper with arsenite of copper—

$Cu C_4 H_3 O_4 + 2 (2 Cu O As O_3)$.

This magnificent colour, the application of which, however, is restricted, on account of its poisonous constituent, is readily made by mixing boiling solutions of equal weights of arsenious acid and acetate of copper, and continuing the process of ebullition for some time.

The *lead salt* of acetic acid is simply prepared by dissolving litharge (protoxide of lead) in acetic acid; the solution, by slow evaporation, yields very large prisms of the formula

$Pb C_4 H_3 O_4 + 3HO$.

This salt is very prone to form basic salts, especially a tribasic compound, $Pb C_4 H_3 O_4 + 2PbO$; and for this reason an excess of litharge has to be avoided in the preparation of acetate of lead. This salt is exceedingly soluble in water, of which it requires less than its own weight. The solution has an extremely sweet taste,—hence the term "sugar of lead," —which becomes, however, astringent and metallic. The chief ... of acetate of lead—not to speak of its uses as a ... and hydrosulphuric acid—are in the manu... test for sulp... chromates of lead so extensively used facture of the seve... in the preparation of the alu... as colouring materials, and ... of the latter, which mina-mordant. In the manufac... the dyer, probably is one of the most important agents of ... the largest quantity of acetate of lead is consume...

The alumina-mordant is virtually a solution of *acetate of alumina*. It is made by adding to a solution of alum such a quantity of sugar of lead that the whole of the sulphuric acid combined with the alumina is precipitated in the form of sulphate of lead, while the sulphuric acid of the potassa remains in solution.

$$\underbrace{Al_2\ 3SO_4,\ K\ SO_4}_{\text{Alum.}} + \underbrace{3\ (Pb\ C_4\ H_3\ O_4)}_{\text{Sugar of lead.}} =$$

$$\underbrace{Al_2\ 3C_4\ H_3\ O_4 + K\ SO_4}_{\text{Albumina-mordant.}} + \underbrace{3\ Pb\ SO_4}_{\text{Sulphate of lead.}}$$

The alumina-mordant is, therefore, a mixture of acetate of alumina with sulphate of potassa; this solution has the remarkable property of gelatinizing, on being heated, from a separation of the alumina, which is, however, re-dissolved when the liquid cools. It is this feebleness of the force by which the alumina is held in solution, that renders this liquid so valuable to the dyer, for the same result which is produced by heat is effected also by the attraction of the woody fibre, which, in fact, absorbs the alumina with the greatest facility, and permanently, from the mordant. Cloth thus charged with alumina, mordanted, or mordantised, as it is called, is capable of being at once dyed, the alumina which is fixed upon the fibre combining, in this case, with the colouring matter. The pure acetate of alumina may be made by precipitating a solution of sulphate of alumina with acetate of lead; it is not capable of crystallizing, but dries up to a gummy mass when evaporated upon the water-bath. This salt has been lately carefully examined by Mr. Walter Crum, whose researches, which are not yet published, have led to some exceedingly interesting results. The details of this investigation scarcely belong to the subject of this lecture, but I cannot omit mentioning that the study of the action of heat upon the acetate of alumina has led Mr. Crum to the discovery of a soluble modification of hydrate of alumina; a solution of acetate of alumina heated in a water-bath loses with the aqueous vapour a certain quantity of acetic acid; if this process be continued for some time, care being taken to replace the water as it evaporates, the whole of the acetic acid, or nearly so, is at last removed, a clear solution of hydrate of alumina remaining behind. The slightest change in the equilibrium of the solution, however, is sufficient to make the alumina again insoluble; change of temperature, addition of any acid, or of alum, or many salts, convert the solution at once into a trembling jelly; even on the tongue the liquid instantaneously coagulates, the small quantity of saline substances in the saliva being sufficient to effect the conversion of the soluble alumina.

The changes which the acetates suffer under the influence of heat are particularly interesting, and claim our attention for a moment. The deportment of these salts varies to a considerable extent according to the metal which they contain. The acetates of the easily reducible metals, such as silver or mercury, yield part of the acetic acid unchanged, while another portion is decomposed, furnishing the hydrogen necessary to reproduce the acetic acid, the residuary carbon being carried off in the form of carbonic acid, and a pure metal remaining behind. On the other hand, if acetates containing an alkali metal, or the metal of an alkaline earth be distilled, such as acetate of soda or acetate of lime or baryta, a perfectly different metamorphosis takes place. In this case the metal remains behind, in the form of a carbonate, abstracting from the acetate carbon and oxygen in the necessary proportion, while the remainder of the elements assumes the form of an exceedingly volatile spirituous liquid, long known by the name of pyro-acetic acid, but now generally designated by the term *acetone*. The following equation illustrates this change:—

$$\underbrace{MC_4\ H_3\ O_4}_{\text{Acetate.}} = \underbrace{M\ CO_3}_{\text{Carbonate.}} + \underbrace{C_3\ H_3\ O}_{\text{Acetone.}}$$

Acetone is a colourless transparent liquid, of 0·792 specific gravity, and boiling at 55° C. (132° F.) It burns with a pale bluish flame. Like alcohol and acetic acid, it is miscible with water in all proportions. It undergoes a series of changes when submitted to the influence of chemical agents, but they are for the most insufficiently understood. The only body of well-marked properties derived from acetone is a liquid hydro-carbon *mesitilole;* it is formed by treating acetone with concentrated sulphuric acid, the

action of which appears to consist in the removal of the oxygen of the acetone in the form of water.

$$\underbrace{C_3\,H_3\,O}_{\text{Acetone.}} \;-\; HO \;=\; \underbrace{C_3\,H_2}_{\text{Mestitilole.}}$$

The formula $C_3\,H_3\,O$ is the simplest atomic expression of acetone; the vapour-density of the body, however, together with its general behaviour, renders it extremely probable that the true acetone formula is

$$C_6\quad H_6\quad O_2$$

In a similar manner the simplest atomic expression of mesitilole by no means represents the molecule of this hydrocarbon. In a former lecture, in which I entered more fully into the doctrine of the vapour densities, I explained to you the reasons why we prefer the formula $C_{12}\,H_6$ to the simpler expression $C_2\,H$ for benzol. A similar reasoning has induced chemists to adopt for mesitilole the formula

$$C_{18}\quad H_{12},$$

which is in every respect supported by the deportment of this substance; and thus, as I have stated already on a former occasion, the formation both of acetone and mesitilole affords a striking illustration of the powers possessed by modern chemistry, of rising from the simpler to the more complex terms of a series.

The metamorphosis of an alkaline acetate by the action of heat undergoes a remarkable modification if it take place in the presence of an excess of base. In this case the acetic acid loses a larger quantity of carbon; in fact, the excess of base gives rise to the formation of as large a quantity of carbonic acid as the amount of oxygen present in acetic acid will permit. The rest of the carbon, together with the whole of the hydrogen of the acetic acid, is evolved in the form of a colourless, inflammable gas, commonly called "light carburetted," or better, perhaps, "carbonetted hydrogen."

$$\underbrace{C_4\,H_4\,O_4}_{\text{Acetic acid.}} + \underbrace{2\,Ca\,O}_{\text{Lime.}} = \underbrace{2\,Ca\,CO_3}_{\text{Carbonate of lime.}} + \underbrace{C_2\,H_4}_{\text{Carbonetted hydrogen.}}$$

The gas is generally prepared by heating a mixture of acetate of soda with lime in a copper flask; it is collected over water, in which it is insoluble. It burns with a pale blue flame, which possesses comparatively but very little luminous power. You observe that the formula $C_2\,H_4$, which we have adopted for light carbonetted hydrogen likewise differs from the simplest atomic expression, which is $C\,H_2$; but the former is not only more in harmony with the mode of formation of this body, but likewise with the vapour-density and with its numerous derivatives. The decomposition of acetic acid by an excess of base is by no means the only source from which light carbonetted hydrogen is obtained. It is formed in abundance by the putrefaction of vegetable matters, woody fibre, etc., which in this process assimilates the elements of water, and splits into carbonic acid and carbonetted hydrogen. The gas which is frequently seen rising in bubbles from the bottom of ponds consists chiefly of carbonetted hydrogen, and hence the name of "marsh gas" by which this substance is frequently designated. The fire-damp of our coal-mines, which, in spite of Sir Humphrey Davy's ingenious invention, still occasions annually such a sad sacrifice of human life, likewise chiefly consists of this gas. Carbonetted hydrogen, lastly, is the chief constituent of ordinary coal-gas.

The action of heat upon acetate of ammonia requires still briefly to be noticed. If this salt, which may be prepared by saturating pure acetic acid with ammonia, be distilled with substances which absorb water with great avidity—with anhydrous phosphoric acid, for instance—it loses the whole of its oxygen in the form of water, the rest of the elements being separated in the form of an exceedingly volatile and fragrant liquid, which has received the name of "acetonitrile." The re-action which takes place in this case is perfectly analogous to the change by heat of oxalate of ammonia, which I exhibited to you experimentally upon a former occasion, and which consists in the formation of water and cyanogen.

$$\underbrace{N\,H_4\,C_2\,O_4}_{\text{Oxalate of ammonia.}} = 4\,HO + \underbrace{C_2\,N}_{\text{Cyanogen.}}$$

$$\underbrace{N\,H_4\,C_4\,N_3\,O_4}_{\text{Acetate of ammonia.}} = 4\,HO + \underbrace{C_4\,H_3\,N}_{\text{Acetonitrile.}}$$

This substance boils at 77° C. (170° F.) Its vapour burns with a pale, greenish flame. It is rather soluble in water, in contact with either acids or alkalies, acetonitrile re-assimilates four equivalents of water, and reproduces acetate of ammonia. The chief interest attached to acetonitrile lies in the remarkable connexion which this substance establishes between acetic acid and another family of bodies, the methyl-family, which we have not yet considered. The analogy of the production of cyanogen and acetonitrile suggests some relation between these two substances; experiment, in fact, has proved, that acetonitrile is a cyanogen compound, of a peculiar kind; in one word, that it is cyanide of methyl. This is, however, all I can say at present, reserving a more complete elaboration of this question to a subsequent lecture.

I have treated acetic acid and its derivatives, perhaps, more in detail than the short limits of this course of lectures would appear to allow. But you will see bye-and-bye that all these substances are types of certain classes; that all the changes which I have noticed occur in an almost unlimited number of cases; and you will find, that, while speaking of perfectly different substances, I shall have frequently to remind you of the metamorphoses of the acetic acid series.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. VII.

EXTRACTS FROM THE ANNUAL REPORT ON THE HEALTH OF THE TROOPS SERVING IN CEYLON, FROM APRIL 1, 1850, TO MARCH 31, 1851.

By DR. CAMERON, Surgeon 37th Regiment.

1. ON THE TREATMENT OF CHOLERAIC DIARRHŒA.

Under the head of diarrhœa, are included several cases which should perhaps have been returned as cholera. One was certainly so; and others were at least highly choleraic in character. I allude to the subject for the purpose of bringing especially to notice the admirable effects of bicarbonate of soda and opium administered in the form which has given it the name of "Maxwell's remedy," being first introduced by Dr. Maxwell, of the Madras Cavalry, about two years ago, I think. I happened to read his letter in the Indian papers at Galle, while a case was under treatment in hospital, and finding the following morning that the man had vomited all night in spite of every remedy tried, that the dejections were rice-watery, the nails blue, and the body very cold, I at once gave him "Maxwell's dose," which stopped the whole train of symptoms directly. The proportions are as follow:—A scruple of sesquicarbonate of soda, with three grains of opium, given in the form of bolus, and washed down with a second scruple of soda in a wineglassful of water *as hot as the patient can bear to swallow it.* This to be repeated in the evening, with two grains of opium if necessary, and afterwards in diminished doses if required. I have never found it necessary to give a second bolus when the first was retained, and sometimes have succeeded in stopping the vomiting by the hot draught with laudanum when the patient could not keep down any bolus. This was the case in the cholera patient alluded to, who was admitted at Colombo, on the 15th of July, with blue skin, shrivelled hands, and weak voice, after vomiting and purging all night.

On our arrival here, and during the hot weather with cold nights in March, we had about a dozen cases of men brought into hospital, many of them off guard, in a state of great exhaustion from vomiting and purging, having generally had diarrhœa for twenty-four hours or more previously. None of them were exactly cases of cholera, but they very closely approximated to it, having cramps and great coldness of skin. In every instance, "Maxwell's dose" was immediately given, and acted like a charm.

2. ON THE TREATMENT OF DYSENTERY.

Dysentery is generally seen as colonitis in Ceylon, and very rarely attended with that hepatic complication so much talked of elsewhere. The treatment pursued has been local depletion by leeches to the abdomen and anus, the internal use of Dover's power and ipecacuanha, in doses of three grains each every third hour during the early stage, and afterwards combinations of opium with kino, chalk, tannin, acetate of lead, etc., according to circumstances.

In all severe cases, I have for many years past conjoined quinine in moderate doses with the other remedies, giving to the extent of twelve or sixteen grains in the twenty-four hours, and, I am persuaded, with the best results as regards the patient's strength and the prevention of sloughing of the mucous membrane. I attach much importance, also, to the support of the patient from the commencement. Sick men often die of *starvation* as much as anything else. I generally give a cup of arrowroot twice a-day for the first three days, and after that continue it, with chicken broth, for dinner and drink. Opiate injections are constantly used. I have occasionally derived benefit from strong solutions of nitrate of silver thrown into the colon; but with the ordinary apparatus it is nearly impossible to use the remedy effectively, owing to decomposition.

I have for many years past abandoned the use of calomel in this disease, after considerable experience of its results. The loss of two cases in seventeen appears high; but in one of them the disease had reached a sloughing stage before it was known to exist. The other was lost after he had become quite convalescent and left his bed, solely, I think, from being deceived by him in his anxiety to get discharged.

3. ON A NATIVE REMEDY FOR DIARRHŒA.

In the treatment of some very obstinate cases of diarrhœa "much benefit was derived from the use, in chronic cases, of the fruit of the 'Œgle marmelos,' or 'bele,' a favourite Cingalese remedy.(a) From one to three of these 'apples,' as they are called, slightly roasted in the ashes, and eaten with sugar, generally agreed well with the stomach, and proved powerfully astringent. Among others, this remedy cured a man who had laboured under diarrhœa for a year nearly, and who was sent to head-quarters to be invalided. It is also highly useful in the sequel of dysenteric cases, and in the chronic form of that disease, even when the discharges are bloody."

4. ON THE TREATMENT OF HEPATITIS.

In ordinary acute hepatitis, I bleed a fit subject till either the pain is removed or syncope supervenes. A return of pain is met by a repetition of the bleeding till full and free inspiration can be made without hindrance. Local depletion is practised as required when further general bleeding seems unadvisable, and a constant steady drain from the portal circulation is kept up by free purging. Very rigid abstinence is insisted on during the early stage, not merely from solids, but fluids also, the patient's drink being limited as much as possible, and never allowed to exceed half-a-pint of any fluid in twenty-four hours. I attach much importance to this restriction, (first suggested to me by a perusal of Twining's admirable remarks on hepatitis,) and have generally been able to induce my patients to submit to the privation cheerfully, by explaining the reason for enforcing it. The object, in an acute case of hepatitis, is to overcome the excited vascular action attendant upon inflammation of such an organ, and to reduce considerably the quantity of fluid in the system. By free bleeding, purging, and abstinence from food and drink, we create a sort of vacuum in the system, which necessarily renders absorption active; and this is of primary consequence when a vascular sponge like the liver is in a state of turgescence, and when its vessels have such a strong tendency to seek relief by depositing a portion of their contents, and thus laying the first foundation for the future abscess. This is the rock to be avoided, and therefore I consider it necessary to persevere daily in the use of leeches and purgatives as long as fulness and pain on pressure remain. Should the patient's strength fail while tumefaction is unremoved, a succession of open blisters, with bitter purgatives, and a cautious, gradual use of mercury, seems beneficial; and, in older cases, I have derived great benefit from the introduction of a seton.

For many years past, I have ceased to employ mercury in the acute stage of hepatitis, or to regard this mineral as indispensable in the treatment of the disease. I am disposed to regard its physiological effect upon the liver as contra-indicating its exhibition in the inflammatory stage. The patient's constitution, his habits of life, and perhaps his former experience of salivation, often render its administration, at any period of the disease, very undesirable. In my early service here I used it freely and uniformly,—in fact, was afraid to omit its exhibition,—and my practice was by no means fortunate. I have succeeded much better since I left it off, and followed the plan above detailed.

Dr. Cameron then details a successful case of puncture of the liver. The patient had suffered from chronic hepatitis from February till May:—"From the 3rd to the 7th of May, he continued to suffer from pain, weight in the side, restless nights, and constant rigors; but the vascular excitement had subsided considerably, the pulse falling to 84 in the morning. Although there was no pointing, or anything beyond a fulness generally, yet the symptoms seemed so decidedly those of abscess, that, with the view of preventing the fatal result which seemed certain to follow the continuance of his sufferings, I was very desirous of trying the effect of a puncture at a spot in the side above the ninth rib, where pressure caused acute pain. In coming to this conclusion, I was greatly influenced by the numerous cases in which, a few years ago, the late Inspector-General Murray tried, and caused others to try, the practice in India. He fully established the strange fact, that the liver may be deeply punctured without any unpleasant consequences, (avoiding the large vessels,) even when we fail to hit upon an abscess, and still further, that benefit seems to result from the operation. The Hakeems in India are in the habit of puncturing both liver and spleen with long, good-sized needles, or sounds, as a remedy for enlargement of these organs, and I believe this influenced Dr. Murray in trying it boldly.

As regards the advantage of opening hepatic abscess in this way no doubt can exist, especially if it is done at the earliest moment practicable. I have had two successful cases myself, and seen others; but I believe general opinion is against puncturing, without almost a perfect certainty of finding an abscess. In consultation, Dr. Roe was rather opposed to my attempting it in this case, and only yielded reluctantly, on my urging, that the puncture in itself would probably do good instead of harm. Accordingly, on the 7th of May, I introduced a good-sized trocar between the eighth and ninth ribs, behind the junction of the cartilage, and passed it deeply, in two different directions, into the liver, without finding any pus. The wound was then carefully closed, a strong opiate administered, and large warm poultices applied to the side. No increase of pain seemed to follow. Eight leeches were applied round the wound. On the 11th, poultices and opiates being continued daily, no discharge took place, and the opening healed directly. The rigors, with more or less pain, continued to the 20th of May. Quinine was given in moderate doses, and on the 28th a seton was inserted. From the 21st, all the symptoms gradually improved. He was restricted to milk diet during all June, and regular mild purgation kept up. On July 6th, he was placed on meat-diet, and then gained flesh rapidly; so that, on the 22nd, he was discharged stout and fat, and is still doing his duty. Nor did he fail to test his recovery fully, for, only eight days after his discharge, he was brought to hospital in a state of frantic intoxication! Such are the materials the Military Physician has to work upon, and such the prolific sources of disease and early death among our soldiery,—causes far more commonly fatal here than the scape-goat of a "tropical climate."

5. THE TREATMENT OF BUBO.

In this country, very troublesome swellings of the glands of the groin often seem to originate constitutionally, without assignable cause. They are also readily excited by boils or leech-bites on the legs. I only allude to this, for the purpose of noticing the excellent result of the French treatment by blister, and the local application of a strong solution of bichloride of mercury to the consequent sore. I consider it an especially valuable remedy here, where I have known indolent buboes last for a whole year, and force the patients to quit the country.

(a) The tree is the œgle, or cratæva marmelos of Linnæus. It is one of the orange tribe, though known as the Bengal quince, or Bel of the Hindoos. The fruit contains tannin, a peculiar mucilage, a concrete essential oil, an aromatic and a bitter principle.—Ed.

ON THE PREVENTION OF CHOLERA.

By JOHN SNOW, M.D.

We cannot hope to prevent any disease unless we have a correct knowledge of its causes. As regards the cholera, many persons, indeed, consider that its causes are well-known, and also the means of its prevention; and they attribute its continued existence and extension entirely to neglect of the requisite measures for its suppression. Every candid observer must admit, however, that a great deal has been done within the last twenty years in the way of presumed sanitary improvement, much of it with the best results as regards the general health of the community, and all of it with the best intentions. Yet the cholera of 1849 was much more fatal than that of 1832, and now, on its third visit to our shores, it is prevailing to a more fatal extent in Newcastle than was ever before witnessed in this country. These circumstances clearly show, that the causes of cholera are not generally well understood, and that the true preventive measures have not been applied.

The first origin of cholera, like that of other epidemic diseases, is hid in obscurity, and will probably remain so. It has been proved, however, by various documents quoted by Mr. Scot,(a) that cholera was prevalent at Madras in 1769, and that it carried off many thousands of persons at various places in the peninsula of India from that time to 1790. From this period we have very little account of the disease till 1814, although, of course, it might exist in many parts of Asia without coming under the notice of Europeans. In June, 1814, the cholera appeared with great severity in the 1st Bat. 9th Regt. N. I., on its march from Jaulnah to Trichinopoly, while another battalion which accompanied it did not suffer, although it had been exposed to exactly the same circumstances, with one exception. Mr. Cruikshanks, who attended the cases, and made a report thereon, writes as follows:—(b)

"It was the belief of the natives, strenuously fostered and inculcated by their spiritual guides, that the epidemic was the immediate consequence of the wrath of Heaven, outraged and insulted by the pollution of certain sacred tanks, situated at the village of Cunnatore, in which sepoys of low caste and camp followers had indiscriminately bathed. Such we may not regard as affording a very satisfactory solution of the difficulty; yet it leads, I think, directly to the true point of inquiry. At Cunnatore, the force was so encamped, that while the 5th Native Infantry on the right had their supplies of water from wells, the puckallies of the 9th Native Infantry procured water for that battalion from tanks situated on low ground on the left of the line. The fact, that the disease first broke forth in a day or two after passing Cunnatore; the prevailing opinion of the natives, that it originated there, and that somehow it was connected with the tanks; a desire to discover some one cause confined in its influence and operation to one out of the two battalions; lastly, the difficulty or impossibility of lighting on any other; all these led to inquiry, and to ascertaining with a considerable degree of certainty, that each battalion was supplied with water from a source distinct from the other." The cholera was said not to be at Cunnatore at the time.

In 1817, the cholera prevailed with unusual virulence at several places in the delta of the Ganges; and, as it had not been previously seen by the medical men practising in that part of India, it was thought by them to be a new disease. At this time the cholera began to spread to an extent not before known; and, in the course of seven years, it reached eastward to China and the Philippine Islands, southward to the Mauritius and Bourbon, and to the north-west as far as Persia and Turkey. With its progress afterwards in Europe the reader is, no doubt, quite familiar. The cholera travels along the great tracks of human intercourse; it never attacks the crews of ships coming from a country free from cholera to one where the disease prevails, till they have entered a port or had intercourse with the shore. Its exact progress from town to town and from country to country has not always been traced, but it has never appeared except where there has been ample opportunity for it to be conveyed by human intercourse. It is quite true, that personal communication cannot always be detected between the new cases and previous ones; but this is only what happens in small-pox, which is proved by inoculation to be a communicable disease. In an interesting account of an epidemic of variola at Corfu,(a) Mr. Spencer Wells writes as follows:—"On the 27th of February, 1852, a case of small-pox occurred in the Jew's quarter at Corfu. Small-pox had been prevalent for some months on the opposite shores of Albania, which were only placed under a quarantine of observation of twenty-four hours. No communication could be traced between any infected person or object from Albania to account for the appearance of the disease in Corfu." Innumerable instances are, however, observed of the communication of cholera by personal intercourse, and hundreds of them of the most convincing kind; as where the first case in a neighbourhood is that of a person newly arrived from a place where the disease was prevailing, and the next cases are those of members of his family or others who attend on him. There is, it is true, what has been considered the other side of the question. Numbers of persons come into near proximity with the sick without contracting the malady; but this only shows that it is not communicated either by contact with the patient or by effluvia given off into the surrounding air; and as there was no right to assume that these two modes, usually denominated contagion and infection, are the only ways in which disease can be transmitted from one person to another, the evidence of the communication of cholera remains unshaken to afford a full explanation of the progress of the disease; indeed, the only explanation of it that can be offered.

It only remains, then, that the mode in which cholera is communicated should be known, in order that the means of arresting its progress may be pointed out. Every disease communicated from one person to another is necessarily caused by some material proceeding from the former and received by the latter. Now, if cholera were one of those disorders which are ushered in by general symptoms, such as fever, we should have no indication of the channel by which the morbid poison is received, whether, for instance, by the alimentary canal, by the lungs, or in some other way, but should be left to determine this point by circumstances unconnected with the pathology of the disease. Cholera, however, always commences with disturbance of the functions of the alimentary canal; all the early symptoms are connected with this canal, and the effects which follow are only the result of what has occurred in it. The exudation of the watery part of the blood into the stomach and bowels causes the faintness and sinking. The blood which remains in the vessels, being too thick to pass readily through the capillaries, both the pulmonary and systemic circulations are impeded; hence the difficulty of breathing, the general coldness, and state of collapse. How far the cramps depend on irritation of the nerves of the alimentary canal, and how far on the want of fluidity and proper circulation of the blood is not very evident; but it is quite certain that they do not depend on any cholera poison circulating in the blood, for the cramps and all the symptoms of collapse disappear for a time on the injection of a weak saline solution into the veins, which merely replaces what has been lost by the bowels. It is evident from this circumstance that the blood is not poisoned in cholera, except in cases of secondary illness, when it becomes charged with urea and other excretory matters, owing to congestion of the kidneys. The primary and essential morbid actions of cholera being confined to the alimentary canal, it follows that the materies morbi of cholera must find access to it by being swallowed, that it must increase and multiply there, and be discharged to be a source of danger to others.

Before pointing out the precautions which these views

(a) Report on the Epidemic Cholera. 1824. P. 5.
(b) Op. cit. P. 237.

(a) *Medical Times*, current vol., p. 3?.

suggest, it will be well to examine what light they throw on the progress of cholera, and what confirmation they receive from general and particular facts connected with its history. It has been observed, in all parts of the world, that nothing assists the spread of cholera more than want of personal cleanliness. When we consider how free the evacuations from the stomach and bowels of cholera patients often are, both from colour and odour; how suddenly and copiously, and with what force they are generally discharged, it is evident that the hands, both of the patient and his attendants, are liable to be soiled with them. Unless great care is taken to wash the hands frequently, and more especially before taking food, or handling and preparing the food of others, small quantities of the evacuations must necessarily be accidentally swallowed. The influence of dirty habits in aiding the spead of cholera is thus clearly accounted for. It is analogous to what occurs among house-painters in regard to lead-poisoning. Those of cleanly habits escape; while others constantly swallow a little paint with their food, and become affected with colic. The scarcity of water, of course, is an obstacle to cleanliness, even when the inclination prevails; and this has been frequently observed to be connected with the unusual extension of cholera in a town or neighbourhood. The reason why Medical men, and other persons of cleanly habits, who do not stay to eat and drink in the sick room, are scarcely rendered more liable to cholera by their avocations, while it often fares differently with the social visiter, is perfectly explained by the above views. It is evident, also, why the Medical man can make inspections of the dead bodies of cholera patients with impunity; while they who wash and lay out the body often suffer. The Medical man is certain to wash his hands after his operation, while the persons who perform the other offices mentioned, especially among the poor, are almost as certain to neglect that duty. It is obvious that, where a whole family live, night and day, in one small room, in which the cooking is done and the meals are eaten, that the food is very liable to become contaminated, in the event of a case of cholera occurring; and, where several families live in one room, the risk amounts almost to a certainty. Now, under these circumstances, cholera is observed to spread through the family and household; while cases occurring among the well-to-do, who have separate kitchens and sleeping-rooms, are seldom observed to spread the disease. The great havoc which cholera has made in certain asylums for pauper children and pauper lunatics, to which it has gained access, is explained by the crowding which existed, and more particularly by the difficulty of maintaining cleanly habits among these classes of persons. On the other hand, the almost total escape of the inmates of the model lodging-houses in 1849, although inhabited by a class of persons who usually suffer more than others, was due to the excellent arrangements for cleanliness, and the proper separation of apartments and offices required for distinct purposes. About a month ago, certain German emigrants, on their way to America, who had crossed the sea from Hamburg and Rotterdam, where cholera was prevailing, to the port of Hull, and had gone thence by rail to Liverpool, were seized with cholera (some of them fatally) in the latter town; and it is most likely to the well-regulated Emigrant's Home, in which these cases occurred, that the town of Liverpool owes its present freedom from the epidemic.

The colliers of this country suffered much more from cholera than persons in any other occupation whatever, both in 1832 and 1849,—a circumstance which can only be explained by the mode of communication of the malady above pointed out. Pitmen are differently situated from every other class of workmen in many important particulars, as the following reply, which I received a few days ago from the agent to a colliery near Leeds will show:—"Our colliers descend at five o'clock in the morning, to be ready for work at six, and leave the pit at from one o'clock to half-past three. The average time spent in the pit is eight to nine hours. The pitmen all take down with them a supply of food, which consists of cake, with the addition, in some cases, of meat, and all have a bottle, containing about a quart of 'drink.' I fear that our colliers are no better than others as regards cleanliness. The pit is one huge privy, and of course the men always take their victuals with unwashed hands." It is very evident, that when a pitman is attacked with cholera while at work, the disease has facilities for spreading among his fellow-labourers such as occur in no other occupation. That the men are occasionally attacked while at work I know, from having seen them brought up from some of the coal-pits in Northumberland in 1831-2, after having had profuse discharges from the stomach and bowels, and while fast approaching to a state of collapse.

It is not only when the cholera evacuations are accidentally swallowed in small portions with the food that they have the power of propagating the disease, but also when they are diffused in a very large quantity of water. On former occasions(a) I adduced several instances in which a violent irruption of cholera in a limited community was caused by the contamination of the water of a well or tank by the contents of drains and cesspools, when there were cholera evacuations in the latter,—instances in which irruptions of cholera among greater numbers of people were connected with a similar contamination of the tidal ditches of Rotherhithe and Bermondsey,—and instances in which whole towns were, more or less, affected by drinking the water of rivers into which the sewers discharged their contents. It was shown that, in the latter case, more particularly when the water was distributed by water-works, the cholera, instead of creeping along in the back streets, and courts, and alleys, inhabited by the poor, became generally diffused among all classes of the community. This circumstance has just received a fresh illustration at Newcastle and Gateshead.

The Water Company, formed about six years ago for the purpose of supplying these two towns with water from a rivulet and springs at Whittle Dean, about ten miles distant, have lately found their proper sources insufficient for the demands of the population and the various factories, and have been making use of the pipes of a former company to obtain water from the Tyne, at a spot about a mile above the towns. The tide, however, flows for several miles further, and, consequently, carries the sewage past the place where the water is obtained. When the cholera became established in Newcastle, in the early part of the present month, the sewers necessarily conveyed the peculiar evacuation of the disease into the river, and for some days the deaths from cholera increased in a geometrical ratio,—being, on the 13th, 29; 14th, 59; 15th, 101; and they increased in Gateshead in the same proportion. Complaints of the impure state of the water were now more loudly expressed than before; and on this day the Tyne water was discontinued, and the mortality no longer increased in the same frightful manner. It kept at this point, and even a little above it, for a few days, however, before it began to decrease, perhaps on account of impurities still remaining in the pipes and in the cisterns where the latter are used. Besides, it must be borne in mind, that the disease might maintain, by its ordinary means of propagation, the wide dominion it had obtained through the aid of the steam-engine and pipes of the Water Company. The cholera on this occasion has been very fatal among the genteel and well to do classes in all parts of Newcastle and Gateshead, as well as among the poor. Only a few streets in these towns are situated at a low level, for the banks rise very abruptly at a little distance from the river on both sides. A great portion of each town is elevated nearly 200 feet above the river, and some parts are nearly 300 feet high, yet the Water Company above mentioned supplies all these districts, and all have been visited severely by the cholera. The diminished mortality which is taking place now (September 27) is chiefly confined to the lower parts of the two towns. I have obtained the above particulars from a medical friend in Newcastle, and also from the published reports of the meetings of the Town Council and other public bodies.

In 1831-2 there were no waterworks in Newcastle. It was supplied in an insufficient manner with spring water, which generally had to be carried some distance to the houses from "pants" in the streets. The epidemic cholera was pretty severe at this time. In 1849 Newcastle and Gateshead were plentifully supplied with water unpolluted with sewage, by the Company above-named, who had then no occasion to have recourse to the Tyne. At this period these towns escaped with a very slight visitation from cholera. The existing epidemic, under the circumstances above narrated, has carried off more than six times as many persons in Newcastle during the first four weeks of its presence, as it carried off in a similar period in 1831-2; and more than twice as many in Gateshead.

(a) *Medical Gazette*, 1849. Vol. II., pp. 730, 745, 923; and *Medical Times*, 1851. Vol. II., pp. 559, 610.

The absence or deficiency of drainage and the overflowing of cesspools promote the spread of cholera, as of typhoid fever, by permitting the evacuations of the patients and the water in which soiled linen has been washed to flow on the surface, and contaminate everybody who comes in contact with them; but the want of proper drainage is often still more injurious, by causing the liquids which ought to be carried off to saturate the ground, and percolate into the pump wells and other supplies of water.

The measures for the prevention of cholera which are suggested by the circumstances and views above detailed, may be divided into those which can be carried out in the presence of the epidemic, and those which, as they require time, should be taken beforehand.

The measures that should be adopted during the presence of cholera are:—

1st. To take care that there is a hand-basin, water, and towel, in every room where there is a cholera patient, and to take care that they are used by the nurse and other attendants, more particularly before touching any food.

2nd. To immerse the soiled linen of the patient and his bed in water as soon as it is removed, until such time as it can be washed, lest the evacuations should become dry, and be wafted about as a fine dust.

3rd. To take care that the water employed for drinking, cooking, and preparing food, (whether it comes from a pump-well, or is conveyed by pipes,) is not contaminated with the contents of cesspools, house-drains, or sewers; or, in the event that water free from suspicion cannot be obtained, to have it well boiled and, if possible, also filtered.

4th. When the cholera prevails very much in the neighbourhood, to have all the provisions which are brought into the house well washed with clean water, and exposed to a temperature of at least 212° Fahr., or to make them undergo at least one of these processes.

5th. When a case of cholera appears among persons living in a crowded room, the healthy should be removed to another apartment where it is practicable, leaving only those who are useful to wait on the sick.

6th. As it would not be practicable to clean out coal-pits and establish privies and lavatories in them, or even to provide the means of eating a meal with anything like common decency, when the cholera makes its appearance, the time of working should be divided into periods of four hours instead of eight, so that the pitmen might go home to their meals, and be prevented from taking food into the mines.

The measures which can be taken beforehand to provide against a visitation of cholera, are,—

7th. To effect good and sufficient drainage.

8th. To provide the inhabitants with an ample supply of water, which is quite free from contamination with the contents of sewers, cesspools, and house-drains, or the refuse of people who navigate the rivers.

9th. To provide model lodging-houses for the vagrant class, and sufficient house-room for the poor generally.

10th. To inculcate habits of personal and domestic cleanliness among the people everywhere.

The advice and directions which are issued respecting cholera by authority, are directed almost entirely against dirt and nuisances; but, unfortunately, they are perfectly silent respecting that particular kind of dirt which does the mischief. The Board of Health directs its attention more particularly to offensive effluvia, as a supposed cause of cholera. When the ready means for the communication of this disease exist, it often happens, for very evident reasons, that offensive gases are not altogether absent; but it has been satisfactorily proved, that the effluvia arising from the decomposition of vegetable and animal matters have nothing whatever to do with cholera.

The communicability of cholera ought not to be disguised from the people under the idea that the knowledge of it would cause a panic, or occasion the sick to be deserted. English people would not desert their friends or relatives in illness, though they should incur danger by attending to them; but the truth is, that to look on cholera as a "catching" disease which one may generally avoid by a few simple precautions, is a much less discouraging opinion than that which supposes it to depend on some mysterious state of the atmosphere in which we are all of us immersed and obliged to breathe.

18, Sackville-street.

HISTORY OF THE RECENT EPIDEMIC OF INFANTILE LEUCORRHŒA.

WITH AN ACCOUNT OF FIVE CASES OF ALLEGED FELONIOUS ASSAULTS

RECENTLY TRIED IN DUBLIN.

By WILLIAM R. WILDE, F.R.C.S.
Surgeon of St. Mark's Hospital, etc.

[Continued from page 348.]

Now, with regard to the case of the child Delmere, to which I have already alluded at page 262, and who swore before the magistrate to the committal of the crime upon the 15th July, at one o'clock, the same day and hour upon which the child Cosgrove said she had been violated,—upon procuring copies of the informations two days after they were sworn, I was much astonished to find that the date of the offence in this case was three days different from that sworn to in the first instance, in the *viva voce* testimony. I immediately applied to the magistrate for an explanation of the circumstance. He informed me, that he had himself observed the peculiarity of the different date being in the informations which were read over to the child when she came to swear them (after the prisoner had been removed, and the solicitor and myself had left the office,) to that which she swore to originally; but that he passed no remark thereon. The clerk who took down the evidence, said he had destroyed his notes. Both the magistrate and clerk were subpœnaed to the Commission, and would have been examined as to the circumstance, had the Crown not given up the case. Both children being tutored, as I believe, into the recital of the same story, they naturally stated, that the crime occurred upon the self-same day and hour, a circumstance which must have attracted the attention of the person who subsequently prepared the informations at the police-office, and who must evidently have seen that such an incongruity would have tended to the acquittal of the prisoner.

It is unnecessary to enter into the details of the five other cases of vaginal discharge in young children, to which I have already alluded. In the cases at the Pitt-street Dispensary, the symptoms were somewhat similar to those which formed the subject of the late trial, but the mothers being of a decenter class, and keeping their children cleaner, the extent of disease was not so great. The ages of the children were four and seven years. In that aged four, the mother entertained the same cruel suspicions, until assured by Dr. Croker of the nature of the affection. In the former case the disease was discovered on the 28th June, and in the latter the 15th of July, the date assigned to the two last cases of violation. The last case which I have heard of occurred about ten days ago. An intelligent woman, residing in a garret in Golden-lane, one of the most unhealthy localities in the city of Dublin, discovered a vaginal discharge in one of her children,—a girl between four and five years of age. Greatly distressed at the circumstance, she informed her husband, who most properly desired her not to mention it to any of her neighbours, but to take the child to a doctor. She brought it to Mr. Dwyer, of Camden-street, and, in great anxiety, stated her fears as to the nature of the discharge her child had got. Upon his offering, however,—to use his own expression—"to take his oath" to her that the disease the child had was nothing wrong, she was perfectly satisfied, and is now most grateful. I saw the child with Mr. Dwyer about a week ago (August 10). It was delicate and puny-looking; there was some swelling and considerable redness of the labiæ and external parts, from which, as well as from the vagina, there was a considerable yellowish discharge; but, as the child was kept exceedingly clean, there was very little excoriation or eczematous rash. Mr. Dwyer was well acquainted with the affection, not only from the description given by Cooper, but from his having had a similar case about eighteen months ago, the particulars of which he has given me, and in which, upon the discovery of the discharge by the mother, she brought an accusation against a man who lodged in the same house, and upon whose knee she saw the child sitting some time before. In Dr. M'Clintock's cases, which both occurred in the early part of July, one child was aged three and a-half, and the other four and a-half years.

Mr. Hughes, one of those medical men who appeared on

behalf of the prisoner at the Commission, had a case of the nature of the foregoing some time ago. The following is his letter to me upon hearing of the accusation brought against Kane:—

"A woman brought a daughter of hers, a child apparently under seven years of age, to Jervis-street Hospital, stating that she wished to have the girl examined by the surgeon on duty, as she was afraid that the child had been recently abused by a married man, a fellow-lodger of hers. I consequently examined the child, and found her labouring under inflammation of the vagina, accompanied by a profuse muco-purulent discharge. There were, however, no marks of violence on any part of the person of the child; and, after a most careful examination of the person of the accused, no trace of disease could be detected on him. The case was investigated at Henry-street Police-office, by Mr. O'Callaghan; and, as I looked on the case as one of simple vaginal inflammation, which all Metropolitan surgeons not unfrequently meet with among the children of the lower classes of society,—the result, in some cases, of extreme uncleanliness; in others, of neglect of the bowels, irritation from the presence of intestinal worms, dental irritation, etc. etc., the magistrate very propely dismissed the case. I find it a very difficult matter to make the mothers of children so affected believe that the little patients have not been violated."

Dr. Beatty, in the article "rape," in the "Cyclopædia of Practical Medicine," says, that "in the year 1831 a man was arrested in the City of Dublin, on a charge of rape committed on a child, the only evidence of which was the presence of a purulent discharge from the pudendum. Popular opinion, as is usual in such cases, ran high against him, and it was only through the positive opinion of an intelligent surgeon that the case was explained, and the man liberated. A case of a somewhat similar nature lately came under the observation of the writer. A lady and gentleman came to his house one evening, in a state of great alarm and excitement, accompanied by their child, a girl of four years old, whom they stated to be affected with a terrible disorder, communicated to her by some person in their employment. They had previously shown the child to an apothecary, who confirmed their worst apprehensions, and at once declared that the girl had got a clap. On examination, the parts were found in a state resembling that just described, with a free purulent discharge; and it was with no small degree of pleasure that the writer was able to console the parents by assuring them that their child was labouring under no uncommon affection, and that a few days would set all to rights. It has rarely fallen to his lot to witness a more sudden transition from grief to joy than this announcement effected." Such will, I am sure, be the feelings of every humane man,—such I believe to be the bounden duty of every educated and benevolent practitioner who meets such cases,—no matter whether employed by the police,—performing the office of a surgeon or physician to a public institution, or consulted in private. Such explanation should be given in mercy towards the infatuated parents, and the threatened, in some cases the tutored child, as well as in justice towards the accused, and also for the credit of the morals and religion, as well as the honour of the country.

The last notable case of this description, which occurred in Dublin, until the date of the present epidemic, was more upon the type of Cooper's, or in accordance with his description, than any I have read of for some time. A soldier, of the 7th Dragoons, named Fitten, was on guard at Kilmainham Hospital, on Friday, the 15th August, 1851. Two little girls, daughters of a pensioner, named Fitzpatrick, one aged 6½, and the other about a year older, were remarked playing with him during the course of the day. In the evening he was seen sitting with the children upon a bench, and subsequently with the younger child on his lap. Upon the Tuesday following the younger child complained to her elder sister of having a discharge. The mother was in the habit of changing the children's linen twice a-week—on Sundays and Wednesdays. On Wednesday she remarked the young child's linen soiled with a yellowish discharge, which she found proceeded from the genitals. She at once asked the child who had been with her, particularly upon whose lap she had lately sat. Fitten, the soldier, whom both mother and sister had seen her with upon the Friday evening, was named, and the usual course of interrogating (as subsequently appeared on the trial) was gone through. The woman rushed with her child to the nearest medical practitioner; he confirmed her suspicions, by telling her the child had gonorrhœa. The mother and child proceeded at once "from the doctor's shop" to the police office, and made their complaint; the soldier was arrested; four or five informations—which I have examined—were sworn by the child as to the fact; by the mother, as to the discovery of the child's state; by the sister and two soldiers, as corroborative evidences of the child being seen with the soldier at the time and place specified; and by the medical man, as to his having examined the child, and found her private parts in a state of great inflammation, and with a discharge "very much resembling gonorrhœa." The man was committed to prison. He was examined, and found perfectly free from either gonorrhœa or syphilis. The case was tried before the Chief Baron at the October Commission, 1851. From the amount of corroborative evidence, it was believed there would be a conviction; and, as the man did not bear a very good character in his regiment, there was but little sympathy for him. Mr. Coffey was retained to defend the prisoner. He informs me, that—as I have already mentioned in a previous part of this communication, as a peculiarity in such cases—he at first felt some hesitation in undertaking the defence of such a case, especially as, from a perusal of the informations, he thought the prisoner guilty. A medical friend, however, drawing his attention to Cooper's description, he at once saw the similitude, and, acting upon the suggestions therein contained, finally succeeded in having the man acquitted. The child swore that the act was committed while she was sitting on the soldier's lap, with his cloak around her. In the cross-examination of the corroborative evidence of the soldiers, it appeared that the sentry—an armed man!—was walking up and down within a few yards of them the whole time, and must have heard the child cry if any force had been employed. Mr. Coffey also took the precaution of examining the place where the offence was alleged to have been committed, and directed a surveyor's measurement of the ground to be made. The result was curious, showing that the crime, if committed at all, must have occurred within ten feet of the sentry-box, and within view of a guard-house, which was but thirty feet from where the prisoner sat with the child in his lap. The medical man, in his examination, differed from what he swore in his informations, and then stated, that the appearance which he observed, the swelling, discharge, etc., "might be the result of violence." This difference, in his opinion, somewhat like what occurred at the late Commission, weakened his testimony in the minds of the Jury, particularly as he admitted, on cross-examination, that he had treated the child for several days for gonorrhœa. The prisoner's counsel read the statement of Cooper. The surgeon of the regiment bore testimony to the healthy condition of the man, not only at the time of his arrest, but immediately before the date of the offence, as, being a soldier, he had inspected him weekly. He also bore testimony to the nature of the disease with which children are sometimes affected, and stated that he had met several instances of the kind described by Cooper. The Chief Baron, in charging the Jury, said, it would be a very happy thing for all parties concerned, if the Jury could, after the evidence, come to the opinion that the crime had not been committed, and that the whole was a mistake. The prisoner was acquitted. The case excited much interest, but owing to the nature of the examination, did not appear in the newspaper reports. The foregoing statement, however, which I received from several of the parties concerned, as well as an examination of the informations, may be relied upon. It was made a subject of strong observation to the Jury, by the prisoner's counsel, that had the unfortunate soldier been affected with disease, he undoubtedly would be convicted upon the medical testimony, although the man was undoubtedly innocent.

Sir Astley Cooper says, that he had met thirty such cases in the course of his life, and concludes his observations by saying,—"I am anxious that this complaint should be known by every one present, and that the remarks which I have made should be circulated throughout the kingdom." In the celebrated case recorded in the early editions of "Percival's Medical Ethics," and which occurred in Manchester, in 1791, the child absolutely died of the disease, and a verdict of murder was returned by the coroner's inquest, against a boy, from the suspicion that violence had been offered. "Not many weeks elapsed, however, before several

similar cases occurred, in which there was no reason to suspect that external violence had been offered; and some in which it was absolutely certain that no such injury could have taken place." (b) Now, this is exactly what recently occurred in Dublin. First comes the case of Geoghegan against Tracy, tried before the Recorder, at the beginning of summer. Not many weeks elapsed, however, before eight similar cases occurred, in five of which suspicions and accusations arose; and in three of which the Crown prosecuted at the late commission, although offered satisfactory proofs of the non-committal of the offence, or what perhaps lawyers think of more consequence, proofs of the impossibility of finding the prisoners guilty. Before disposing of the celebrated Manchester case, it is but due to the memory of Mr. Ward, the surgeon who first examined the girl, to say, that before the trial came on, he being convinced that he was under a mistake, most properly came forward and stated so. And, "the Judge informed the Jury, that the evidence adduced was not sufficient to convict; and that it would give rise to much indelicate discussion if they proceeded with the trial." It was accordingly abandoned.

[To be continued.]

OBSERVATIONS ON THE SPREAD OF CHOLERA IN BARNSLEY, DURING THE YEAR 1849.

By MICHAEL THOS. SADLER, M.R.C.S.

As the cholera has again visited England, and many medical men, if not the majority, still deny or doubt its infectious nature, the following facts, from my own personal experience, may be of some service in deciding this important question. I and my partner, Mr. Ibeson, were the sole medical attendants on the paupers of Barnsley during the prevalence of epidemic in the year 1849. The town contains about 15,000 inhabitants, and it fell to our lot to attend about 100 cases of cholera. Other cases occurred; but as attacks of this disease were, in a great measure, confined to the poor, the majority came under our care.

I may premise my observations by stating, that, previous to any cases of cholera, bowel complaints were very prevalent in Barnsley among the poor, and there were many cases also among the inhabitants in easy circumstances: but we had not any cases of diarrhœa which proved fatal; and I may add, that they were not prevented from degenerating into cholera by the treatment for premonitory symptoms recommended to be adopted by the Board of Health.

The two first cases which occurred in Barnsley I and Mr. Ibeson were summoned to attend early in the morning on the 6th of September. They were both in lodging-houses, situated at a distance from each other. The case I was called to attend was a tramp, who had the day before come from Leeds, and who had been residing in a street where the cholera was prevalent. This man recovered from his attack, but his wife, who had attended upon him, was immediately after seized with the same disease, and died after about twenty-four hours' illness. The day after the death of the wife of the tramp, an aged woman, who kept the lodging-house, was also seized with the cholera, and sank as rapidly. Her daughter, who lived next door, and who attended upon her mother, had also a mild attack. All these four cases occurred in succession, in one house; and there were then no other cases of cholera in the town, except in the other lodging-house, where Mr. Ibeson was called to attend. Mrs. Machen, who kept this house, (a feeble old woman,) was seized in the night preceding the 6th of September, and died on the evening of the following day. Immediately after her death, a lodger in the same house had an attack of cholera, but recovered. I could at first trace no probable source of contagion to the inmates of the last-named lodging-house, as the daughter of Mrs. Machen assured me repeatedly that her mother never took in common tramps, and for some weeks, she said, they had received no strangers. I was, however, afterwards told, that a man who had come from Leeds had brought the disease to the house; and on making further inquiries of the daughter, she said that a dealer in herrings, who came to their house every market-day, had, the day previous to her mother's attack, come from Leeds, just before leaving which town he had an attack of vomiting and purging. After this information, I had little doubt that this man brought the disease to the house of Mrs. Machen. After the introduction of the cholera into these two lodging-houses, I was called to visit a man who had an attack of it, residing at a considerable distance from them. Previous to this call, the disease had been confined to these two houses. There were circumstances attending this case which tended to excite suspicion that contagion might be the cause of it; and though I cannot expect them to have much weight in convincing the deniers of contagion, it may be well to relate the facts on which this suspicion was grounded. This man was seized while working in the formation of a railroad, in the immediate neighbourhood of Barnsley. Another of his fellow-workmen had also an attack of the cholera, both of which cases recovered. A man, also, who kept a public-house, about a mile from Barnsley, much frequented by the navvies working on this railroad, had a fatal attack of the cholera; and though there were numerous inhabitants contiguous to his residence, there were, I believe, no other cases of cholera in the neighbourhood.

Hitherto we had no cases of cholera, except in the two lodging-houses,—the labourer on the railway, and a tradesman who had been to Bradford on business, where the cholera was prevalent, and who, on his return, had a severe attack of it. I may add, that, though the locality of the residence of the railway labourer, and the physical state of the inhabitants,—of those living in the neighbourhood,—were highly conducive to the spread of the cholera, yet his was the only case in the locality. The next case which occurred in Barnsley was that of David Megson, an aged man, not in good health. His residence was at a considerable distance from all the other houses alluded to; and there were no local circumstances favourable to the propagation of cholera. He was seized one evening, and died early on the following morning. His occupation was that of banksman at a coal-pit. As there are vessels constantly coming from Hull to this pit for coals, I asked the owner of the pit if David Megson had anything to do with the boats, and he said that he had not. I was inclined to attribute this man's attack to epidemic influence; but I soon had good reason to alter my opinion, for the gentleman (his employer) of whom I had made the above inquiry, wrote a note to me, stating, that, since he had seen me, he had learned that David Megson, a day or two before his being seized with an attack of the cholera, had gone on board a vessel which had come direct from Hull, (where the cholera was raging,) and smoked his pipe in the cabin, the master of which vessel said, that he had just lost his wife from the cholera, she dying in the bed of the small cabin in which David Megson had been sitting. The knowledge of these facts reminded me of the statement made by the captain of the vessel which was supposed to have been the means of conveying the cholera to this country in 1832. The captain is stated to have said, that, when his vessel arrived in Sunderland, he had no case of cholera on board, but the first man who came on board his vessel was seized with the disease. David Megson was the only one who was attacked by this disease in his own family; and, as in all the other cases which had occurred up to this time, it did not spread to any of the neighbouring houses. After the last-named case, I was summoned to attend another tramp at a lodging-house kept by William Leatham. The man had been taken ill upon the road. As the locality of William Leatham's lodging-house was very favourable to the spread of the cholera, I recommended that the man should have a room to himself, and that as few persons as possible should be admitted into it to attend to him.

William Leatham took the sole charge of attending to him, and allowed no one but himself to enter the room where the man was lodged. The man recovered after a rather protracted illness; but William Leatham himself was seized with the cholera, and narrowly escaped with his life. In this instance, also, the disease did not spread to any of the neighbouring houses, though the locality of the last named lodging-house was highly conducive to its propagation. A short time after the occurrence of the cases I have related, the cholera became prevalent at the southern extremity of this town. I think it important that I should mention certain facts relating to the history of this disease in the adjoining parish of Worsborough, which immediately preceded the breaking out of the cholera in this part of the town, as I think they prove

(b) See Beck's Medical Jurisprudence.

that contagion was one great cause of its propagation, both in the parish of Worsborough as well as of Barnsley. I did not attend the cases of cholera which occurred in Worsborough parish, but I think I may confidently say, that the following facts are indisputable. About two miles south of Barnsley is a place called Worsborough-bridge, at which a branch of a canal terminates, and where coals are fetched from adjoining coal-pits, and conveyed to various parts of the kingdom. On the night after the arrival of a coal vessel at Worsborough-bridge, the wife of the captain of it was seized with cholera, there being at the time no cases of this disease in the neighbourhood. The case terminated fatally after a short illness, and a woman named Turner, residing at Worsborough-bridge, who went on board the vessel to attend to her, was seized immediately after, and died; and the son of Mrs. Turner, who was apparently in good health at the time of the death of his mother, was seized with the same disease, and it was so suddenly fatal that I believe he was buried in the same grave with his mother. After these three deaths there were many other fatal cases in the adjoining houses and immediate neighbourhood where Mrs. Turner resided. What I particularly wish to call attention to is, that Benjamin Mallinder was employed about the boats at Worsborough-bridge, when the cholera commenced, but resided on the top of Worsborough-common, which place is not more than 200 yards from the south extremity of Barnsley, where the cholera broke out soon after, and assumed an epidemic form. The case alluded to proved fatal, and immediately afterwards many other severe and fatal cases occurred in the locality where this man resided. I may here observe, that I do not think that there was anything particular in the sanitary condition of the inhabitants of Worsborough Bridge to make them more susceptible of the cholera than the mass of operatives in general, except it be, that the houses are built on a level situation, and that a branch of a canal terminates there. As regards the top of Worsborough-common, where there were so many fatal cases in proportion to the number of inhabitants, it is a particularly elevated situation, there being few places in the kingdom, excepting it be a mountainous district, where it is possible to see more miles in every direction. The population is principally composed of hand-loom weavers, and I think their sanitary condition was as good as the average of the weaving population. That part of Barnsley where the cholera became prevalent is, as I have just stated, about 200 yards from Worsborough-common. This part of the town is called Barebones. It takes its name from being situated on a sand-stone rock with a very thin stratum of soil on its surface. I do not believe that there is anything in the locality which the Sanitary Commissioners would say especially exposes the inhabitants to any epidemic disease. I think most will allow that, considering the locality and the open situation on which the houses are built, the inhabitants would be pronounced less liable to attacks from any epidemic than the majority of the labouring class of Barnsley.

If contagion is not the sole cause of cholera, an interesting fact occurred, showing how highly susceptible a certain class of persons residing in certain localities are to its influence. After the cholera had apparently entirely ceased in Barebones, Thomas Swain, who lived at the lower part of Barebones, went over to Wakefield Asylum to see a son who was dangerously ill, and afterwards died of cholera. Immediately after his return home he was seized with diarrhœa, compelled to take to his bed, and, in a few days, died of cholera. His wife also had a fatal attack immediately after his death; his next door neighbour also took it, and died; and then it spread among the denser population of Barnsley. The sanitary condition of this part of the town was certainly favourable to the spread of epidemics, and here the cholera prevailed in 1832. I may be allowed here to observe, that Dr. Wright, the physician to the Asylum at Wakefield, clearly shows, in his able Report, that cholera was not only imported into that Institution, but also that it was propagated among the inmates of it by infection.

There were only three houses in the northern part of the town where there were any cases of cholera; the first was the tradesman's before mentioned, who had been to Bradford; the second was that of a person who had come from a house near Leeds, where a man had died of this disease; and the third was George Hall's, who had been attending a relation in the southern part of the town, and who, immediately after his return, was seized with the cholera, and, before he had recovered, two of his children took it also, and died.

I could relate other equally striking instances of cholera being propagated by contagion, which occurred in Barnsley during the epidemic of 1849, but those I have given, I hope, are sufficient to convince every unprejudiced mind that cholera is not only infectious, but that there is reason to believe it is highly infectious under certain circumstances and states of the constitution. I do not pretend to assert that I could trace all the cases which came under my own observation to contagion, nor do I wish to be understood as maintaining that contagion is the sole cause of cholera; but I must confess, that I do not feel so much inclined to contend, as I once did, that such an opinion is an absurd one. It may be thought by some, that it is sound policy to keep the public ignorant of the infectious nature of cholera; but I think that such policy is neither just nor humane, and is attended with far more serious consequences than speaking the truth, I believe that there is sufficient natural affection, humanity, and sense of duty in the people of England, to prevent any serious consequences from speaking the truth on this matter. I have never been called to attend persons labouring under infectious diseases when neither love nor money would induce any one to attend to the sufferers. The experience we have had of cholera clearly shows, that it is the ill-fed, ill-clothed, ill-lodged, and overworked and intemperate who are the subjects particularly liable to be attacked with it; and experience equally proves that persons in comfortable circumstances, provided they are temperate, and not debilitated by disease or old age, are little liable to its attacks. If a judicious choice be made of nurses, there would be little danger of their falling victims to this disease in the discharge of their duties. Many medical men have been induced to believe that cholera is not infectious, because so few cases of this disease occur in persons in the middle and higher classes, who, provided they are not debilitated from any cause, as experience proves, possess comparatively but slight susceptibility to the choleraic poison. We know that all morbid poisons have something peculiar in their operation, and that all states of the constitution are not equally susceptible to the influence of each of them; and it would be most unreasonable to conclude, that because a certain class of persons can be exposed to the choleraic poison with comparative impunity, that therefore it is not infectious.

In conclusion, convinced as I am that facts, reason, and common sense show that contagion is one important cause of this formidable disease, I cannot help expressing my opinion, that a most serious error will be committed, if, while dwelling on the importance of sanitary measures, however necessary they may be, medical men do not warn individuals of the danger of contagion, and those in authority do not adopt every rational means to protect the community from it.

Barnsley, Sept. 20, 1853.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

CARIES OF THE ORBIT.—ABSCESS IN THE BRAIN OPENING INTO THE ARACHNOID SAC.—ACUTE SUPPURATIVE ARACHNITIS.—DEATH.—AUTOPSY.

[Under the care of Mr. PARTRIDGE.]

Henry Bird, aged 11, a weakly, strumous boy, was admitted, at eleven a.m., on May 16, 1853, suffering from severe cerebral symptoms, which had supervened on caries of the orbit. By an abscess which had formed over the left malar bone, three years ago, occasioning from time to time the exfoliation of fragments, the lower and outer borders of the orbit were completely destroyed, and in their place was a deep suppurating fissure. The lower jaw was rigidly closed, the lower eyelid everted, and the cheek much swollen. His father, who brought him, stated, that although more than usually ailing for the last five weeks, the child had always kept about, and enjoyed a good appetite, until the evening of the preceding day, when he suddenly became delirious, and during the night passed into a state of stupor. For several nights previously he had not slept well, frequently waking, and crying out on account of severe pain in the forehead and left temple. At the time of admission, he was in a stupid and very drowsy condition;

could not be got to answer questions, but, when asked to show the part where he was in pain, he put his hand to the left side of his temples. The pupils were dilated and fixed; pulse 102, very small, and feeble. He continued to decline during the rest of the day, and could scarcely be got to swallow any of the wine and beef-tea which had been ordered for him. In the evening he became quite comatose, and remained so through the night, and to about two o'clock in the afternoon of the next day, when he died. It was noticed, some hours before death, that the whole of the muscles of the extremities were in a rigid condition. Thus, then, a case in which there existed known carious disease of the bones of the skull, had terminated fatally within forty-two hours of the supervention of symptoms of urgent cerebral mischief. The attack had, it is true, been preceded by several weeks of pain in the head, restlessness, and other indications of the brain becoming affected, but by nothing calculated to excite any immediate alarm. On what, then, might the fatal result be supposed to have depended? Could a large collection of matter have formed within one hemisphere, sufficient, by its direct compressing influence, to destroy life? Had a vessel been opened by ulceration, and permitted of the extravasation of blood, or were the symptoms due simply to extension of inflammatory action from the bone to the dura mater, and thence to the brain itself? To these questions no satisfactory answer could be given; only the last twenty-four hours of the patient's life had been passed under medical observation; the account of the previous symptoms might not be trustworthy. The symptoms pathognomonic of inflammation and of compression, had, however, been strangely intermixed: the coma had not been persistent, nor had it occurred suddenly at the beginning of the attack as if from effusion of blood; and, on the other hand, there had not been the fierce delirium or convulsions so usually present in acute inflammations of the brain or its membranes.

The *post-mortem* examination was performed on the following day, by Mr. Hulke, the House-Surgeon of the Hospital, to whom also we are indebted for the particulars of the case. It afforded a most satisfactory explanation of the course which the disease had run. A large portion of the left malar bone was found to have been destroyed by exfoliation. The orbitar and cerebral surfaces of the greater wing of the sphenoid were carious, and the periosteum of the orbit and the dura mater of the upper surface were separated from it by effused pus. The affected portion of the dura mater was soft and pulpy. In the part of the middle lobe of the left hemisphere opposed to the diseased bone, was the cavity of a circumscribed abscess, about the size of a large nut, which had opened externally into the sac of the arachnoid. The arachnoideal investment of the whole left hemisphere, and of the upper surface of the anterior lobe of the right one, was bathed in pus, and the subjacent pia mater was intensely congested. The lateral ventricles, each of them, contained more fluid than usual, but it was clear, and not differing from that of health. In the cavity of the left lateral sinus, just at the part where the superior petrosal sinus enters, there was about a drachm of pus. These appearances seemed to make it clearly evident that the disease had begun as periostitis of the malar and sphenoid bones, and that having affected the upper surface of the latter, there had, from contiguity of parts, been inflammation set up in the substance of the cerebral hemisphere; this latter had probably commenced at the time when—five weeks before admission—the child had begun to complain of headache, etc., and had terminated in rupture of the abscess into the cavity of the arachnoid, by which, lastly, acute, pus-effusing, and fatal arachnitis had been induced.

GUY'S HOSPITAL.

LARGE ABSCESS IN THE BRAIN OPENING EXTERNALLY THROUGH A FISSURE IN THE FRONTAL BONE.—DEATH.—AUTOPSY.

[Under the care of Dr. BARLOW and Mr. HILTON.]

THOMAS FENNELL, aged 14, a fair-complexioned and rather strumous-looking boy, was admitted, under the care of Dr. Barlow, into Stephen's Ward, in the beginning of February, suffering from a very painful and partially paralytic condition of his left hip and leg. The statement given by his friends was, that, about six weeks previously, a swelling had formed spontaneously over the right eyebrow, which, after it had lasted about a week, and become painful, was opened by a surgeon, and evacuated of a considerable quantity of matter. The opening soon closed, and the swelling remained comparatively small. About a fortnight after its first appearance, the boy was one day suddenly seized with violent pain, which extended downwards from the left hip to the foot. In the course of another week, this pain became much alleviated, apparently in consequence of some medicine which had been administered; but the whole extremity remained very weak, and a re-accession of pain had, at length, induced his application for admission into the hospital. There was no history given of any recent accident; five years ago he had received a violent blow from a brickbat over the part now affected, which, however, produced no wound, and was shortly afterwards perfectly recovered from. As we have already stated, there was, when admitted under Dr. Barlow's care, great pain complained of in the thigh and leg of the left side, and the patient had so little power over that extremity, that he could not stand without assistance. He had not been in the hospital many days before the swelling over the right eyebrow again formed, and suppuration took place. For the first time, the patient now began to suffer from severe cerebral symptoms; he was very delirious at nights, passed his urine involuntarily, and had convergent strabismus of the left eye. At Dr. Barlow's request, Mr. Hilton now saw him, and made an examination into the condition of the bone beneath the seat of disease. Having freely laid open the fistulous canal left by the abscess, the surface of the frontal bone was found to be rough, and denuded of pericranium, and a narrow fissure was seen to extend across it. No bone was removed. By this measure a free exit was afforded for the matter, and the condition of the patient underwent an almost immediate improvement. Within a week afterwards, the delirium had ceased to recur, the pain in the left lower extremity had quite disappeared, and its power of motion had returned; the squinting, however, remained as before, and at times affected also the right eye. During the following month the boy continued in much the same state, able to be up and to walk about the ward, though perhaps gradually becoming more and more excitable in his temper. There was constant discharge of pus from the wound. In the middle of May he had a slight relapse, and, as his symptoms were now recognised as of a character more likely to be relieved by surgical than medical treatment, he was transferred to Naaman's Ward, and placed under the care of Mr. Hilton. The following notes of his condition and progress were taken by Messrs. Hammond and Ince, Mr. Hilton's clinical reporters:—

May 18th.—There is a large irregular sore on the forehead, extending from the middle of the right superciliary ridge, slightly upwards, and across to the opposite side. The bone is in some parts exposed, but in most covered, either by granulations or bands of cicatrix. The right eye is almost totally blind, and looks inwards. The patient is paralytic in the left lower extremity, and confined to bed; he is quite conscious, but complains of severe headache and confusion of ideas. The bowels are costive; tongue furred; appetite very good; pulse 72.

May 31st.—Has been getting rather worse since last note, suffers more pain in the head, and is frequently delirious at night.

On June 6, an attack of mild erysipelas occurred, and the inflammation spread from the borders of the sore over the greater part of the scalp. It subsided, however, in the course of a few days, leaving the patient not materially worse than before.

June 17th.—The symptoms of cerebral mischief have much increased. The boy is very sleepy and heavy during the day time, and in the nights restless, and even delirous. He complains of great pain in the head, and has repeatedly vomited his meals.

20th.—There has been no sickness during the last two days. He takes food well, but is, excepting when roused, quite insensible. The fæces and urine are passed in bed. Pulse 84, small and feeble.

21st.—The insensibility has increased, and is now so complete, and the jaws are kept so closely shut, that it is with difficulty that nourishment can be got within the mouth. There are almost constant spasmodic twitchings of the arms. The urine is passed unconsciously; the bowels are confined.

22nd.—During the night, and this morning, the patient has been in an almost constant succession of slight convulsion fits, one of which has occurred at least every ten minutes. The pupils are contracted, and motionless; pulse 80; tongue thickly coated; very little food is taken, and the nurse who attends to him believes that swallowing is accomplished with difficulty. Having determined to ascertain whether any collection of matter had formed between the bone and dura mater, Mr. Hilton made an incision across the cicatrix, and dissected it up. The bone proved to be very soft, and there was no need for resort to the trephine; by the aid of the cutting forceps, a portion, about the size of a half-crown, was detached, and removed from the middle and left side of the forehead. In doing this, the anterior portion of the longitudinal sinus was torn, and considerable bleeding followed; it was staunched, however, by the introduction of a small fragment of sponge into the wound. The exposed dura mater had a perfectly healthy appearance, and the pulsations of the brain beneath could be easily perceived through it. No pus had been found, and with

this evidence that none existed beneath the dura, it would, of course, have been worse than useless to puncture that membrane. The operation was accordingly desisted from. *Vespere*, 9 p.m.—Since the operation, the patient has remained in much the same condition; the spasmodic attacks still continue. Pulse 94, rather fuller than before.

23rd.—The convulsive fits remain quite as frequent as yesterday, and affect equally the two sides of the body. The pupils are, however, more sensible to light than they were before the operation. Tongue dry and brown; pulse small and feeble, 140; face flushed; bowels confined. A poultice is being constantly applied to the wound.

24th.—There has been a profuse discharge of pus from the wound, and the boy is this morning much more sensible; he can see well, and has spoken rationally several times. The pupils move freely when stimulated by light. Pulse 128; bowels confined. Enema cathart.

25th.—The convulsions continue to recur, but are much less frequent. He takes much more food, and has no difficulty in swallowing. Urine is passed in bed. Tongue dry and brown; pulse 120. The bowels have been freely opened by the enema.

27th. Has again become quite unconscious. Pulse 140, small and thready; pupils fixed and dilated. He cannot be got to swallow food. The left eyelid is inflamed and much swollen.

July 22.—Death took place this morning, in a violent fit of convulsions. During the whole of yesterday he had been extremely restless, and towards evening began to suffer from the spasmodic movements from which he had been free for several weeks. Since the last date, his condition has varied very much. At times, he has been partially sensible, and at others quite unconscious; mostly very restless or delirious at nights. Severe rigors have repeatedly occurred. On several occasions he has been, for a day or two at a time, quite blind, and at others quite deaf. The pulse has usually had a frequency of about 112. The inflammation and swelling of the left eyelid, mentioned in the last note, proved to be a collection of pus, which was opened on the 29th inst. A very profuse discharge was afterwards kept up, to the seeming relief of the more urgent symptoms, which became aggravated when the flow of pus decreased.

Post-mortem Examination Fourteen Hours after Death.—Body much emaciated. On attempting to remove the calvaria, the dura-mater was found to be morbidly adherent to the margins of the opening in the frontal bone, and the inner surface of the latter was rough with osseous deposits. The anterior half of the right cerebral hemisphere was diffluent and pulpy, and its convolutions were expanded and flattened out. In its substance, immediately beneath the dura-matral investment, opposite to the wound, was a circumscribed collection of pus, which communicated with the cavity of the right lateral ventricle, and from it passed down into the third ventricle, but was prevented from entering the fourth by fibrinous occlusion of the connecting passage (iter a tertio ad quartum ventriculum). The left half of the foramen of Monro was also obliterated by lymph, so that no pus had found its way into the left lateral ventricle, which contained, however, about its natural quantity of serous fluid. The distension of the right lateral ventricle by the pus which occupied it had much enlarged its cavity laterally, and also bulged the septum lucidum considerably to the left. The like process in the third ventricle had occasioned downward and lateral pressure on the optic tracts, which were flattened out, and rather softer than natural. On examining the cavity of the abscess in the left eyelid, it was found to communicate with the interior of the skull by a somewhat circuitous passage, having crossed the bridge of the nose, and then through a small fissure in the frontal bone, a little below the site of the operation, entered the skull, and become continuous with the abscess in the brain. By the discovery of this communication, much light was thrown on the character and course of symptoms during life. The viscera of the abdomen and thorax were carefully examined, but no disease detected, excepting a single mass of strumous deposit beneath the capsule of the left kidney.

The above case had during life excited unusual interest; its history had been carefully made out, and the changing course of the nervous symptoms closely watched, with the view, if possible, of discovering the exact seat of the cerebral lesion. Mr. Hilton had often directed the attention of his clinical class to its peculiar features, alluding more particularly to, 1st, the very unusual prolongation of life in a patient who was almost certainly suffering from suppuration within the skull. 2ndly. To the evidence there seemed to be that the disease was located on the right side, and that it was circumscribed and did not implicate the centres from which arise the nerves presiding over vital functions. Thus, while the paralysis, the loss of vision, the strabismus combined in indicating extensive cerebral disease, the quiet respiration, the ability to swallow, to protrude the tongue, and to speak in a loud clear voice, the fact that the face was not drawn to either side, the good appetite and undisturbed digestion, the non-occurrence of vomiting (excepting on one occasion for a day or two) all concurred to prove that the parts of the cerebral centres most important to the continuance of life were yet intact. 3rdly. The sudden intermissions as regards all the more severe symptoms which had repeatedly occurred, and which went to make it seem very probable, that although the two exploratory operations had failed in discovering any channel of communication between the intra- and extra-cranial mischief, yet that such did still exist so as to furnish a means by which the fluid, exerting pressure on the brain, might escape. The way in which these conclusions were verified, and all the various symptoms explained at the *post-mortem* was most instructive. A large collection of pus in one hemisphere of the brain amply accounted for all the indications of disturbed or suspended nervous function present,—occlusion of the passage of communication between the third and fourth ventricles had prevented the matter which filled the former from passing backwards into the latter, and had saved the medulla oblongata from pressure such as must have occasioned speedy death. A narrow chink in the frontal bone, and a circuitous channel of escape through the external soft parts, furnished a means of exit for the pus, which, while sufficient, when patent, to relieve the brain from pressure, it was easy to see might frequently become choked up, with the result of an immediate reproduction of that condition. During life the lower extremity only had been paralysed. Now, accepting the theory that the optic thalamus is the ganglion presiding over the upper, and the corpus striatum that over the lower extremity, this was quite explicable; since the corpus striatum lay in the floor of the abscess itself, and was directly exposed to pressure from which the optic thalamus was exempt. Mr. Hilton was inclined to think it most probable that the disease had really been originated by the severe injury stated to have been inflicted on the part five years prior to the occurrence of symptoms. He had known several parallel ones in which inflammatory disorganisations of parts of the brain inferred to be due to external violence, inasmuch as they occurred in the same part, had either delayed their appearance for several years, or been during that time existent without any symptoms. It is not improbable in the above case that the abscess was originally quite superficial, and that the occurrence of the first severe cerebral symptoms marked the period at which it opened itself into the lateral ventricles. The relief afforded on each occasion by the operation performed, and also by the opening of the abscess of the eyelid, was no doubt due simply to the fact, that those procedures made the external escape of matter more easy.

CHARING-CROSS HOSPITAL.

INJURY TO THE HEAD FOLLOWED BY PERSISTENT PAIN.—DEATH TWO MONTHS AFTERWARDS.—AUTOPSY.—ABSCESS IN THE BRAIN.

[Under the care of Dr. ROWLAND.]

Daniel Lynch, aged 13, admitted April 30, 1853. For the last five or six days he has suffered acute pain of the right side of the head. The eyes are prominent and staring, and a little distorted; the pupils are widely dilated, and contract sluggishly at the approach of a light; the sight is rather impaired. He is perfectly intelligent; there is no lesion either of sensation or movement in the extremities. He appears, however, to have had one or two epileptiform seizures previous to admission. Pulse 70; skin cool; no heat of scalp; tongue furred; appetite good; bowels regular.

It is reported that he received several severe blows on the head about a fortnight ago.

A blister is ordered, applied to the nape, and a powder of calomel and ipecacuanha to be taken twice a-day.

May 5.—He has been free from headache for two days; the eyes retain the same expression. Last night he had a transient convulsive attack with momentary loss of consciousness, and distortion of the features.

30th.—He was apparently improving till yesterday when the headache returned, and it is now more violent than ever. He moans and cries continually, and can get no sleep. The intellectual functions are still sound; but he is very impatient of disturbance, and answers questions addressed him with hesitation and in a drawling manner, although quite to the purpose.

Various means have been tried, but without as yet any effect. Cupping the temples, leeching, and blistering the shaven scalp,

the cold douche, etc., but by none of these has any mitigation of the pain been obtained.

June 1.—The eyesight, which has been gradually failing, is now lost completely. The mental faculties are perhaps a little weakened, but he is very quick in recognising voices familiar to him, and understands perfectly what is passing around him. The headache continues. Very little sleep. A mixture containing the potassio-tartrate of antimony and opium is prescribed.

3th.—He is quieter, and making less complaint of pain. Pulse small and rapid; face flushed. The mental powers are failing.

4th.—He fell gradually into coma during the night, and death took place this morning.

On *post-mortem* examination, there was found moderate vascularity of the membranes of the brain, without serous effusion. The substance of the brain was firm and healthy, and showed no signs of congestion; but, on gradually removing the textures to the level of the lateral ventricles, a bulging upwards was observed in the right hemisphere. When a scalpel was inserted at this point, about four ounces of healthy pus escaped from a large cyst embedded in the substance of the brain, external to the ventricle, and stretching along the organ from the anterior nearly to the posterior cornea. Its internal surface was soft and flocculent; externally it was condensed and firm. Not a vestige of broken-down nervous matter was found within the cyst. The cerebral structure in immediate contact with its external layer retained its natural consistence and colour.

The following is the substance of a short clinical lecture by Dr. Rowland on the above case, and on abscess in the brain generally:—Pus is found occupying the cerebral structure, infiltrated into its substance, or collected into an abscess. In the latter, the matter is either kept insulated by the condensation of the neighbouring tissue, or it is contained within a cyst which is sometimes thin, soft, and delicate; at others, (as in the present instance,) remarkably firm, and of great strength and thickness.

It is difficult to obtain precise notions on the circumstances that determine the formation of a cyst in cerebral inflammation, or to suggest the conditions under which the pus is infiltrated into the substance of the brain; but there are facts that favour the opinion that cysts more commonly exist after the sudden application of an exciting cause, and in persons of vigorous constitution and in the prime of life. In this respect, the present case agrees with a large proportion of recorded histories of encysted abscess, which were occasioned by the application of an injury to the head, in persons previously healthy.

The duration of the complaint in this boy, dating from the period of the accident, was from seven to eight weeks. The course is often more rapid. Chomel thinks that the disease is rarely extended beyond two months. There is, however, reason to think that it is occasionally protracted to a much later period, and even that its cure is sometimes effected.

The most remarkable symptom in this patient was the intense headache. Pain of this violent character is so generally observed in cerebral abscess, as to form a prominent feature in its history. The pain, it will be observed, was on the right side, corresponding with the seat of the disease advancing in the brain.

The function of voluntary motion was not affected. There was no paralysis, no contraction, not even feebleness of the limbs opposite to the brain-lesion. Sensation was equally unimpaired. Still more extraordinary, considering that so large a portion of one of the hemispheres was destroyed, the memory and judgment continued sound. There was even a degree of quickness and cunning strongly contrasted with the mental torpor and slowness of apprehension which so remarkably characterise the progress of cerebral softening.

It is very important to notice the absence of febrile excitement in this and other similar cases. The extreme violence of the pain under such circumstances might readily mislead the practitioner into the opinion that the case was simply one of neuralgia. The state of the eyes, the convulsive seizures, and other symptoms, in the present instance, sufficiently announced the existence of organic disease of the brain; but cases sometimes occur in which there is scarcely any sign of diseased action in the early stage of the complaint, except intense headache.

It was interesting to observe how accurately nature, in the formation of the cyst, had drawn the line between the sound and diseased textures. External to it, the nervous tissue was quite healthy, and free, not only from morbid products, but even from undue vascularity.

The series of cases of Abscess in the Brain will be continued in our next week's number.

ST. BARTHOLOMEW'S HOSPITAL.

CASES OF EPIDEMIC CHOLERA.

[Under the care of Dr. BURROWS.]

Within the last week, two well-marked cases of the epidemic form of cholera have been admitted into this hospital. The first was that of a young man who, when attacked, was engaged in loading a Greek vessel at the West India Docks. He was admitted, in a state of extreme collapse, on Oct. 1, rallied very much on the 2nd, and, on the 3rd, had good reaction; subsequently, however, he again sank into the stage of collapse, and death took place on the night of the 4th. The second case was that of a man who had been living in a very miserable manner, and having walked a great distance, on the same morning was found in a public water-closet at Greenhithe, about noon, on the 5th, in a state of extreme collapse. He has made good improvement under the treatment pursued, and has at the present time (Oct. 6) warm extremities and a good pulse. Dr. Burrows's plan of treatment has consisted in the exhibition of an emetic of sulphate of zinc, and afterwards of full doses of calomel and opium, the application of external warmth being meanwhile assiduously attended to.

In St. George's Hospital a case has terminated fatally, after a short illness, attended with most of the symptoms of epidemic cholera.

In Guy's Hospital, some very severe cases, approaching closely to the epidemic form, have recovered.

In King's College, St. Thomas's, the Middlesex, and St. Mary's Hospitals, no cases have occurred during the last week.

Medical Times & Gazette.

SATURDAY, OCTOBER 8, 1853.

THE TREATMENT OF CHOLERA.

It will be seen from some of the letters we insert, and from notices of numerous others we have received, but have not space to publish, that, after two epidemics of cholera have passed away, medical men are almost as uncertain and undecided as to the most successful manner of treating the disease as they were before. Bleeding, and transfusion of blood—calomel in large doses, and calomel in small—calomel alone, or combined with opium—opium alone, or combined with calomel—tartarized antimony—emetics—cold water and ice—brandy and cayenne—the wet sheet, cold bath, and douche—sinapisms, burnt brandy blisters, and the hot-air bath—electricity—salines by the mouth, or by the rectum—injection of salines, hot water, opium, quinine, etc., into the veins—the inspiration of oxygen, and nitrous oxyde—ammonia, camphor, musk, phosphorus, strychnine, essential oils, aromatics, and vegetable astringents—acetate of lead, sulphate of copper, quinine, arsenic, iron, and a host of other remedies have been tried, and the result has been a melancholy one. We have either not yet discovered the antidote to the poison; or its action, when received in a concentrated form, or by a predisposed patient, must be so powerful as to render the human constitution insensible to the action of any antidote we have tried.

It was said of the first epidemic at Moscow, that twenty different modes of treatment were practised at twenty different hospitals, and that the proportionate number of deaths was the same in all. It was also supposed that the mortality was not greater among those entirely destitute of medical aid. The experience since gained in Great Britain has led many to arrive at similar conclusions; and there really are strong grounds for believing that in the severer forms of the disease, whether bleeding or calomel, brandy or astringents, or almost any other of the favourite methods of different

practitioners, be followed either in excess or moderation, that the proportionate mortality at each period of the epidemic is the same.

Bleeding, extolled by some on the theory of venous congestion oppressing the great centres of the nervous, circulatory, and respiratory systems, and depressing the vital actions and powers, has been employed generally and locally in every stage of the disease, from the first premonitory symptoms to the last traces of consecutive fever. It still has its advocates; but the results of its employment have led, or should undoubtedly lead, to its entire abandonment.

Calomel has been given in enormous doses. It has been given in very small doses. In both forms it still has its advocates. Some think it quiets gastric irritation; others believe it clears the biliary ducts. A third sect suppose it removes an inflammatory condition they assume to exist. A fourth fondly imagine it to be an absolute antidote to the poison. After careful inquiry, we believe that the practical results are not more encouraging than those after bleeding. It has been used in every country, and its use has been followed by an immense mortality,—whether given in doses so small as to be absolutely powerless, or in quantities so large that it has constituted a great portion of the dejections, and has been found covering the mucous membrane after death.

Opium—although it has failed as a cure for cholera, (for the mortality after this and the antagonist systems of bleeding and calomel is nearly equal); although it fails to calm gastric and intestinal irritation; although it fails to relieve the suffering caused by the cramps; although its narcotic effect is often injurious in the latter stages of the disease—is no doubt a valuable auxiliary in the premonitory stages. If it is to be employed during the present epidemic, we would suggest that the *dose* so successfully used by Dr. Cameron, and recorded in our "Army Medical Report" this week, should have a fair trial.

Many think that a fair trial should also be given to the saline treatment, and it will be difficult for any one to read Dr. Stevens's book, and not think so too, especially when we reflect upon the alterations which the disease effects in the blood. But the neutral salts by the mouth have entirely failed in India; the injection of chloride of sodium and carbonate of soda into the veins, adopted with such wonderful temporary benefit by Dr. Macintosh, only led to twenty-five recoveries out of 156 patients treated; and Dr. Stevens's mixture of carbonate of soda, chloride of sodium, and chloride of potassium, was also unsuccessful.

We trust that one lesson at least may be drawn from the experience of the past,—not to persevere in the employment of methods of treatment which have been proved to be useless. But of all the remedies used during the previous epidemics, with the exception, perhaps, of opium as a palliative in certain stages, quinine probably is most deserving of a further trial. Modern experience in India is leading to increasing confidence in its powers. Towards the close of the epidemic of 1849, it was used in London. Mr. Spencer Wells injected a solution into the veins in four cases. Dr. Parkes did so in two others. He also injected solution of salicine without any marked effect, besides alcohol, both in simple warm water and in saline solutions. The experiments were only made in desperate cases, and no recoveries followed, but the power and duration of the reaction which took place were very remarkable, and, as phlebitis only followed in one case, encouragement is afforded for a repetition of the trials in cases not so absolutely hopeless as those in which they were formerly made.

Of the new remedies proposed, sulphuric acid appears to be the most promising. The excellent paper of Dr. Fuller, published in our last Number, on its singular power in averting choleraic diarrhœa and vomiting, should be read with attention. If, as Dr. Fuller believes, it is "an antidote, a specific against choleraic diarrhœa, if not against the worst forms of cholera, as powerful, as energetic, and as certain in its effect, as is cinchona bark, or quinine, against a paroxysm of ague," and the experience of the present epidemic should prove his conviction to be well founded, the visitation of the disease will prove a blessing instead of a curse.

ASSURANCE OFFICES.

We have lately seen a correspondence between a Consulting Surgeon practising at the West-end, and the Law Life Assurance Society, which places the question between Assurance Offices and Medical men on a new footing.

On the 7th of September, the surgeon received the usual series of questions from the Office respecting the life of a lady of high rank, who proposed to insure her life to a large amount. The questions were answered and returned, with a note requesting the fee of "one guinea for the professional advice given, for the information of the Directors, at the request of the Actuary."

No notice whatever being taken of this, the surgeon wrote again on the 20th, complaining of the want of courtesy, and desiring to know whether the Directors would send the fee, as it was his intention "to endeavour to decide the question in a court of law, whether a public company can ask for the professional advice of a medical man, and then refuse to pay the sum he charges as a remuneration for the service he has rendered to the Company."

This led to an apology for the neglect, thanks for the answers to the reference letter, a statement that it is not the practice of the Office "to pay the fee to the Medical referee of a party proposing to assure;" and notice of a most unjustifiable application to the solicitors of the assurer to request that they would arrange the payment of the fee.

One sentence in the letter of the Office appears to have been misunderstood by the Surgeon. It is this:—"The reference is made at the request, and on the behalf, of the assured, and it is intimated by a memorandum on the proposal which he fills up, that he is required to furnish the answers of his referees free of expense to the Society." The Surgeon appears, from his answer, to have supposed that this memorandum was on the paper he filled up, instead of that filled up by the Assurer; for he says, after stating that he should accept nothing from the solicitors of the assured, his advice not being given to their client, but to the Company, for the guidance of the Directors, "I see that you escape liability by the memorandum you state to be on the proposal filled up, so that I can do no more in the present case; but, for the future, when any patient speaks to me about an assurance, I shall recommend an application to the 'Royal Exchange,' or some other of the old established respectable offices who are not compelled to beg for advice gratis."

We very much regret that this gentleman did not persevere in his original intention of suing the Company, as we are of opinion that he would have recovered the fee in a court of law, and thus have set at rest the question which has raised so much ill feeling between Assurance Offices and Medical men. It is too much to expect that a single Medical man should risk the expense of trying the question in the Law Courts, as no doubt the whole machinery of appeals would be brought to bear by powerful

Companies; but we should be glad to join in a subscription to defray the expenses of any one willing to try the venture, and have no doubt that the Profession would come forward very generally and do the same.

There are so many of the oldest and most respectable offices who now pay for the advice of the Medical referees, that we never need be at a loss when requesting a patient not to join one which acts on the partially exploded, niggardly system of "begging for advice gratis." It is not at all necessary to support any new office, which depends for its existence upon offering an unusually large fee to medical men for a certificate, or conducts its business in a manner which may reasonably lead to doubts as to its stability. Some of the oldest and best offices now act upon just principles with regard to their Medical advisers. We shall be glad to see them supported, and those whose ill-judged cupidity prevents them from following the example spontaneously, compelled to do so by legal decision.

OFFICIAL REGISTRATION OF MEDICAL PRACTITIONERS.

The following extracts from a letter of the Registrar-General to the Superintendent-Registrars are worthy of great attention, as they show that at last we shall have an official registry of all persons practising medicine in the kingdom, with an account of their qualifications:—

"General Register Office, Sept. 10, 1853.

"The first duty devolving upon you as Superintendent-Registrar will be to ascertain the name and address of every duly-qualified Medical Practitioner, or retired Practitioner, now resident in your district, and to transmit a certified list of all such Practitioners to this office not later than the 20th instant.

"You will also have to make yourself acquainted with the changes, as to Medical Practitioners, which take place from time to time in your district, and to keep them all regularly supplied with the necessary books and forms, which you will receive from this office for that purpose.

"For this extra service you will receive from the Registrar-General, annually, in the month of January, the following remuneration:—

When the number of legally-qualified Medical men reported to you by the Registrar-General as living in your district, and as being in actual practice on their own account as principals, is under 12 . . . . . per ann.	£2	0	0
When 12 and under 18	2	10	0
When 18 and not exceeding 24	3	0	0
And for each such Medical Practitioner over and above 24	0	2	6

"The first of such annual payments will be made to you in January, 1854; and, in order to entitle you to receive similar payments in future years, it will be necessary that you forward annually to the Registrar-General, on 1st December, a certified list of all the Medical men who may have been resident in the district during any portion of that year, but distinguishing those who may have died or quitted the district previous to the 1st December, the date of your return.

"You will particularly bear in mind, when preparing the present and every future similar list, that the Act of 16 and 17 Vic., in making provision for the supply of vaccination books and forms to 'Medical Practitioners,' expressly mentions only those practitioners who are 'duly' (or, in other words, legally) 'qualified' to practise the medical art; and the Registrar-General is most anxious to prevent, as far as possible, their being placed in the hands of unqualified persons. It is important, therefore, that the list to be made out by you, from time to time, should embrace the names of such Practitioners only in your district as are known or reputed to be—

"Medical Graduates of a University;

"Members of the British or Irish Colleges of Surgeons;

"Licentiates of the Society of Apothecaries, London; or,

"Apothecaries legally qualified by having been in practice before the year 1815.

"You will have the goodness also to distinguish in the list,—

"(1.) Those Medical men who are in actual practice as Physicians, Surgeons, Apothecaries, or General Practitioners;

"(2.) Those practising as assistants to others; and

"(3.) Those who have retired from, or are not in, actual practice.

The list should, of course, include each partner of a firm; and in those cases the names of the respective partners should be connected together by a bracket, or distinguished in some other way.

"The 'Examples' prefixed to each of the forms are intended as a guide in the preparation of the list; and, whenever it can conveniently be done, it will be desirable that the particulars relating to each Medical man should be entered by himself, or under his immediate authority."

The following are some of the examples alluded to:—

No.	Name and Surname of the Medical Man.	Professional Titles, in a contracted form, and Date of the same.	Whether practising as a Consulting Physician, Consulting Surgeon, Accoucheur, General Practitioner, assistant, or Not Practising.	His Address by Post.
		CHRIST CHURCH.	SUB-DISTRICT.	
1	John Smith.....	M.D., Edinburgh, 1830	Physician (Consulting).....	5, Paddington-st., London.
2	Evan Edwards..	{M.R.C.S., 1828 .....; L.S.A., 1830.}	Surgeon in General Practice.....	7, Baker-street, London.
3	Alfred Angus....	F.R.C.S., 1852	Consulting Surg..	5, Cavendish-st., London.
4	William Baker...	Practice prior to 1815.....	Apothecary and Accoucheur.....	19, Edward-street, London.
		ALL-SOULS,	SUB-DISTRICT.	
5	John Buxton	{M.D., Glasgow, 1850..; L.S.A., 1849.}	Assistant to Mr. J. Smith.....	5, Paddington-st., London.
6	Robert Davies...	M.R.C.S., 1807....	Retired from practice.....	7, Welbeck-street, London.

THE CHOLERA.

THE METROPOLIS.

47 deaths are registered for the week ending October 1. Of these, 21 were under the age of 15, 25 aged from 15 to 60, and 2 were over 60 years of age. 31 were males, and 16 females. 3 of these deaths occurred in the West District, 6 in the North, 2 in the Central, 4 in the East, and 32 on the South side of the river.

THE PROVINCES.

The following are the Board of Health returns of deaths from Cholera (C) and Diarrhœa (D):—

	Sept. 29		30		Oct. 1		2		3		4		5	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Newcastle ...	29	5	20	4	11	1	1	1	19	2	10	4	10	1
Gateshead ...	7	0	6	0	5	1	8	0	6	3	1	0	1	0

At Berlin the cholera has carried off the whole of one family within 48 hours, in the persons of a highly scientific officer, Lieut.-Gen. Teichert, of the artillery, his wife, and 4 children.

REVIEWS.

Sketch of the Operation and of Some of the most Striking Results of Quarantine in British Ports, since the beginning of the Present Century. By GAVIN MILROY, M.D. London. 1853. 8vo. Pp. 38.

Dr. Milroy professes to "narrate with thorough truthfulness facts and occurrences, as they have been recorded by trustworthy writers," (p. 4,) in order to ascertain how far the system of quarantine, "as hitherto practised, has succeeded in the object for which it was established." (P. 6.) We do not think his performance at all fulfils his profession. His account of the effects of quarantine on the plague of Malta in 1813, so far from showing "thorough truthfulness," is a one-sided statement of the arguments of the non-contagionists, the most important facts in favour of the opposite party being passed over in silence.

In 1813 Malta was healthy. The plague was at Alexandria. There had been no plague in Malta for 130 years. A vessel arrived from Alexandria, two of the crew having died of plague during the passage. Three days after her arrival the master also died. The ship was lying in the harbour close to the city of Valletta. Remonstrances were made, the removal of the vessel recommended, and six days after the admonition the first case of plague appeared. This was surely remarkable, although it might be explained away as Dr. Milroy does; but he says nothing whatever about the still more remarkable facts that one of the suburbs of Valletta, differing in no respect, in position or sanitary condition, from neighbouring suburbs, escaped without a single case, the escape being attributed to the fact, that rigid quarantine was kept up day and night; that in one village quarantine had apparently as marked an effect in keeping the disease within as, in the former case, it had in keeping it out; and that, in more than one establishment where quarantine was observed, the only victims to the disease were those who broke through the rules. The version given by Dr. Milroy of the case in 1841, where the only man of a large population attacked by plague was one who had been brought in contact with diseased persons in a ship which had arrived with plague on board, is quite incorrect. He says, the man was "confined in the lazaretto with a crowd of poor filthy Moors," p. 15; whereas he was a boatman appointed to attend on the ship, and was not, as implied, kept in a crowded place, but especial precautions were taken to prevent crowding. The complete immunity of the officers of the lazaretto Dr. Milroy wonders at is easily explained, as they never go into an ill-ventilated room, and never go near enough an infected patient to touch him.

We need not examine this pamphlet further. The author possesses a certain amount of ability, and it is to be regretted that he does not exercise it upon subjects with which he is practically acquainted. It is quite clear, from the manner in which he speaks of lazarettos, that he never can have visited one. Unfortunately, most of his readers are in the same position, and this is the reason why recent supporters of the theory in fashion just now at Whitehall have produced some effect in their attempts to abolish a useful Institution, because some of its regulations are inconsistent, and their practical application abused.

Homœopathy Fairly Represented; in Reply to Dr. Simpson's "Homœopathy" Misrepresented. By William Henderson, M.D., Professor of General Pathology in the University of Edinburgh. Pp. 276. Edinburgh. 1853.

A few months since, we took occasion to speak in terms of high and, we conceive, well-merited approbation of an elaborate work by Professor Simpson, entitled, "Homœopathy, its Tenets and Tendencies;" and we only regretted that so much learning and ability should be expended upon the demolition of an absurd quackery, which nothing but the heated brain of an enthusiast could invent, and nothing but the most profound gullibility of the public could adopt. We consider that Dr. Simpson, in that work, exhausted the subject, and so completely laid bare the naked monstrosity of the Homœopathic doctrines, that we were in some hopes that the practitioners of this form of quackery would be convinced by Dr. Simpson's luminous reasonings, and forthwith renounce their errors. But the hydra of empiricism is not so easily extirpated; and the force of argument, which generally prevails in ordinary discussions on scientific subjects, is utterly powerless against the disciples of Hahnemann; and we accordingly find, that Dr. Simpson's book has called forth a vehement reply in the work now before us, written by the Professor of Pathology in the University of Edinburgh.

It would be unjust to deny that Dr. Henderson's book exhibits great ability, and we very deeply regret that so much talent should be expended upon so bad a cause. It is indeed lamentable to find a Professor in the most celebrated University of Scotland not only accusing a brother Professor of ignorance and misrepresentation, but deliberately attacking the whole Profession of Medicine as practised in civilized countries, and advocating a system of treatment which has already been repudiated by all the good and wise, and the strength of which rests only in the zeal of enthusiasts, and in the credulity of their dupes.

To enter into any lengthened criticism of Dr. Henderson's defence of Homœopathy would be to give to it a degree of importance which it does not deserve; and we shall, therefore, content ourselves with a few general observations on its leading topics. As we have just remarked, it contains a series of insults to our common Profession; and the difficulties and uncertainties of our own art (which defects are inseparable from this or any other human pursuit) are made the subject of scorn and ridicule, while the wild speculations and baseless dogmas of Hahnemann are held up to veneration as the emanations of a superior intelligence. But Dr. Henderson, with a disingenuous adroitness, parts company with his oracle whenever he finds the arguments against him are too strong to be refuted. For instance, Dr. Simpson most convincingly proves the utter absurdity of the dogma propounded by Hahnemann, that medicines become more and more active *in proportion* to their minute subdivision, and shows how utterly ridiculous is the assertion made by the same authority, that the efficacy of medicines depends upon the mode of their trituration; and as Dr. Henderson is quite unable to defend these and similar crotchets, he coolly tells us, that Hahnemann was wrong in entertaining them, and that they form no part of the homœopathic system. Whenever Dr. Simpson, in the course of his learned refutation, commits a trivial error, he is at once charged by his opponent with ignorance and malice; but when his reasoning against persons and doctrines is so strong as to be irresistible, then the former are repudiated, and the latter are declared to be unimportant. Thus Dr. Mure, who is justly ridiculed for his "*provings*" on the *pediculus capitis*, is pronounced by Dr. Henderson to be "a fanciful and indiscreet personage," and we are told that his "*provings*" should "not be accepted as authentic."

But we cannot occupy our space with any further remarks upon this melancholy production, which, had it proceeded from one not within our ranks, we should have treated with silent contempt; but coming as it does from a recognised teacher of the principles of medicine at one of our largest seats of learning, we think it our duty to protest against it as a disgrace to the University to which he is still permitted to belong, and an insult to the pupils he professes to instruct, but misleads by his perverted notions.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON THE COLOUR OF THE URINE.

By Prof. J. VOGEL, of Giessen.

I imagine, says the author, that the colouring matter of the urine is formed by the colouring matter of the blood, and that it consists of a decomposition of blood discs. If this be the case, and it be premised that the decomposed blood-discs do not leave the body through any other channel than the urinary, it follows that we possess, in the colour of the urine, a ready means of ascertaining, in a given time, whether a large or a small quantity of blood-discs are decomposed in the animal economy. In the normal condition two to six parts of colouring-matter are voided daily, and this expresses the normal loss and reproduction of blood-discs. A chlorotic patient, or a convalescent, who voids but little colouring-matter in the urine, would have but little change and reproduction of blood-discs. Everyone whose urine is high-coloured would require a constant supply of red blood corpuscles. The grounds upon which this hypothesis rests are the following:—

I. In all cases of brown or brownish-black urine, where the urine is most coloured, the direct source of the colouring-matter,—namely, from decomposed blood-discs, can be easily traced.

II. In all cases where there is a constant discharge of red urine with increase of the colouring-matter, as in fevers, inflammation, etc., there we see, as a common result, diminution in the quantity of the blood-corpuscles, and a corresponding condition of anæmia.

III. In cases where there is noticed diminution in the production of red blood corpuscles, with probability of their very sparing disintegration, as in many (not all) cases of anæmia and chlorosis, there do we find diminution in the excretions of the colouring-matter of the urine.—*Vogel und Nasse' Archiv.*

NICOTIN INJECTIONS IN PARALYSIS OF THE BLADDER.

By ANTONIO PAVESSI.

L. R., between 60 and 70 years of age, of athletic build, but subject to attacks of gout, became affected, after nocturnal exposure to cold, with severe pains in the loins and the extremity of the spinal cord, attended with pain in the region of the bladder and strangury. After the employment of proper remedies, these general symptoms disappeared, but paralysis of the bladder remained, inasmuch as sixty hours had been allowed to pass after the first occurrence of the strangury, before the introduction of the catheter, from fear, as it was supposed, of exciting inflammation. Many remedies proved of no avail, and the patient was obliged to seek surgical aid twice or thrice a day, or to wear an elastic catheter. On August 2 he came under the care of Dr. Pavessi, who tried the effect of electricity by Daniell's battery, applied to the lumbar region, but without permanent good effect. Then nicotin was employed in the following way:—Every morning a silver tube was introduced into the bladder, and after its evacuation, four or five ounces of a decoction of mallows was injected to clear the organ. After a few minutes the fluid was allowed to flow out, when half an ounce of a solution of nicotin, (twelve grains in twelve ounces of water,) with one ounce of thin gum water was injected. In the afternoon the injection was repeated, and in three days the quantity was increased to one ounce. While this was going on, the bladder acquired a daily increased power of contraction, so that at the end of fifteen days the catheter was laid aside. The patient did not experience any effects upon the brain. On September 22 he voided the urine in a full stream, and without straining.—*Gazz. Lomb.*

ACUTE DISEASE OF THE ARTICULATIONS, TERMINATING IN SUPPURATION, WITH LESION OF THE CARTILAGES OF THE RIGHT TIBIO-FEMORAL ARTICULATION.—DEATH THIRTY-SIX HOURS AFTER THE APPEARANCE OF THE FIRST SYMPTOMS FROM PULMONARY CONGESTION, AND THE FORMATION OF CLOTS IN THE HEART.

A man, aged 39, of strong frame, good constitution, brown hair, and brownish complexion, entered the Sainte Marguerite Hospital, May 31, under M. Marrotte. He had never had any previous ailment of severity, except occasional blennorrhagia. May 26.—He experienced headache, lost his appetite, and felt difficulty in deglutition. He remained at home four days without treatment, and then came to the hospital. He then complained of headache, want of sleep, lassitude, slight constipation. But the skin was cool, and the tongue pale and moist. June 3.—Upon exposing himself, during the night, imprudently to cold, he suffered pain in the lower extremities, and in the joints. In the morning, the right knee was found swelled; some leeches were applied in the afternoon. June 4.—Respiration became difficult; he died the same evening. *Sectio Cadav.*—Both lungs were found congested, and of violet colour. From their section an abundant reddish-coloured fluid escaped. The heart, which was of enormous size, and had evidently compressed the left lung, presented a right auricle as voluminous as the left ventricle of the normal heart. The left ventricle contained some fibrinous clots, floating in fluid black blood. The right ventricle was distended by dark fibrinous clots, which were interlaced with the carneæ columnæ, and extended into the pulmonary artery. The areolar tissue around the right knee was infiltrated by serum. From the interior of the joint there flowed, upon incision, a quantity of yellowish white fluid, apparently pus. The synovial membrane was of rose-colour, but there was no false membrane upon its surface. The bones were healthy. Professor Denonvilliers, who examined their sawn surface, expressed himself of this opinion. Upon both condyles the cartilage had lost its elasticity, as was shown by piercing it with the point of the scalpel. In the intercondyloid groove the cartilage was reduced to a soft pulp. This structure was thickened in the proximity of the diseased parts. Its adherence to the bone was complete.—*L'Union Médicale.*

The interesting points in this case are two: 1. The rapidly fatal course from the manifestation of the first symptoms; 2. The statement, that with thickening (fibrous degeneration?) and partial softening of the articular cartilages there was a perfectly healthy condition of the bones, and simply redness, without inflammatory effusion on the synovial membrane. There was no reason to class this affection among either the gouty or the rheumatic, the patient having been free from any symptom referable to those diseases.

UPON THE EVOLUTION OF THE TEETH IN INFANTS.

M. Trousseau affirms, that the period when the milk-teeth first appear through the gum is about the age of seven months and a-half; and that they pursue the following order:—1. The two inferior median incisors; 2. The four superior incisors; 3. The inferior lateral incisors, and the first four molars; 4. The four canine; 5. The last four molars. M. Trousseau persists in affirming that the canines appear after the first molars. In this point he is undoubtedly correct. The order of appearance of the teeth is governed by the wants of the animal throughout the mammalian class. The soft food first given to the infant requires cutting by the incisor teeth, then grinding by the molar teeth; but the digestive organs are not for some months fitted for the firmer kinds of food requiring laceration, for which the canine teeth are intended.

GENERAL CORRESPONDENCE

A NEW OPHTHALMOSCOPE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your Journal of September 10, a letter was published by Mr. Wells, giving a very good description of the ophthalmoscope invented by Coccius, of Leipzig, (not Kotzius, as Mr. Wells writes the name,) and recommending it as a valuable means of ascertaining the state of the retina in "various forms of partial or total amaurosis."

If the praise bestowed on this instrument be allowed to go forth to the professional public without strong cautions and limitations, such dangerous results appear to me likely to ensue, that I feel it a duty to offer a few remarks on the subject to the consideration of your readers.

Against the employment of the apparatus in cases of total amaurosis, I can, of course, have nothing to urge. It might be used, as a means of pathological research, whenever disease of an obscure nature has destroyed the visual function of the retina. When, however, we consider in how many cases of so-called "amaurosis" the impairment of vision really depends upon morbid conditions of the brain,—either permanent changes of its structure, or temporary irregularities of its circulation,—on disease of the dura mater, or bone, adjacent to the optic nerve, etc.,—it must be evident that extreme caution is requisite before any mere defect of sight is referred to alterations in the retina itself; at least, of such a kind as would admit of positive demonstration.

A knowledge of the invaluable aid which the aural surgeon receives from his speculum has, perhaps, led the inventors of specula oculi to expect too much from their contrivances; and caused them, likewise, to overlook the all-important fact, that the retina, while subjected to their searching examinations, so far from remaining passive, is specially influenced by the very agent—light—which they employ in such a concentrated form.

Every day one meets with instances in which the dreaded name "amaurosis" has been too hastily given to dimness of sight arising from some of the above-mentioned causes. Now if, in such cases, the inexperienced or incautious practitioner, having assumed the existence of local disease in the retina, is to arm himself with so powerful an instrument as Coccius's ophthalmoscope, and concentrate "intense light" on the part, while he is making a prolonged search after morbid appearances, and even treating them, when found, as "admirable subjects for the artist," it is easy to perceive that he may bring about the very condition he is hoping to avert, and "contribute towards a history of amaurosis," in a sense very different from that implied in Mr. Wells's quotation; he will but enlarge the page on which that sad history may be written.

I am, &c.

Green-street, September 26, 1853. JAMES DIXON.

[Mr. Spencer Wells remarks, first, that he stated in his letter that he might have misspelt the name of Coccius, as he had never seen it written or printed; secondly, that it is in assisting in the diagnosis of amaurosis, more or less complete, caused by disease of the retina, from cases where the vision is impaired in consequence of disease or disorders of the brain,

dura mater, bone, etc., that the ophthalmoscope is calculated to be especially useful; thirdly, that the light, when either Helmholtz's or Coccius's instruments are used for a short time with an ordinary lamp, is not sufficiently intense to injure the retina. It does not produce so much effect upon a sound eye as exposure to a bright sun-light. No search need be prolonged; for, if the retina be healthy, it is at once seen to be so. The morbid alterations an artist would be called upon to represent would be in cases where, the sensibility of the retina being destroyed, no harm could result from prolonged examination. Fourthly. That the retina being sensitive to light, might be injured by the great concentration of light upon it, or by examination too long continued, is so self-evident, that Mr. Wells did not think it necessary to mention it in his letter.

30, Brook-street, Grosvenor-square, Sept. 29, 1853.]

ON THE ADMISSION OF CHOLERA PATIENTS INTO PUBLIC HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I do not know whether it may be looked on as right or wrong for such a young man as I am, to think of differing from one who holds so high a post of honour in the Profession as Dr. Babington; yet I cannot but do so, on the subject of admission of cholera patients into our public general hospitals. There is not the slightest doubt but that hospital relief should be provided for such patients; but those hospitals should not be the public hospitals of a city,—the hospital where the unfortunate tradesman, when he meets with an accident, seeks for shelter, and looks for relief. There is not the slightest doubt but that, in such institutions, "are found all the appliances which may be needed;" but such appliances can be as well supplied in a special hospital; besides, any person acquainted with the internal arrangement of a general hospital will at once see a great many difficulties in the admission of cholera patients, such as—asking the staff of an hospital to give up their beds to this class of patient, thereby shutting out those whom they were in the habit of receiving, etc. There is not the slightest doubt but that the fears of the relatives and friends "prevent them (in most cases) from rendering the necessary assistance;" how much more then will this fear affect the mind, and through it the body, of a sick patient who may be in the ward into which a cholera patient is carried. Let the necessary assistance be provided, by forming a body of nurses out of those who were attached to the temporary hospital in '49, and let special institutions be prepared for the unfortunate sufferers. There is not the slightest doubt but that "Medical labour is thus economised;" but this is as fully done in one hospital as in another. There is not the slightest doubt but that we would be better able "to minutely observe," so as in time to come to a satisfactory plan of treatment "based on scientific principles," by having the patients in hospital. I should hope, that the men who would get charge of a temporary cholera hospital would be as well qualified to do this "as the professed teachers in public hospitals. There is not the slightest doubt but that typhus fever patients are admitted into general hospitals; but they are always placed in separate wards.

From the experience I have had, while Resident Assistant in the "Cork Fever Hospital and House of Recovery," during the epidemic of '49, of the mode of procedure so strongly advocated by Dr. Babington, I should hope, that, if it pleases Providence to visit our city with this epidemic, on the first appearance of it, that temporary hospitals and staffs be immediately got up, which, when set about by men of energy, can be accomplished in a very short time; and that the beds of our public general hospitals will be left for the relief of those accidents which occur so constantly.

I am, &c. Thos. C. Shinkwin,
Late House-Surgeon, North Infirmary, &c.
North Mall, Cork, Sept. 27, 1853.

The Ship Niagara, arrived at New York from Liverpool, having lost thirty-eight passengers,—one-eighth of the whole number,—by ship fever. This is the second instance of similar mortality at sea within a week. Overcrowding, want of ventilation, and of proper cleanliness, with perhaps bad provisions, are the exciting causes of ship-fever. We had believed that no emigrant ship was allowed to leave a British port, carrying more passengers than it has due accommodation for, and without proper means of ventilation; but the dreadful mortality on board the Niagara shows that we were in error.

REPORTS OF SOCIETIES.

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. Greenhow, Esq., President, in the chair.

The President communicated the two following cases of

FISTULA IN PERINÆO.

James Robson, aged 23, pitman, admitted October 28, 1852, with a sinus in the upper and inner part of each thigh, about three inches from the perinæum, through which urine passes freely. Fifteen weeks ago, while at work in the pit, a large piece of coal fell from the roof, and struck him on the left side of the pelvis. On examination, an irregularity is discerned on both rami of the pubes, showing that fractures had been sustained in this situation about an inch below the symphisis. Partial paralysis followed the accident, with inability to pass uriue, which required to be drawn off twice daily for eight or nine weeks. On admission, he was unable to walk, or even to get out of bed; but passed urine both by urethra and through the preternatural openings. An astringent lotion to the ulcers. Bowels kept open with pil. aloes. co, and inf. gentian. co., with nitro-muriatic acid given three times a day. Vain attempts made to pass sounds or bougies into the bladder. No. 4 is arrested in the membranous part of urethra, where it is firmly embraced by the stricture or contraction which followed the accident. The attempt to push the instrument forward is attended with pain, and a drop or two of blood follows its withdrawal.

November 26.—The sinuses remain open, and a probe passed through that of the right thigh reaches the ramus pubis. On the left side, the probe cannot be passed to the same distance. Urine still passes through the openings, though in less quantity, and through the urethra the stream is larger and more free. The bowels are regular, the appetite good, and his general condition greatly improved. He can now rise from his bed, and walk with the aid of crutches.

January 12.—The progress of the patient in general health and strength has been satisfactory. He can now walk about the ward without crutches, and passes urine principally through the urethra in a small stream. The opening in the left thigh is nearly healed, but that in the right remains open, and through it urine still exudes in some considerable quantity. A small flexible bougie has two or three times been passed into the bladder; but the attempts to do this are often fruitless, the instrument appearing to enter a cavity having false openings into the sinuses, which are more likely to be entered by any catheter or bougie than the true one into the bladder.

The correctness of the diagnosis as to fracture of the rami pubis has been proved by the discharge at four different times of portions of detached bone; one from the left thigh, the others from the right; (two of these exhibited.)

In the above short history of the case, it has not been mentioned that abscesses had formed in either thigh, which were opened by the surgeon who at that time attended the patient, and that matter and urine were discharged. From this account, which is given by the man himself, it seems evident that some injury of the urethra must have been occasioned by the accident, and that these abscesses were the result of urine escaping, probably in small quantity only, into the surrounding parts. If the bladder had at that time been able to discharge itself without the use of the catheter, it is probable that the quantity of urinary exudation would have been greater, and the mischief in proportion increased, so that possibly the safety of the patient may have been protected from this greater evil in some degree by the paralysis of the bladder which accompanied the lesion of the urethra.

Daniel M'Loran, aged 58, admitted October 28, 1852, with stricture of urethra, which is so contracted at the orifice, as to prevent the admission of a small sound, which could not be effected until it was enlarged by incision, when a sound (No. 5) passed into the urethra to the extent of an inch and a half. He says, he had gonorrhœa about two years ago, which was followed by the stricture. But, about a year ago, he received an accidental injury of the perinæum, which led to an abscess, and the formation of a fistulous opening behind the scrotum, through which urine passes at the same time that it does, in a very small stream, through the urethra. Micturition frequent and painful; sleeps badly; bowels pretty regular; warm bath. Pil. hyd. gr. v. h. s., oleum ricini mane.

November 26.—This patient is much improved. Instruments have been repeatedly passed into the bladder. No. 7 can now be passed pretty easily. Stream of urine enlarged, and passed with

much greater ease. The fistulous opening appears closing up, but some drops of urine still ooze through it. Has suffered from an attack of iritis in left eye, which yielded to leeches, mercury, and purges. The gums are slightly affected, and the eye is greatly improved.

At the end of December, the cure of this patient was complete, and he left the house. A catheter No. 11 (the largest that could be admitted through the still somewhat narrow orifice of the urethra) has been repeatedly introduced into the bladder; the sinus was closed, and he passed urine in a full stream. He was desired to come to the Infirmary twice a-week to have the instrument introduced.

The report of the remainder of this meeting must be deferred until next week.

OPENING OF THE MEDICAL SESSION.—1853-4.

ST. BARTHOLOMEW'S HOSPITAL.

The lecture, inaugurating the opening of the Medical Session at this Hospital, was delivered, on Monday, by Mr. Stanley, Surgeon, to a very crowded audience.

He commenced his address by adverting to the great benefit which the modern practice of associating medical schools with hospitals had conferred on the Profession, and, through the Profession, on society at large. From these general observations he passed to that portion of his address which he meant to direct more especially to the young men then entering on their medical studies. If any of his audience should be embarrassed how to employ his time, he would advise him to consider the scheme of Benjamin Franklin for occupying each twenty-four hours. That scheme would show how much might be made of a single day when the principle of order was observed, by giving to all things their right place, and to every part of business its right time. Franklin rose at five with an address to his Maker, and then proposed for his thoughts the question, what good he could do that day. Having resolved on his work, he proceeded with it until seven, when he breakfasted. After breakfast, he had four hours' work until twelve. From twelve to one he dined, and then again he had four hours' work. After that, he had four hours of music, conversation, or some other diversion, and then he concluded with the question—what good had he done that day? That was the mode of employing time adopted by Benjamin Franklin, then a journeyman printer in Bartholomew-close; and the student at St. Bartholomew's Hospital would do well to imitate that example at the present day. He would state a single fact, for the purpose of illustrating the important influence which members of their Profession might exercise in the progress of human events. An Englishman had opened a species of hospital in China. A native who had obtained admission to it had there acquired a slight knowledge of the art of medicine, as well as of the truths of Christianity; he had then determined on offering to his fellow-countrymen religion and health; and that had been the germ of a revolution, the mightiest, perhaps, which the world had yet seen. Mr. Stanley, after having referred to the careers of Harvey, Haller, and other distinguished masters of the Medical art, concluded by reminding his young audience that they might well feel proud of a Profession which had been illustrated by men who had in their time taken high rank in intellect and virtue. He was much applauded. An interesting *conversazione* took place after the lecture.

ST. THOMAS'S HOSPITAL.

The Introductory Lecture was delivered on Saturday evening, the 1st of October, in the board-room of the Hospital, by Dr. J. R. Bennett. In the course of his discourse, Dr. Bennett dwelt with more than ordinary emphasis upon the pre-eminent importance of clinical instruction, as calculated to lay the most solid foundation for future professional skill and excellence. In addressing the students then assembled, he recommended them to ponder well the nature of the arduous profession they had chosen to pursue, as well as the high moral and intellectual qualifications necessary for the right discharge of its varied and onerous, yet pleasing duties. Although the art and science of medicine required habits of correct observation, yet the successful practice of medicine required also habits of sound reasoning. He congratulated the students of the school upon the appointment of one of his colleagues to the honourable post of Professor of Clinical Medicine, and the appointment of Dr. R. Dundas Thomson to the chair of Chemistry, which he was so well qualified to occupy, with credit to himself and to the establishment, in consequence of his intimate knowledge of organic chemistry. He exhorted those attending the lectures, and other sources of information at this establishment, to the most unwearied diligence in their studies, yet at the same time not unmixed with proper and seasonable relaxation; and both now and hereafter, throughout their professional career, to exhibit to each other, and to all with whom they came into social relation, the manners and deportment of gentlemen. The lecture was listened to with evident attention.

GUY'S HOSPITAL.

The Introductory Lecture was delivered on Saturday, October 1, by Dr. Henry Oldham, in the anatomical theatre, in the presence of a large assemblage. The lecturer dwelt fully, and with great force, upon the paramount duty of cultivating the mind, by acquiring the power of fixing the attention and controlling the will. He urged the necessity of cultivating a proper acquaintance with the sciences which form part of a thorough medical education, as botany, chemistry, and comparative anatomy; not that they, the pupils, would be expected to be perfect botanists, perfect chemists, or perfect comparative anatomists; but he regarded a thorough acquaintance with the facts of physiology as of the highest importance in a good and sound medical education. He referred to the very great advantages offered to the students in the wards of the hospital, for the successful prosecution of the practical part of their education, or an acquaintance with disease as there presented in the living human form. Dr. Oldham made deserving mention of the names of its founder, Thomas Guy, and of its second great benefactor, Mr. Hunt, who had bequeathed to the Institution the sum of 190,000*l*. He referred, too, in a most becoming manner, to the loss the hospital and school had sustained by the death of the late Mr. Bransby Cooper, and concluded an eloquent lecture by an appeal to the students to diligence and assiduity in their studies.

WESTMINSTER HOSPITAL.

The following is the substance of the inaugural address delivered on the opening of the medical school, by Mr. Guthrie, on Monday :—

In the session 1850-51, 1044 students were registered at the College of Surgeons as studying in London; 370 obtained the diploma in that year. In 1851-52, 1141 registered; 404 received the diploma. In the last year, 1852-53, 1105 were registered; 476 obtained the diploma—which number of diplomas granted in each year includes gentlemen who studied out of London; so that, as the preceding three years were nearly alike, it appears that of all the students educating in the different schools recognised by the College, very many go forth to the world at large without a certificate of competency in the profession of surgery, of which they take the title, and thus impose upon the public; for it may not for a moment be understood, that all these gentlemen would not obtain such certificate of competency, or diploma, if they had the information required to give in exchange for it. This is a lamentable state of things, demanding the attention of the Legislature; for, although I have no desire to interfere with the liberty of the subject, nor of preventing any persons from employing whomsoever they please to cure or kill them, I would certainly prevent any and every person from taking a Medical designation who was not entitled to it; nor would I permit any man to hold any public office who was not duly qualified, nor any one not qualified to obtain remuneration in a court of law for his services, nor have any indulgences or immunities whatsoever granted him. I would allow no unqualified persons to offer to kill or cure for lucre without an annual licence, describing them as irregular unqualified practitioners. No man may try to kill a partridge in this country without a licence, why should he be allowed to kill a man any more than a bird? The greater the civilisation of the country, the greater must be the despotism of the law, is a maxim, I maintain, all should quietly submit to for the public good. Until this last year, 1852-3, there were no authorised examinations to test the qualification of surgeons or apothecaries in midwifery, and horrible disasters were and are continually recurring from the ignorance of unqualified persons who practise in it. The College of Surgeons have instituted such examinations, and grant a certificate of qualification, which has been obtained by ninety-three gentlemen, all members of the College. It is to be hoped the Legislature will insist upon every man who shall commence practice after this year having a certificate of qualification. I contend more for this than for the practice of surgery; for, in the more important cases which occur in it, a longer time for consideration and action is frequently allowed than in the case of a woman who has, perhaps, been several hours in labour, and for whom assistance of the highest order is suddenly claimed to save her almost departing life; and which, from ignorance, is often not afforded. I re-

member once asking a gentleman who professed to be a practitioner in midwifery, what he would do in a case of difficult and procrastinated labour. He replied, he would have the woman's nates well rubbed with hot olive oil, and, if that did not do, he would consult with another practitioner,—a proceeding I earnestly recommended him to adopt, at the earliest period, on all similar occasions. It may be desirable to inquire, what may be the causes of so many persons being unable to obtain the ordinary qualification,—of their being less able to do so than formerly. It has been said, that the examinations at the College of Surgeons are more severe of late, but this is a great error, for, if any change has taken place, it is otherwise,—they are less, rather than more severe; or, perhaps, it should be said that, while the examinations are the same, the judgments are more lenient. The real fact is, that the students are worse prepared. Whether they do not apply themselves with the same assiduity as formerly, or the teachers do not teach with the same application, is to be ascertained. I suspect there is occasionally a little of both; and if it should be so, it is desirable that some amendment should take place, and in such amendment I should be very glad this School should set an example. When I had the honour of being President of the College in 1831-2, 1 in 14 only was referred or rejected. When again President, in 1843, 1 in 8, and now that I am again the Senior Vice-President, the rejections were, in the last Session, 1 in 6. It may be, and, indeed, is said, that the study of anatomy in London has failed for want of means; but I am afraid this is not entirely the case. I know that few students dissect as they ought to do, and that the average in some schools is not more than one-sixth—in some, one-third of a subject; in none is the average greater, although individually it may be greater or less. Measures are, however, in progress to obtain, if possible, a larger supply, which may, and I hope will, be successful; but the complaints of teachers and students cannot be considered quite valid when the inspector of anatomy complains, in his turn, that his offers of supply during the month of April last were refused by the teachers, on the ground that their labours for the session had terminated, although formerly dissection was carried on until May. There are at present in London eleven recognised hospitals and twelve schools, one hospital having two schools, and two more, I understand, are forming. It is possible that the number of schools may account for the decadence in teaching to which I allude, inasmuch as some small schools have not paid the teachers, who, in consequence, may have been negligent of their duties, and the students have not acquired that information which one party agreed to give and the other expected to obtain. A lecturer or teacher can always be obtained, even on the certainty of not being paid. It is sufficient that his name shall be announced in the public papers as a teacher in the branch of science he has selected; but, after a time, he finds this is not enough; he wants money as well as notoriety, and must be paid, or becomes careless. In a printed paper I have lately had sent to me, giving some account of a metropolitan school, it is stated, that the teacher of anatomy, when he gave a demonstration in the dissecting-room, did not give an anatomical lecture that day in the anatomical theatre, although one of the essential requirements of his office; and it is further stated, that his description of the bones occupied him until Christmas, and that other neglects and deficiencies also took place. If this be true, how could all other parts, subjects in anatomy, be duly taught by the end of March? It is unnecessary to say that they could not; but nevertheless certificates were given that they were taught. The Council of the College of Surgeons, it appears from this paper, interfered, as they have done on other similar occasions, and withdrew the recognition of the school, with the happiest effect. The defects which all parties admit did exist, and which I myself saw on an inspection for the purpose, as a friend interested in the welfare of the principal teachers, have all been removed; and the school is now in as good condition, and as deserving of public favour, as any other. The Council, then, did those gentlemen the greatest service, and with every possible care that they should sustain no injury. In former days the emoluments of teachers, when surgeons of hospitals and men of distinguished reputation, and when the schools of medicine and teachers were fewer in number, were often so considerable as to be scarcely credible. I remember, in the presence of Mr. Keate and the late Mr. Thomas, saying to a celebrated teacher of anatomy and surgery, who had been greatly distinguished as an hospital surgeon, "Why, you must have made 150,000*l.* out of your hospital." "Nonsense," was the reply. "Yes," I said, "you made 3,000*l.* a year for 30 or 35 years." "How do you make it out?" "So much as surgeon, so much as teacher of anatomy, so much as teacher of surgery, in all 3,000*l.* a year." "You mistake. I declare," said he, "I never made more than 2,700*l.* in one year." "Agreed; 2,700*l.* for 35 years is about 94,500*l.*, a great part of which was purchased into the funds when between 50 and 60. They are now more than 30 per cent. higher; add to this the interest and compound interest, and it will far exceed the 150,000*l.*" He turned away laughing, saying, "You may say what you like, but I shall not cut up when I am dead half as rich as you expect." These days are past, and there are now, perhaps, at least three if not four men doing the work he did in the same hospital, and also for a third part of the money; and it is by no means apparent that it is better done, although the Council of the College of Surgeons do now prohibit any man from teaching two subjects. In the Royal hospitals the surgeons have always had an annual stipend of 40*l.* (a sum possibly equal, when first granted, to 200*l.* at the present time), coupled with an important regulation, that they should submit to an annual election,—an admirable rule which still remains, although obsolete in effect, for a re-election has become customary, and I have no wish the custom should be abrogated. There is a rule, however, which I should wish substituted for the custom in all hospitals,—it is, that after a surgeon has completed his 65th year, he should be relieved from the active and laborious duties of his office, and be appointed consulting-surgeon. The only good reason which can be advanced against this is, that he may not have saved money, and that the abstraction of his income arising from the hospital student fees may leave him, in advancing years, in an uncomfortable situation. This may easily be obviated by dividing the fees in a different manner, and granting to those who may hereafter retire from the more laborious duties at 65, a share with those who succeed to them. Surgeons of hospitals would not then remain until they die, or are totally unfit for their duties; and their successors, instead of being 50 years of age, or almost past their work, when appointed, would be more early placed in situations in which they might render important services to the public, and obtain for themselves a remuneration for their services through their better opportunities, so as to render the sum awarded to the consultant a matter of no consequence. Many more reasons might be given rendering this change of great value to the public. To state them might give offence to some who have attained their 65th year, and I therefore abstain. The retention of elderly gentlemen as surgeons to this hospital long after they were able to do the duty as it ought to be done, was one cause of its decadence from that high and palmy reputation it enjoyed thirty or forty years ago, and which we hope now—and it is the cause of our meeting this day and of this address—to restore to the state it then enjoyed. The governors of hospitals in general have begun to learn that hospitals are supported for the benefit of the sick poor, and not for that of physicians and surgeons. They some years ago, in this hospital, adopted the resolution I proposed to them, of making their physicians and surgeons consultants at 65; they have lately again determined to do so; and they will in future act upon it, I trust, without favour or affection to any one. The Council of the College of Surgeons have declared four years to be the shortest period of study they will acknowledge as sufficient for instruction—one to be passed in the study principally of pharmacy, and three, including vacations, by attendance on an hospital and school of physic and surgery. Formerly, two sessions only were required; and I have to regret the share I took in insisting on three, for students have not come up better prepared for their final examinations than they did twenty years ago, while the expense to their parents has been greatly augmented, and their morals have not certainly been benefited by a third winter's residence in London. It is said that they will not work the second year, but idle away their time, and acquire habits which render them unwilling to work the third. If this should prove to be so, it will be matter of consideration whether it might not be better to insist only on three years or sessions, commencing in October and ending in June, when the health of students will not admit of their remaining twenty-three or twenty-four consecutive months in London, commencing from the October of the first year. The evils alluded to might, however, be materially prevented during the whole period of study, if the physicians and surgeons of hospitals and the various teachers would note weekly the attendance of their students, and refuse certificates to those who failed to attend,—an unpleasant duty nearly all have refused to perform in a thoroughly efficient manner when called upon officially to do it, the refusal being headed, in one instance, in writing, not only by legislators, peers of the realm, but by elective legislators in the House of Commons; and until these gentlemen shall refrain from such interference in their capacity of governors and councillors of hospitals and colleges, no superintending body will be able to enforce a compliance with such regulations as they may think necessary. They are obliged to admit that "prudence is the better part of valour," on the principle, that "he who fights and runs away may live to fight another day;" and it may be, if this maxim

be true, that the contest may some day be renewed. It may be asked why a regulation of this kind ever failed, or should be resisted? The answer generally given is, that many students do not like to be forcibly kept to their work,—some think it derogatory, and go to the school in which they think a severe discipline is least observed. Teachers when just on this point lose students; when more lax they gain, and it is in the nature of man to endeavour to gain; a proceeding which would fail if all were compelled to act alike. The Council of the College of Surgeons have reduced the study of the profession by lectures to one course on each branch, except in surgery. They have ceased to regulate the number of lectures in each course, although a course is expected to consist of a reasonably sufficient number; but the insisting on two courses of lectures on surgery, or rather of two winter seasons of such lectures, is, perhaps, an error, inasmuch as it enables the Society of Apothecaries to insist, very fairly in their turn, on two courses on the practice of physic, etc. Two sessions of such lectures are as much wanting in one branch of science as in another; but they are not wanted in any, and have, from their multiplication, become a nuisance, greatly to the disadvantage of the student. No man can be taught any practical branch of learning by lectures. They can only point out to him what he ought to learn, and by giving him a general knowledge of the subject, enable him afterwards to work it out practically. I was once told by a student, that he could describe any part in the human body or in anatomy he had not seen, just as well as one he had seen; nevertheless, he did not know the very parts he had described to me when they were placed before him. He could state accurately enough the difference between a hernia, a hydrocele, and a varicocele. He was eloquent on the subject of the latter, feeling like a bag of earth-worms; albeit he had never felt a bag of earth-worms, and did not know practically what sort of feeling it conveyed; and when I brought him here and showed him these diseases, he could not tell one from the other, for he had never seen them. Lectures on all subjects should certainly be delivered annually. A student should attend one course of each, or make up in a second course for such parts as may have been accidentally omitted in the first. More is, in my opinion, unnecessary, as taking up time which may be more usefully employed. The certificates usually given of such attendances are sometimes fraudulent; little dependence can be placed on the accuracy of any of them, and the sooner they are abolished the better, being, in many instances, as great a discredit to those who give as to those who receive them. They are, take them all in all, encouragements of laxity of principle. It ought not to be difficult to say what might be substituted for them; but it can only be done, I fear, with advantage, when the College of Surgeons and the Society of Apothecaries shall cease to act on antagonistic principles,—when the curricula, as they are termed, for the education of a surgeon and apothecary, or general practitioner, as the fashionable term is, shall be alike; and the day is not far distant, I trust, when this great object shall be effected. The means or manner of instruction at present pursued renders another party, in many instances, absolutely necessary to enable students who have been inattentive to undergo their ultimate examination with success. This gentleman is called a "grinder," and it is said that some so employed make from 1000*l.* to 3000*l.* a-year. They work hard, and, I believe, deserve the money. They beat into the heads of negligent students that information which they had failed to acquire during the proper period of their studies, and, when thus ground, polished, or wound up to the proper point, they select their day for examination, and very often succeed. Information thus acquired is evanescent; it is soon forgotten. In a few months it is remembered no longer. It cannot be otherwise; and the necessity for such instruction is much to be deplored. It ought to be superseded, in anatomy and surgery, by the demonstrator in each school. He should be the grinder and polisher of the students under the professors of each of these branches; and the knowledge which is now very evanescent, if thus acquired, would be long, if not permanently, remembered. I am desirous, in conclusion, to relieve your minds from some false impressions which are generally promulgated with regard to the Court of Examiners of the College of Surgeons. The members divide into four parts, or tables, two of which examine in anatomy, two in surgery, and each table reports that the student is good, bad, or indifferent. If on the aggregate of the four there is one indifferent, it is considered as nothing. Two indifferents cause the person to undergo a written examination on the subsequent week; one bad does the same; but it requires the four tables to report against a man to cause his immediate rejection. The president, at the written examination, gives the questions, and three hours are allowed for answering them, more if desired; they are then read, and the decision is that of the whole court. It is obvious that no one examiner can then reject an individual, as students are very apt to suppose; and they may be assured a rejection is always a matter of regret to the examiners, which they would willingly avoid if consistent with their duty—although I have often had the gratification of hearing men when they have come up for the second time, after six months' further study, acknowledge the service the rejection had done them, in making them, through shame and a proper sense of honour, labour more diligently. I may also add, in order to remove another error, that it is of no pecuniary consequence to the examiners whether a student obtains his diploma or not. Their remuneration is the same for rejections as for admissions; but those examiners only are paid who attend. Lest you should think I have regarded with too little respect the great advances which have of late years been made in physiological and histological teaching, I may say I have done so because you can receive every instruction, and the greatest possible assistance in your leisure moments, after your ordinary education has been gone through: from Mr. Quekett, the resident conservator at the College of Surgeons, where demonstrations are open to you, without expense, during ten months in the year; and it would be highly satisfactory to me to see the appointment, in a similar manner, of a professor of chemical pathology, or of animal chemistry, whose demonstrations would, I am satisfied, be of the utmost advantage to the Profession at large, and most acceptable to those who had leisure in the commencement of practice to attend to them. I ought, perhaps, to apologise to the Council of the College of Surgeons for noticing any of their acts, but the best apology I can make is to say, that they need no concealment; the more they are known the better it will be for themselves. Some twenty years ago Mr. Warburton obtained a Committee of the House of Commons to inquire into certain acts of this Medical corporation. The College of Surgeons, it was said, was to be overwhelmed. They were pleased to order me, then their President, to defend them before the Committee. How do you think I did it? I took into the Committee-room, the Secretary, three chests of papers, all endorsed, arranged, and docketed, with a schedule in my hand of the contents of each chest, and intimated to Mr. Warburton, the Chairman, that I was quite ready to meet and overturn any charge anybody might be pleased to make. It was an attack, and not a defence. Mr. Warburton asked a few trifling questions, and gave in; his former prompters, who were arranged along the wall behind him, were mute; the Committee knew nothing about the matter; and I was actually obliged to place in the hands of Sir Frankland Lewis such questions as I thought advisable he should ask to enable me to overthrow all the statements my Radical friends had advanced, as they supposed, so triumphantly. When my examination was over, my old friend Carpie, the head of the Radicals, and who had been an old master of mine, came to me, and said, "You have saved your College, but you have ruined yourself. We will never forgive you." My reply was, "You really do me much wrong. Have I not disabused you of all your errors? Have I not shown you I am the man to suppress all grievances, all abuses? I ought to be, on the contrary, your pet lamb, if not your bell-wether." If the House of Commons, doubtful in their belief of any part of the stories which occasionally are or may be told them, should think fit to appoint a Committee to inquire into Medical matters, I shall very willingly do the same thing for them; and, should I not be forthcoming, there will be many others of the Council equally willing and much more capable.

The lecture was listened to with much attention by a crowded audience, and there was general applause at its termination.

ST. GEORGE'S HOSPITAL.—DISTRIBUTION OF SCHOLARSHIPS AND PRIZES.

On Monday afternoon the annual distribution of scholarships and prizes to the most distinguished students of this hospital took place in the board-room, which was filled long before the time appointed for the commencement of the proceedings, a large number of the auditors being men celebrated in the Medical Profession.

The President of the Royal College of Physicians (Dr. Paris) was called to the chair, and having briefly introduced the business,

Dr. Nairne, the senior physician of the hospital, said he was happy to inform the meeting, that during the past year the students of St. George's had greatly distinguished themselves. The curator of the hospital had gained Sir Astley Cooper's celebrated prize on the spine; the house-surgeon, at the examination for the Medical Degree at the University of London, had gained the prize for anatomy and physiology; while another student had obtained the studentship in anatomy in the Royal College of Surgeons. Another circumstance connected with the hospital which he might mention was, that since the last session a lectureship in midwifery had been established, and an obstetric physician ap-

pointed. It was gratifying to him to state, that the scholarships had been well contested—one in particular, having been gained by a gentleman who was not a native of this country. That scholarship was one founded by Sir Charles Clarke, for good conduct and general proficiency; and it had been carried off by Mr. Theodore Duka. Mr. Duka was a Hungarian by birth, and had fought nobly for his country's honour and freedom; but having failed in accomplishing the object he had at heart, he became a refugee in this country, and directed his energies to the prosecution of the study of medicine. He had by his conduct gained the goodwill of all the medical teachers of that Institution, both physicians and surgeons, as well as the respect of his fellow-students and all others connected with their medical school. (Cheers.)

Dr. Paris then presented the following scholarships and prizes to the gentlemen to whom they had been adjudged by the examiners, accompanying each presentation with some friendly and encouraging remarks:—

Scholarship.—Mr. John Bowman Collison.

Scholarship.—Mr. Henry Charles Andrews.

Sir Charles Clarke's Prize.—Mr. Theodore Duka.

Anatomy, Senior Class.—Prize: Mr. Christopher Bulteel and Mr. H. W. Bellew—equal. Certificate: Mr. P. F. Bellew.

Anatomy, Junior Class.—Prize: Mr. J. B. Collison. Additional Prize: Mr. Allan Douglas Mackay. Certificates: Mr. Alfred Hunt and Mr. Geo. Goddard Rogers—equal.

Physiology.—Prize: Mr. Christopher Bulteel. Certificate: Mr. H. W. Bellew.

Botany.—Prize: Mr. H. Lewis. Certificate: Mr. E. J. Marshall.

Chemistry.—Prize: Mr. Henry Charles Andrews. Certificate: Mr. A. P. Knight.

Practical Chemistry.—Prize: Mr. James Keene. Certificates: Mr. P. F. Bellew and Mr. H. W. Bellew—equal.

Materia Medica.—Prize: Mr. J. B. Collison. Certificates: Mr. Henry Chas. Andrews and Mr. E. J. Marshall—equal.

Medical Jurisprudence.—Prize. Mr. John Hopkins Willis. Certificate. Mr. Garland.

Midwifery.—Prize: Mr. W. H. Dickenson and Mr. P. F. Bellew—equal. Certificates: Mr. H. W. Bellew, Mr. C. Bulteel, Mr. F. H. W. Iles, and Mr. C. Roberts—equal.

Practice of Physic.—Prize: Mr. J. C. Penny. Certificate: Mr. E. C. Garland.

Surgery.—Prize: Mr. Geo. Yeates Hunter. Additional Prize: Mr. Thos. Duncan and Mr. J. C. Penny—equal. Certificate: Mr. H. J. Strong.

Dr. Paris then addressed the general body of students, upon whom he urged the necessity of preserving the character of gentlemen through the course of their professional career. Without that, science and professional skill would be of little avail.

After some complimentary resolutions, the proceedings terminated.

LONDON HOSPITAL.

The introductory lecture to the winter session of the present year was given at this Institution, on Monday afternoon, by Dr. Parker. He asserted the high dignity of our calling, and vindicated what seemed to him the indisputable right which members of our Profession have to the respect and gratitude of mankind. Notwithstanding that their just claims on the State had been too often passed over by Government and corporate bodies, and their manifold useful labours ignored and unappreciated by the mass of mankind, still, actuated by no selfish or sordid spirit, they had done good service in the cause of humanity, had braved proscription, and danger, and death, in battling for its interests, and in all ages had distinguished themselves as promoters of what was useful, pursuers of what was true, and doers of what was right and good. Let us, then, remember, (said the lecturer,) that pestilence still rages in our densely-populated cities; that the deadly emanations from those plague-spots, the burial-grounds, still saturate the air of this Metropolis with their pestiferous gases; that animal, and even human putrescence, still contaminates our water; that fever still decimates our over-crowded emigrant ships; that our poor still lodge in wretched hovels which are a disgrace to a civilised community; that lunatics are in many instances still treated as criminals; and that a comprehensive and efficient scheme of national education is still to be framed. Let us remember all these wants of the age, and not rest until the final victory be achieved. Alluding to Dr. Pereira, he said, it would indeed be extraordinary, considering the many ties by which he was bound to us, if the deep voice of sorrow which has been raised for the loss of Dr. Pereira did not find a responsive echo within these walls; it would, indeed, be strange, if we could witness the sudden close of a life so spent among us without the deepest grief at so melancholy a termination to the career of so distinguished a man. Though Dr. Pereira's name was known throughout the whole civilised world, it had become identified with this hospital and with this school. Having stood at his bedside during his dying moments, I can truly affirm that I can hardly imagine the transition from life to death to have been more sudden or more touching. On the evening of his decease, with the exception of a trifling lameness, Dr. Pereira was in the full possession of all his mental and bodily powers. While conversing cheerfully with his family, death came upon him with suddenness and with anguish. After a few minutes of intense suffering, his heart ceased to beat, and his mind passed to a higher sphere of action. It seems probable that causes had long been in operation which had slowly undermined his health, and lead to permanent organic changes which in a moment caused the destruction of so valuable a life. It seems almost as though, of late years, the doom of a sudden or of an early death had descended as an heirloom to the medical and surgical staff of this Institution. The late Dr. Davies was struck down in the zenith of professional success, before his strength had begun to fail. Mr. Scott perished in the prime of his manhood, in possession of all his powers. Mr. Andrews was taken away from us without a moment's warning. Dr. Algernon Frampton was cut off before he had reached the meridian of life. And now two other names must be appended to the gloomy list—that of Dr. Pereira, whose loss we all so much deplore, and that of the gentleman who became our colleague on Dr. Pereira's decease—namely, Dr. Miller. Who that had beheld the latter gentleman, in the pride of health and strength, at the period when he took office in this Institution, could have thought that he was so soon to follow to the tomb his distinguished predecessor? Who that had then beheld him in the plenitude of his powers could have dreamed that he was so soon to be removed from that long career of usefulness, and that long course of active benevolence, which his talent, his kindly disposition, and his zeal in the discharge of the important duties which had been committed to his charge, led us to hope that he would have lived to enjoy?

At the conclusion of the lecture Dr. Parker was loudly cheered by the pupils.

MIDDLESEX HOSPITAL.

The opening of the medical school of this hospital for the session took place on Monday night, at eight o'clock, before a numerous audience.

Dr. Frere commenced by alluding to the advantages and disadvantages of the study of medicine. He said, with all the trials besetting the study of their Profession, was there aught in the practice of it that could compensate for the uncertainty in which it must be entered, and the difficulties that lay in its pursuit? Was there anything that could make up to them for thus devoting themselves to an arduous and never-ending task? It, however, had its charms, and its peculiar charms. It was not, perhaps, in many respects, a Profession so attractive in its external garb as others. Be their well-earned success what it might, no public honours, no popular rewards, would recognise their merits. A grateful country would swell the applause of the victorious soldier,—upon the close reasoning and the clear denunciation of the forum attentive and applauding numbers hang,—upon the eloquence of the tribune might depend the fate of nations, and nations might recognise and reward the merits of the orator and statesman,—in a holier sphere, the words of truth might flow from the persuasive lips of the divine, and bursting eyes and bended knees might bear testimony to his power; but from all that they were excluded. Their work, if not less important in its results, was far less obtrusive in its progress, and their praise must not be external, but inward. If their craving appetite demanded public recognition, they might turn again to the starting-point. There was no place for them in the ranks of their competitors; but, if they could be content with the still-small voice of an approving conscience, with the love of friends, the respect of acquaintances, then let them follow the course they pointed out, and as much as that they would assure them. The habits and nature of the subjects of their study might place them in the first rank of science. They would have attained a useful—practically useful knowledge, and a sense of responsibility that would be their best and surest stimulus to a conscientious performance of their duty. They would be called upon—and there was their singular privilege—without quitting the ordinary routine of their profession, but in direct pursuance of that routine—to exercise those corporal acts of mercy, in their attention to the bodily wants of their fellow-men, the due performance of which formed so large a proportion of practical religion. In their practice they

would often be the recipients of much undeserved and unmerited praise; rarely they would have to bear undeserved blame. Let them walk on, caring for neither. If the world applauded, let them look upon it as the evidence of a general kindliness of disposition rather than as the result of their own merits. Should the world abuse them, rest satisfied also if they had done their duty there in teaching, and afterwards in the application of their learning, and if they should choose to set the balance of undeserved praise against that of undeserved blame, there were few of them, he thought, who, at the end of their career, would have much to complain of. Let them look to the grand object of their profession, the bringing health and rest to their fellow-creatures.

At the conclusion of the lecture, Dr. Frere retired amidst general and protracted cheering.

UNIVERSITY COLLEGE.

THE Introductory Lecture to the Medical Session was delivered in the Theatre of this Institution on Monday afternoon, by Professor Garrod, before a very numerous auditory. The lecture was listened to with great attention and interest, and at its close was loudly applauded. In the course of some excellent instructions upon the subject of Medical science, the learned Professor impressed upon the minds of the students present the necessity of industriously applying themselves to the Profession they had chosen. It was one which had its pleasures and its rewards; but, at the same time, was attended with its difficulties and its responsibilities. To attain to an adequate knowledge of its various branches would undoubtedly entail upon them no small amount of labour and mental exertion; but they would find their reward in the assurance that they promoted the happiness and welfare of their fellow-beings. As the responsibility was great, therefore so also was the reward; hence it became their imperative duty to improve to the utmost the talents with which Providence had endowed them. In dwelling upon the discoveries made in recent years in Medical science, the lecturer noticed the valuable aid which had been derived from the sciences of physiology and chemistry, without an acquaintance with which their knowledge of the functions of the animal economy would be most imperfect indeed. Chemistry, too, had been the means of exploding as useless and superfluous many drugs which, in former times, were held in high repute by the Medical Profession; and, while it had done this, had enabled them to introduce medicines of undoubted efficacy and utility. In conclusion, he urged upon his auditory the necessity of combining theory with practice. Mere theoretical knowledge alone was not of itself sufficient; neither, on the other hand, would the simple routine of practice enable them to deal with the new phenomena which must continually present themselves to their observation.

KING'S COLLEGE HOSPITAL.

The Medical Session of King's College Hospital was opened yesterday, in the presence of Professor Partridge, Professor Miller, Dr. Johnstone, Professor Lionel Beale, Professor Rymer Jones, Dr. A. Farre, and a large body of students and general visiters, in the large theatre of the Institution.

Dr. Guy delivered the introductory lecture. The knowledge which they would carry away with them from that place admitted of application to three distinct purposes. First, to the cure of disease and the relief of suffering; secondly, to the prevention of disease and the preservation of health; and, thirdly, to the furtherance of the ends of justice, by sound evidence given in Courts of Law upon matters with which their professional education had rendered them conversant. Of that last application of their knowledge, he would merely observe, that more than one of the examining bodies had long felt it to be of sufficient importance to entitle it to be made the subject of a distinct course of lectures. The second application of medical knowledge—to the preservation of health and the prevention of disease—though its importance was universally recognised, and it entered into the programme of the examinations at the University of London, had not yet been made the subject of a distinct and separate course of lectures. It was a subject, however, that had great claims upon their attention, and was one that ought to commend itself especially to Englishmen—for it was in England, during the last century, that an English physician—Dr. Jenner—discovered the means of banishing small-pox from the world; but a few short years after, Captain Cook and John Howard succeeded in proving that two other frightful scourges of their race—the scurvy and gaol fever—were amenable to preventive treatment. And it was in England also that the practice of hygienic precautions among the great mass of the people had been revived with a vigour and success which had attracted the attention, and provoked the imitation, of other nations. In the case of the Army and Navy Surgeon, the Surgeon of the emigrant or merchant vessel, the Union Medical Officer, and the Surgeons employed in our prisons, opportunities were constantly occurring of applying the principles of preventive medicine; but even the mass of medical men, in the ordinary practice of the profession, were not able, if they would, to separate the art of healing from the sister art of preventing disease; for it rarely happened that the prescription which was intended to cure an existing malady did not go hand in hand with the hygienic advice, which was calculated to prevent its recurrence.

Throughout the lecture, which was listened to with the deepest interest, Dr. Guy was warmly applauded.

ST. MARY'S HOSPITAL.

The Introductory Lecture to Clinical Surgery was delivered by Mr. Ure. He observed, that it was by the knowledge obtained at the bedside of the patient, and also in the operating theatre, that a man could be duly fitted for the discharge of his professional duties. While much information may be gained from general lectures and the attentive perusal of works of acknowledged merit, it is only within the wards of an hospital that the student can become familiar with the features of disease, can trace its progress through its various phases, and ascertain with precision the influence of remedial agents in checking or controlling its symptoms. He regarded clinical surgery, that is to say, the surgery of the bedside, as the complement of surgical science,—the application of established principles to practice; comprising the investigation and treatment of every form of external malady, infirmity, and injury, all branches of practical medicine became subservient to it. After showing that other departments of Medical learning were also subsidiary, he pointed out the manner of conducting clinical research, and illustrated it by a case in one of the wards. He concluded by stating, that this metropolis, with its population of two millions of souls, affords unparalleled advantages for Medical education. Nowhere in the world is such a vast variety of disease to be seen as within the walls of its hospitals. Hence it is, that students come hither from all parts of the country; because in none of the provincial hospitals can they obtain the opportunity of studying the different "ills that flesh is heir to" on the same extensive scale. Paris, with a population far inferior to our own, has been long and justly renowned as a school of clinical instruction; and he trusted that, at no distant period, London, whose "hospitals are as palaces," will stand pre-eminent in the same field.

ROYAL FREE HOSPITAL.

The inauguration of the new College took place on Wednesday evening in the theatre of the Institution, and in the presence of a large number of the friends and supporters of the hospital. Dr. Tyler Smith delivered the inaugural address, and was warmly received both during its delivery and at its termination.

SCHOOL OF ANATOMY AND MEDICINE.

1, GROSVENOR-PLACE.

THIS school was opened by the distribution of prizes awarded during the summer session of 1852, and the past winter session. Dr. Copland took the chair. The usual report of the prospects and condition of the school was read by Mr. James R. Lane. Dr. Theophilus Thompson moved the adoption of the report. He rejoiced to find it stated therein, that there was no ground for any report of the closure of the school, and that, as it had been carried on so successfully for a period of twenty-three years, it was not to be interrupted in its course of usefulness. Dr. Copland then distributed prizes to the following gentlemen:—

SUMMER SESSION, 1852.

Materia Medica.—Prize, Mr. Gilbert P. Girdwood; Certificate, Mr. Cyrus O. Daniell.

Botany.—Prize, Mr. Gilbert P. Girdwood; Certificate, Mr. Henry P. Meredith.

Medical Jurisprudence.—Prize, Mr. Thomas Forder.

Practical Chemistry.—Prize, Mr. Thomas Forder; Certificate, Mr. Thomas R. Jones.

Midwifery.—Senior: Prize, Mr. Charles J. White; Certificate, Mr. Thomas R. Jones. Junior: Prize, Mr. Cyrus O. Daniell; Certificate, Mr. Gilbert P. Girdwood.

WINTER SESSION, 1852-3.

Junior Anatomy (students of first session.)—Bronze Medal, Mr. Augustus Brown; Certificates, Messrs. Charles J. Meller, George G. Gascoyen, and Henry Cook.

Surgery.—Prize, Mr. Thomas Forder.

Chemistry.—Prize, Mr. James F. Benson; Certificates, Messrs. Henry Cook and G. G. Gascoyen.

The Chairman, at the conclusion of the distribution, addressed the students. Dr. Lankester proposed, and Dr. Sibson seconded, a vote of thanks to Dr. Copland. In his reply, the Doctor expressed a hope, not only that he might live to complete his Dictionary, but to send out a second edition, which he meant should be a great improvement.

QUEEN'S COLLEGE, BIRMINGHAM.

The session was opened on Tuesday last, by the Right Hon. Lord Lyttelton. Letters, expressive of regret at unavoidable absence, were received from the Earl Howe; Lords Redesdale and Leigh; C. N. Newdegate, Esq., M.P.; R. Spooner, Esq., M.P.; William Schofield, Esq., M.P.; and other influential Governors. The Rector of the parish, a large number of the parochial clergy, members of the Town Council, guardians of the poor, members of the Profession, Professors Dr. Johnstone, Davies, Heslop, Fife, and Professors Richards, Hunt, Espin, Sands Cox, Berry, Knowles, and Shaw were present. The following is the list of prizes presented on the occasion:—

Diploma of Fellowship.—Franks, Webb.

London University Matriculation Certificates.—First Division: Coathupe, Davies, Jauncey, Jordan.

Fourth Certificate in Mathematical Honours.—John Alban Davies.

PROFESSOR'S PRIZES.

Anatomy.—Medal and Certificate, Vincent; Certificate, Harris.

Surgery.—Medal and Certificate, Jordan; Certificate, Suckling.

Demonstrations.—Book, Vincent; Certificate, Waller.

Medicine.—Medal and Certificate, Jacob; Certificate, Brierley.

Midwifery.—Medal and Certificate, Jordan; Certificate, Suckling; Certificate, Townsend.

Materia Medica.—Medal and Certificate, Bond; Certificate, Williams.

Chemistry.—Medal and Certificate, Jacob; Certificate, Jordan.

Forensic Medicine.—Medal and Certificate, Jacob; Certificate, Jordan.

Botany.—Medal and Certificate, Bond.

Classical Tutor's Prize Books.—Bright.

Mathematical Tutor's Prize Books.—Bache, Bright.

Medical Tutor's Prize Books.—Chemistry, Casey; Anatomy, Ruffe, Bright.

The Piercy German Prize Books.—Bright.

The Webster French Prize Books.—Coathupe.

The French Master's Prize Books.—Lynch, Copestake.

Drawing Master's Prize.—Bright.

The Governor's Gold Medals.—Waller, Brierley.

The Warneford Scholarships.—William A. Smith, Bond.

The Warneford Prizes.—Gold Medal, Scofield; Books, Suckling.

After the distribution by the Right Hon. the Principal, an opening address was delivered by Professor Shaw.

SYDENHAM COLLEGE, BIRMINGHAM.

The Winter Session of Sydenham College Medical School was opened on Monday with an Introductory Lecture by Dr. Russell. The subject chosen by the lecturer was chiefly the grounds upon which medicine bases its claim to take a high place among the sciences, and consequently to receive respect and confidence from those to whom it addresses itself. The present condition of Medical knowledge was considered; and an attempt was made to show wherein the power of medicine consisted, and where the present limits to that power lie; and, in conclusion, reference was made to the great improvement in Medical practice effected by the cultivation of hygienic measures. At the conclusion of the lecture, a request was made for its publication.

The prizes were then distributed by the Principal, Dr. Bell Fletcher, to the meritorious students in the various classes.

The following is the list of students who received prizes and certificates of honour:—

Anatomy.—Prize, Mr. Charles Quinton.

Physiology.—Prize, Mr. Charles Quinton; Certificate, Mr. Frederick James Orford.

Medicine.—Prize, Mr. Charles Quinton.

Chemistry.—Prize, Mr. Charles Holtom; Certificates, Mr. Wm. Joyce, Mr. Thos. Partrige.

Botany.—Prize, Mr. Charles Holtom; Certificate, Mr. Frederick James Orford.

Midwifery.—Prize, Mr. Charles Quinton; Second Prizes, Mr Frederick James Orford, Mr. Thos. Partrige.

Materia Medica.—Prize, Mr. Thos. Partridge; Certificate, Mr. Frederick James Orford.

At a meeting of the Council of the Institution, consisting of Medical men from the town and Midland Counties, a report of the proceedings of the College during the past year was read by the Secretary; and, Dr. Bell Fletcher having resigned the office of Principal, Mr. W. H. Partridge was unanimously elected to that office. An offer was made by certain members of the Council to found a Council Prize, to be awarded to the best student for the year; and the offer having been gratefully accepted, it was referred to a Committee of the Council.

At the conclusion of the proceedings, the lecturers, with some members of the Council and friends, dined together at Dee's Hotel.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—At the usual quarterly meeting of the Comitia Majora held on Friday, September 30, the following gentlemen having undergone the necessary examinations for diploma were admitted members of the College:—

BALLARD, Dr., London.
CALLAWAY, Dr., London.
COOTE, Dr., Oxford.

ROYAL COLLEGE OF SURGEONS.—The new list of the Fellows and Members of the College has just appeared, and has become a most important and interesting publication. It contains 183 Fellows by examination, and 673 by nomination; making a total of 856. Of the Members, there appear to be 11,067 whose addresses are known, and 4,123 of whom no information has been received for some time; making a total of 15,190. It appears that 91 gentlemen have been admitted Licentiates in Midwifery of the College. The Council announces the following as the subject of the collegial triennial anatomical prize of fifty guineas, viz.: "The Structure and Functions of the Ganglionic Systems of Nerves in Man, illustrated by references to Comparative Anatomy." The subject for the Jacksonian Prize of twenty guineas, for the present year, is, "Diseases of the Testis and its Coverings, and their Treatment." The subject for the ensuing year, 1854, is, "The Structure and Treatment of Erectile Tumours." Another interesting document is an account of the receipts and expenditure of the College in the year ending Midsummer-day last, from which it appears, that the receipts from all sources amounted to 14,823*l.* 7s. 11d., and the disbursements to 23,522*l.* 6s. 10d. The summary gives an incidental income of 13,757*l.* 17s. 7d., and expenditure of 19,271*l.* 3s. 8d.; and a permanent income of only 1065*l.* 10s. 4d., whereas the permanent expenditure amounts to 4251*l.* 3s. 2d., or an excess of expenditure over the receipts of 3185*l.* 12s. 10d.

THE FELLOWSHIP.—The Examinations in Classics, Mathematics, and French, for this distinction, took place on Thursday last.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Sept. 29, 1853:—

BURT, STEPHEN JOHN, London.
KING, JOHN BISHOP, Brighton.
STEVENTON, WILLIAM, Cheadle.
VAUGHAN, EDWARD, Keynsham.

APPOINTMENTS.

MEDICAL.—At a meeting of the Dudley Local Board of Health, Mr. J. H. Houghton was unanimously elected Officer of Health to that Board.

NAVAL.—Surgeon John Page Burke, M.D., (1845), from the Buzzard, 6, paddle-wheel steam-sloop, on the North America and West Indies station, to the Imaum, 72, receiving-ship, at Jamaica; William Brown, M.D. (1845), to the Buzzard, vice Burke; Robert Hastings, M.D. (1853), to the Ferret, 3, sloop, on the West Coast of Africa station. Assistant-Surgeon: Richard J. Squire (1847), from the Victory flag-ship, at Portsmouth, to the Apollo troop-ship, at Sheerness. Acting Assistant-Surgeons: John Cowgan (1853), to the Victory; W. G. Hill (1853), to the Impregnable, flag-ship at Devonport; James Ross, to the Britannia, 120, flag-ship on the Mediterranean station; George C. Wilson, to the Boscawen, 70, flag-ship at Chatham; F. W. Davis, to the Victory.

MILITARY.—Hospital Staff: James Arthur Hanbury, M.B., to be Assistant-Surgeon to the Forces, vice Bell, appointed to the 74th Foot. Robert Fleetwood Andrews, gent., to be Assistant-Surgeon to the Forces, vice King, deceased.

DEATHS.

ARAGO.—On Sunday, at Paris, M. Arago. The funeral took place on Wednesday. A brigade of infantry marched with the

procession, and the Emperor was represented at the ceremony by Marshal Vaillant, Grand Marshal of the Palace. Though it rained incessantly, 3000 persons followed the procession to Père la Chaise.

CLELAND.—Augu st25, a t Trinidad, of yellow fever, Alexander Brown Cleland, M.D., Surgeon, 69th Regiment.

CURRIE.—September 17, at sea, on his passage to England, on board the Indiana, Augustus Octavius Currie, Assistant-Surgeon, H.E.I.C.S., fifth son of Claud Currie, Esq., late Physician-General, Madras.

ELKINGTON.—Oct. 3rd, at the Hibernia School, Phœnix-park, Dublin, deeply regretted by all who knew him, James Goodall Elkington, Esq., Surgeon, formerly of the 17th Lancers, in the 70th year of his age, after a lengthened service of 47 years, having served through the Peninsula and at Waterloo.

MARSH. — September 27, at Brentwood, Essex, Thomas Marsh, M.D., aged 47.

POWELL.—Sept. 20, suddenly, (apparently from disease of the heart,) John Gover Powell, Esq., surgeon, while passing through Frogmore-street, Bristol. Mr. Powell, at the time of his death, was returning home from visiting a patient to whom he had been summoned. He had been in practice in Bristol for more than half a century, and was held in great respect.

SWANE.—Sept. 28, at Nile-terrace, Rochester, aged 71, Stephen Jennings Swane, M.D., Deputy-Inspector of Hospitals and Fleets, and Justice of the Peace for the county of Kent.

IN INDIA.—Surgeon W. Harvey, 70th regiment, at Cawnpore, on the 1st August.—Surgeon S. Lyel, attached to the 3rd Light Cavalry, at Bellary, Madras, on the 17th July.—Assistant-Surgeon Thomas Clenkin, 25th Regiment Native Infantry, at Madras, on the 25th July.—Dr. David Keith, 3rd Regiment Sikh Local Infantry, in Hazarah, on the 4th July.—In the early part of August, off Green Island, coast of China, Dr. Thompson, late surgeon of the Lady Mary Wood, brutally murdered by Chinese pirates and mutineers.—On the 18th September, at Barnsfield, Kingsbridge, W. Toms, Esq., surgeon, greatly regretted. Mr. Toms had practised at Barnsfield for upwards of thirty-three years.

MEDICAL SOCIETY OF LONDON.—Some of our readers are doubtless aware that the Council of the Medical Society of London have decided to hold special meetings of the Fellows for the consideration of Physiological questions, apart from the ordinary meetings of the Society. No Physiological Society exists in this Metropolis, and, with such a multiplicity of societies, it would probably be hazardous to establish a new one,—at least until the want of it had been very generally acknowledged. Yet physiological papers are not well suited for discussion in societies where nearly the whole of the members are actively engaged in the practice of their Profession, although the importance of that department is so well known, and its progress universally hailed and admitted. The proposed plan, therefore, seeks to occupy a midway position, and, by affording a monthly opportunity for the discussion of such subjects, the General Society will be relieved of papers specially adapted to the few; and all those Fellows, whether few or many, who are devoted to physiological inquiries, or who desire to gain information in that direction, may freely, and we trust profitably, engage in the discussion. It was at one time feared lest the abstraction of any paper should induce a deficiency in the ordinary meetings; but the plethoric condition of the list for the ensuing Session has dispelled that doubt. Moreover, there is no reason why a Fellow, or, indeed, any Professional man not a Fellow of the Society, should not contribute to both departments. A certain restriction as to originality has been imposed, but, notwithstanding, many papers are forthcoming; and, as the new arrangements become more widely known, it may reasonably be hoped that they will contribute something to the advancement of science and to the interest of the Parent Society.

MEDICAL SOCIETY OF LONDON.—The first Special Physiological Meeting for the Session just commenced, will be held on Monday, October 10, at eight p.m., when a Paper will be read, on "The Means by which the Syphilitic Poison Enters the Constitution." By Henry Lee, Esq. At the next Ordinary Meeting, which will take place on Saturday, October 15, a Paper will be read by Mr. W. Coulson, on "Suppuration of the Joints from Infection of the Blood."

MEDICAL BENEVOLENT FUND.—At the meeting of the Committee, held September 27, the Treasurer announced that, on July 1, the sum due to the Treasurer was 29*l.* Since the above date the sum of 100*l.* 17s. had been received in annual subscriptions, and 28*l.* 4s. in donations, the payments for benevolent aid, etc., being 89*l.* 10s., leaving a balance due to the Treasurer of 15*l.* 4s. *Cases*:—1. An elderly Medical man, who had practised for thirty years in the parish of St. Marylebone, after many losses and misfortunes, is now in great distress. Recommended by Mr. Squibb and Mr. Lavies. Voted 5*l.*—2. The widow of a Medical man, residing in the east of London; she has to support a son, a Medical man, aged 31, who is insane. Recommended by Mr. Self, Mr. Falconer, and Mr. Wilson. Voted 10*l.*—3. The widow of a Medical man, who died after a long illness, leaving six children under eleven years of age, unprovided for. Recommended by Mr. Lord, Mr. Alford, and Mr. R. T. Smith. Voted 20*l.*, 10*l.* to be given now, and 10*l.* in six months.—4. The widow of a surgeon, who died from cholera in 1849. Relieved previously. Voted 5*l.* Several other cases were brought before the Committee; some were passed over as incomplete, or as not being suitable; others were deferred for further investigation.

CONVEYANCE OF CHOLERA PATIENTS TO HOSPITALS.—The following letter has been addressed to the Registrar-General by S. J. Burch, Esq., Resident Medical Officer of the London Hospital:—"September 26, 1853.—I have to report the death of a Spanish mariner (brought to the London Hospital from a vessel in the Thames) from Asiatic cholera, duration 24 hours. I am convinced that this man's death was accelerated by the mode in which he was brought to the hospital, while in a state of rapidly-approaching collapse; he had been placed in a sitting position in a cab. Had he been carried horizontally on a stretcher the chances would have been much more in his favour. During the prevalence of this malignant epidemic in 1849 I had frequent opportunities of observing that extreme cases of patients brought to this hospital sitting in the upright position in public conveyances generally proved fatal in a much greater proportion, and at an earlier period of the disease, than those in which the persons were carried supine upon stretchers, on account of the greater tendency to fatal syncope while in the upright position. Much experience at this hospital during many years convinces me of the truth of this observation, which applies equally to all forms of zymotic disease where there is a tendency to collapse or prostration of the vital power."

SMALL-POX.—A charge of wilfully propagating small-pox has been preferred, under the New Vaccination Act, in Devonshire, against a woman, who, desiring that her children should have the disease Devonshire fashion, by contagion, caused them to wear a neckerchief which had been worn by a woman sick of that malady. One female was convicted, and sentenced to a week's imprisonment; but the mother escaped, through, it is said, the perjury of her nephew, who was also to have been tried on that charge, but was too ill to be put to the bar. The Chairman of the magistrates said, that they were unwilling to proceed against him in the present state of his health, but wished it to be understood, that in all cases where persons were found to endanger the lives of their children by exposing them to small-pox, the utmost penalty would be inflicted. If death had ensued, the parties concerned would be tried for their lives.

THE LATE INTENSE HEAT IN NEW YORK.—The *Washington National Intelligencer* says, that the interments in Calvary (Catholic) Cemetery in Long Island, from the late intense heat in New York and its environs, amounted to one hundred and fifty in one day (Sunday). The population of a village was thus immured in that charnel-house in one day. Foreigners were the principal victims: few of the natives suffered. The Irish constituted five-eighths of the dead, and the Germans about one-half the remaining number. In Buffalo county, United States, there has been a plague of grashoppers destroying the vegetation. On the Rome and Watertown railroad they were so numerous as to stop the trains; they were crushed in the wheels, and caused such a "grease spot," that the wheels revolved, but the cars did not advance, until the officers had cleared the tramways.

DISEASE AMONG THE RUSSIAN TROOPS.—A letter from Bucharest of Sept. 24, says, that nearly one-fourth of the Russian troops in the Danubian Principalities are on the sick list. Typhus has broken out, and cholera too.

DURING a discussion between Dr. Draper and Dr. Watson, both of Boston (U.S.), Dr. Watson stated, that during four years and a-half he had taken from the inhabitants of Boston and its vicinity one hundred barrels of blood, and had administered forty-nine pounds of mercury!

THE Washington newspapers (U.S.) state, when speaking of the emigrant Irish, that of a given number not more than one-half survive the fifth year; hard work, fever, and whiskey destroying the others.

MORTALITY NOTABILIA.—The number of deaths from all causes registered in the Metropolis in the week that ended on Saturday, was 1212. This increase on the previous return arises chiefly from an excess of coroners' cases entered in the Register-books at the end of the quarter. While the mortality from diarrhœa declines, cholera becomes more fatal; the deaths referred to it having risen from 16 and 29 in the two previous weeks to 47 in the last. Of these 47 deaths from cholera, 31 were those of males, 16 of females, and they were thus distributed over London:—In the West Districts 3, in the North 6, in the Central 2, in the East 4, and on the South-side of the River 32.

Births.—Last week the births of 824 boys and 800 girls, in all 1624 children, were registered in London. In the eight corresponding weeks of the years 1845—52 the average number was 1368.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·636 in. The mean temperature in the week was 52·4°. The wind blew generally from the south-west.

DEATHS *in the Metropolis for the week ending Saturday, October* 1, 1853.

Causes of Death.	Oct. 1. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	547	423	235	1212	10404
Specified Causes	542	422	235	1202	10346
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases	211	75	20	306	2976
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	2	24	23	49	469
3. Tubercular Diseases	63	100	10	173	1671
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	54	40	53	147	1157
5. Diseases of the Heart and Blood-vessels	4	24	15	43	330
6. Diseases of the Lungs and of the other Organs of Respiration ...	63	21	28	112	1052
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	19	18	10	47	704
8. Diseases of the Kidneys, etc. ...	2	9	5	16	92
9. Childbirth, Diseases of the Uterus ...	...	6	...	6	96
10. Rheumatism Diseases of the Bones, Joints, etc.	1	5	2	8	68
11. Diseases of the Skin, Cellular Tissue, etc.	1	1	...	2	15
12. Malformations	4	...	...	4	36
13. Premature Birth and Debility ...	31	...	...	31	250
14. Atrophy	23	1	4	28	233
15. Age	...	...	39	39	426
16. Sudden	15	9	7	31	199
17. Violence, Privation, Cold, and Intemperance	49	89	19	160	572
Causes not Specified	5	1	...	10	58

BOOKS RECEIVED.

A Guide to Filey. By E. W. Pritchard, M.D. [A useful guide to visiters to this watering-place.]

Medical Reform; being the Sketch of a Plan for a National Institute of Medicine. By Azygos. London: Partridge and Oakey. 1853.

Notes Worth Noticing Relative to the Cholera. By Dr. Gillkrest. London: Golbourn. 1853.

Homœopathy: Its Globules Analysed. By W. J. Cox. London: Elliott. 1853.

Monographie des Eaux Minérales de Wiesbaden. Par M. le Dr. Braun. Wiesbaden. 1853.

Introductory Lecture delivered in the Grant Medical College, Bombay, Session 1853-54. By C. Morehead, M.D., Bombay. 1853. 8vo, pp. 45.

The Medical Examiner. No. VI. Philadelphia, 1853.

On the Physiological Uses of the Ganglionic Nervous System. By J. G. Davey, M.D., etc. London: Churchill. 1853. 8vo, pp. 20. (A reprint of a paper read last May at the Medical Society of London.)

Pharmaceutical Journal. October.

Journal of Psychological Medicine. October.

The Principles of Surgery. By James Miller, F.R.S.E., etc. Third Edition. Edinburgh: Black. 1853. 8vo, pp. 760.

Memoirs of John Abenethy. By G. Macilwain, F.R.C.S. Two Vols 8vo. London: Hurst and Blackett. 1853.

Popular Errors on the subject of Insanity, Examined and Exposed. By J. F. Duncan, A.M., M.D. Dublin: M'Glashan. 1853. 12mo, pp. 265.

The British and Foreign Medico-Chirurgical Review. October, 1853.

The Pathology and Treatment of Pulmonary Tuberculosis. By J. H. Bennett, M.D., F.R.S.E., etc. Edinburgh: Sutherland and Knox. 1853. 8vo, pp. 142.

Cholera; its Nature, Treatment, and Sanitary Requirements. By J. Scott Alison, M.D. London: Richards. 1853. 8vo, pp. 55.

The Vaccination Act, 1853, and Various Forms from the Registrar-General.

TO CORRESPONDENTS.

B. K. presents his compliments to the Editor of the "Medical Times and Gazette," and begs to enclose an Advertisement from the "Northamptou Herald," which savours rather of quackery, and requires notice.

Northampton, October 4, 1853.

"Mr. SMITH, Member of the Royal College of Surgeons of London, Oculist and Aurist to the Infirmary of Southam, Warwickshire, for curing diseases of the EYE and EAR, will attend at the GEORGE HOTEL, NORTHAMPTON, on the First Tuesday in each month.

"Subscribers to the Infirmary in the vicinity of Northampton, sending Patients, with recommendations, to consult Mr. Smith, at the George Hotel, are requested to desire them to attend exactly at Twelve o'clock.

"September 29, 1853."

[To the Editor of the Medical Times and Gazette.]

Sir,—For some weeks past I have been searching your columns, without success, for some notice or account of the duties and position of Militia Medical Officers, and for some guiding information for those who are almost weekly receiving Commissions. Some are in practice in distant parts of the country, and almost shut out from the means of obtaining necessary information concerning their duties, equipment, and pay, etc.

The responsible acting officers of regiments are either ignorant upon the subject, or consider it unnecessary to give them any information or instruction; a number of Medical Officers having received their commissions, have been left to find out their duty as best they can; many, with myself, are in this forlorn condition, and would thankfully receive any information upon the following points:—

1st. With regard to pay,—What is the pay of the Surgeon and Assistant-Surgeon?

Is there any additional pay, if either of these appointments are combined with another; for instance, Ensign or Lieutenant?

Is there any fee allowed to the Medical Officers for examining recruits? if so, what is the general arrangement between the Surgeon and Assistant-Surgeon in the matter?

Do the Medical Officers receive pay only when the regiment is called out?

2nd. With regard to equipment,—What is essentially necessary in the way of uniform?

Is there any difference in the uniform of simply an Assistant-Surgeon, and when he is also Lieutenant or Ensign?

Who are the Militia Outfitters, and what is about the cost of uniform?

If either you, or any of those gentlemen who have already been on duty, would enlighten us upon these matters, it would infinitely oblige,

The Awkward Squad.

Mr. A. Markwick recommends a blistering liniment composed of 2 oz. of camphor, 20 oz. rectified spirit, and 8 oz. of the strong liquid ammonia, applied upon impermeable piline in the treatment of cholera.

Mr. Kirkman, of Horndean, uses turpentine in the same manner.

We cannot insert the case of Death from Chloroform at the Edinburgh Infirmary, unless authenticated.

J. C., Edinburgh.—We will notice the case next week, as our second Correspondent has given his name.

Mr Robert Scott does not inform us, in his letter, if he has a legal qualification or not.

Dr. Johnson's last Lecture is in type, and will appear next week.

Dr. C. J. B. Aldis recommends the use of injections of acetate of lead in cholera. He has treated obstinate diarrhœa in this way with success, injecting 7 gr. in 4 oz. of water twice a-day.

A Union Medical Officer.—The whole system must be revised before long. Individual exertion does but little. The whole body of Union Medical Officers should unite, draw up a short, clear statement of their case, and present it to the Home Secretary.

Dr. Borrett's cases shall be inserted.

Mr. Paget's paper on Hernia is in the printer's hands, and will appear next week.

Mr. Sullivan.—We cannot insert the letter at present.

Mr. Cooper, Surgeon to the Bloomsbury Dispensary, speaks highly of the combination of carbonate of soda with opium in the early stage of cholera.

E. J. B.—We will publish the case shortly.

We are glad to learn from the letter of Mr. Ikins, of Leeds, that the teaching of Histological Anatomy is more general than the readers of Dr. Hayes's lectures might be led to suppose from the sentence Mr. Ikins complains of. We can readily believe that the subject is well taught in the excellent School of Medicine at Leeds.

[To the Editor of the Medical Times and Gazette.]

Sir,—You have from time to time published in your valuable periodical certain paragraphs, entitled "Gems from the Irish Poor-law." I now beg to furnish you with an additional one, that rivals the Koh-i-Noor in brilliancy, as it really sheds a mountain of light upon the constitution of our Boards of Guardians, and their ideas of the value of a medical man.

The members of the Dispensary Committee of * * * in the * * * Union, recommended that the salary of their medical officer should be raised from £60 to £100 per annum, as his district spreads over 31,000 acres, and has a population of 8,603: they being of opinion that he could not possibly fulfil the duties of the situation without keeping one horse at least, the keeping and wear and tear of which being deducted from the salary, would leave virtually only £30 a-year for the doctor.

The Guardians scouted the proposition, and the same day appointed a weaver to the Union Workhouse at £52 per annum.

I am, etc.

Ireland, Sept. 17, 1853. An Old Subscriber.

Justitia.—The Act only refers to attendance before coroners. We do not think our Correspondent could recover a fee from the Magistrates unless *ordered* to attend by them. In that case his connexion with the hospital would not diminish his right to demand payment for his services.

We shall be happy to receive Dr. Allison's Abstract of the Lunacy Acts.

Referring to the Circular by Mr. Weston we published last week, that gentleman informs us, that he obtained his diploma twenty years since, and that his name appears in the "Medical Directory" for 1845. He adds, "I say that I have not descended to recommend my services in any way to the prejudice of others. This I did not. It would have been indeed derogatory to the honour of the town and profession in which I was born. I did not do and say what some do who style themselves M.D., and practise within a short distance,—call with card in hand, *de die in diem*, soliciting on the plea of some charitable institution; attending at 1s. or more as the case may be; midwifery at 7s. 6d. and 10s.; surgeons and chemists (surgical chemists) attending at 2s. 6d. and 4s. 6d. per annum per head, etc.; circulating inflated proceedings of their self-supporting, self-immolating dispensary; who beguile our patients, and overlook our little momoranda for unpaid professional attendances." He explains satisfactorily his connexion with the Visiting Society; but we still think his circular lays him open to the suspicion of seeking for practice in an unprofessional manner, although he may feel himself guiltless of such an imputation.

COMMUNICATIONS have been received from—

The Registrar-General; Mr. A. Markwick; Mr. Kirkman, of Horndean; Mr. Robert Scott; Dr. George Johnson, of Woburn square: Dr. C. J. B. Aldis; Dr. Hofmann, of the College of Chemistry: Dr. Snow, of Sackville-street; Dr. Borrett; Mr. Cooper; Mr. Paget; B. K.; A Union Medical Officer; E. J. B.; Mr. Sullivan; Mr. Ikins, of Leeds; An Old Subscriber; etc.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES
ON THE
RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE
The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture VI.

One of the chief objects which I proposed to myself in the three preceding lectures was, to describe those milder symptoms of nervous derangement which, in a certain proportion of cases, constitute, in fact, the earlier stage of some of the most formidable diseases with which the physician has to contend. A patient who now complains that he is unable to sleep, or that his sleep is habitually disturbed by frightful dreams and visions, may at no very distant period, if he do not obtain relief from these distressing symptoms, become epileptic or insane. Another object which I had in view was, to trace these diseases to their remote causes; and I have endeavoured to show that, in a larger proportion of cases, the origin of the nervous diseases to which I refer may be traced to the operation of mental influences;—to the influence of anxiety, grief, or terror.

It is frequently asserted respecting patients whose mental or bodily health is much impaired by grief or anxiety, that they must have had some peculiarity of constitution which *predisposed* them to be thus seriously influenced by causes which have no such effect upon many other men who are equally exposed to them. In many cases, too, it is said that the disease, or the tendency to it, has been *inherited* from the parents of the sufferer. I am not prepared to deny the general accuracy of either of these propositions, but I am desirous to guard against some of the practical evils which may result from a vague application of the terms predisposition and hereditary tendency.

With reference to predisposition, the doctrine is true of nervous diseases, as of nearly every other form of disease. Out of a given number of persons who are equally exposed to the same injurious influences, a certain proportion will suffer more than others, and it will often happen that some individuals are scarcely influenced by causes which have a very prejudicial and destructive effect upon others. Now, what we have to guard against in the use of the term *predisposition* is, the tendency to apply it, in our attempts to unravel the mysteries of disease, in such a manner as would imply a belief, that by the mere use of the word we have given a sufficient account of the phenomena. The propensity to substitute words for ideas, to invent and to apply a name, and then to dismiss the subject without further investigation, is a very common impediment in the way of an actual advance of knowledge, and one against which the pathologist needs to be constantly on the watch.

With respect to the influence of various sources of grief and anxiety upon the mind and body, it is not difficult to predict, that some persons will suffer from such influences in a greater degree than others, and also in a different manner. But our predictions will often be falsified, unless they are based upon a very careful consideration of the entire constitution, mental and bodily, of those to whom they relate; unless, too, allowance be made for the modifying influence of intellectual and moral training. It is quite beyond my present purpose to enter upon the full consideration of this extensive and difficult subject. I will merely remark, in passing, that it is not those who *appear* to be most sensitive who generally suffer in the greatest degree from the depressing emotions. On the contrary, mental anxiety often exerts its most pernicious influence both upon the mind and the body of those who have a proud and cold exterior, and whose natural reserve of manner might lead to the erroneous belief, that they are little affected either by joy or sorrow. The most powerful mind and body are often unable to resist the influence of *suppressed* anxiety. Grief may be rendered quite intolerable by *pride*, and the spirit that will not *bend* will sometimes *break* beneath a load of care and sorrow.

And now, with respect to the subject of hereditary disease, it is unquestionable, that children often suffer from the same forms of nervous disease as those which have affected one or other parent; and it is an undoubted fact, that nervous diseases occurring in the children of nervous parents, are often more unfavourable, and less influenced by treatment, than similar diseases occurring in the offspring of healthy parents. It is practically of much importance to distinguish between the various modes in which diseases may be transmitted from parent to offspring. 1st. A disease may be actually inbred, or congenital. 2nd. The tendency to disease may be transmitted, but this will require the operation of certain exciting causes to produce the actual development of disease; and 3rd. The child may acquire from his parents certain habits which favour the occurrence of the same diseases in successive generations.

The practical rule, in reference to this matter, is, that the existence of any hereditary morbid tendency is a powerful reason for the exercise of constant care, to avoid the exciting causes of disease; for, when a disease is not actually congenital or existent, it may often be entirely escaped by a strict avoidance of its known causes; while, on the other hand, the tendency to disease in the offspring will certainly be confirmed by the continued operation of those influences which originally excited the same disease in the parents. The son may not acquire the father's gout by direct inheritance; but, if he inherit his parent's luxurious habits, together with the means of indulging them, he may earn the gout for himself, and this the more readily, in consequence of the morbid tendency which perhaps has been transmitted to him. In short, as there is no disease or morbid tendency capable of being transmitted from parent to offspring which may not be originally acquired by exposure to its known causes, without hereditary predisposition; so there is not one which may not be escaped even by those who are supposed to have an inherited tendency, if they will be vigilant to avoid its exciting causes. And this, I repeat, is the practical lesson to be derived from a study of hereditary disease.

There is something strange and startling in the excuses for self-indulgence which are often based upon the kind of fatalism which is implied in an abuse or misapprehension of the doctrine of hereditary disease. "I know I must suffer from the gout, because my father was killed by the disease; why, then, should I abstain from drinking porter?" Such, in substance, is the reasoning of many a working man who drinks his "two or three pots" of porter daily, but who can ill afford to suffer from a disabling and painful disease, or to spare the money which it costs him to acquire it.

PRINCIPLES OF TREATMENT.

In my previous lectures I have had frequent occasion to refer to principles of treatment and to the influence of particular remedies upon the various forms of nervous disease and derangement with which I have occupied your atten-

tion. I purpose now to devote the remaining portion of this lecture to a more detailed consideration of the important subject of treatment.

There are two methods of illustrating in general terms the intimacy and the importance of the relationship between therapeutics and pathology. The one method is to select a single prominent symptom of disease, and to indicate the various causes and conditions which may give rise to that symptom, these causes being not only of a different nature in different cases, but sometimes even of an essentially opposite character. It follows, therefore, that the removal of that symptom can be successfully attempted only by remedial measures, adapted in each case to the particular nature of the cause which has given rise to it.

Take, for instance, a very common and a very distressing symptom—headache. In what a multitude of causes it may originate, and how essentially different and even contrary to each other are these causes in different cases! First, there are the various kinds of headache which result chiefly from the state of the blood and of the circulation. The blood may be too abundant and too rich; or, on the contrary, it may be scanty and deficient in nutrient materials, and headache of the most intense character may be caused by either of these opposite conditions. It scarcely need be said, that the treatment which will cure one form of headache will certainly aggravate the other. Again, headache may result from contamination of the blood by some noxious materials which have either been generated within the body or introduced from without. An accumulation in the blood of urinary or biliary constituents, or of carbonic acid, is a frequent cause of headache. The two first-mentioned conditions may, in most instances, be traced to functional derangement or structural changes affecting the kidneys and liver, and to these organs the treatment must be directed, while an excess of carbonic acid in the blood is usually dependent either on some morbid state of the lungs or heart, or on the composition of the atmosphere which the patient has breathed.

In other cases, the headache may be attributed to the contamination of the blood by materials which have been absorbed from the intestinal canal, and the cure of it is to be sought by a strict attention to diet and regimen, and by the administration of alteratives and aperients. Headache appears sometimes to be connected with gout, and it is immediately occasioned, perhaps, by the presence in the blood of some of the peculiar gouty products, whatever these products may be. And, again, headache often forms a prominent symptom in the early stages of the acute febrile diseases. In all the cases to which I have referred, the immediate cause of the headache is, in all probability, a morbid condition of the blood.

In another class of cases, the cause of the headache is of a more local character, and consists in a morbid state of the brain, or its membranes, or of the cranial bones.(a) And, lastly, there is a large and important class of cases which may be considered as intermediate between the two before mentioned,—between those in which the headache results from an abnormal condition of the blood, and those in which that symptom depends upon local disease of the head. I refer to the headache which is excited by the influence of fatigue, anxiety, and various other kinds of mental emotion,—nervous headache, as it is sometimes called. I consider this to be intermediate between the other two classes of cases, because, although the first stress and strain of mental emotion are obviously upon the brain, yet it is equally manifest that, through the disturbing influence which it exerts upon the functions of various other organs, the operation of mental emotion is quickly and widely diffused, and it is probable that the headache which results from it is, in part at least, occasioned by its secondary influence upon the blood and the circulation. It is evident, therefore, that, as this one symptom,—headache,—may result from widely different conditions and causes, so its treatment must be conducted with a constant reference to the nature and origin of the evil which we seek to remove,—the same symptom requiring a different and even an opposite mode of treatment in different cases; and this, as I have before observed, is one method of illustrating the connexion between therapeutics and pathology.

(a) It may be observed that, even this apparently local cause of headache may have originated in some morbid condition of the blood, as, for instance, when disease of the cranial bones has been induced by the poison of syphilis.

Another method of showing the relationship between these two departments of science is, to examine the various symptoms which may result from the operation of one class of morbific influences, with the view of demonstrating the beneficial effects of one plan of treatment in removing symptoms, which, to a superficial observer, would appear to be, and are, indeed, widely different, but which, being united to each other by the bond of a common origin, are remediable by a single method of cure. For this mode of illustrating the connexion between therapeutics and pathology, I believe that no class of diseases are better adapted than those which have formed the subject of the three preceding lectures,—I mean the various morbid conditions which result from the operation of different kinds of mental emotion; for as there is scarcely any other single kind of morbific agency which may give rise to symptoms so numerous and so diverse as the mental influences to which I have referred, so there are no forms of disease which require for their successful treatment so constant a recognition of their cause and origin. The knowledge of the cause of a disease—I mean of its remote, outward, originating cause—is, in many cases, of more practical value with reference both to prognosis and treatment, than the most minute investigation of morbid structure, or of the processes by which the structural changes have been effected. If we can detect the originating cause of a symptom, or of a group of symptoms, and if the cause be one which is removable or avoidable, we may often relieve our patient from his disease by instructing him to avoid its cause, although we may know nothing of the morbid anatomy of the disease, and but little of the relation and sequence of its phenomena; while, on the contrary, a very exact knowledge of the consequences of a disease, without some insight into its origin and cause, may be entirely useless for any practical purpose. The following remarks with reference to this subject are from the pen of Dr. Latham(a):—"Our surer knowledge, which regards external causes, is most within our reach; its fruit is most appreciable, and at hand; it concerns the prevention of what is often incurable; it claims an industrious pursuit under a moral obligation, if not from its scientific character. But our more precarious knowledge, which regards internal operations, is what we are most proud of. We learn and we unlearn, and win a truth after the labour of years, and cannot help putting a high price upon it; and, indeed, it has a scientific value which I will not venture to dispute or to depreciate."

We have, in the present day, a manifest tendency to be proud of the knowledge which we possess, or imagine that we possess, of the internal operations of disease; but if we consider the very insecure basis for many of the speculations upon this subject, we shall hesitate before we assign to uncertain and often fruitless hypotheses a scientific character and value, which we deny to that more sure and important knowledge which regards the external causes of disease. There is probably no class of maladies in reference to which it is more important to attend to the remote and outward causes of disease, and to avoid being misled by attempts to explain the proximate cause and the intimate nature of morbid phenomena, than with respect to diseases of the nervous system. I shall not, I trust, be thought to depreciate the value of minute pathological researches. I believe them to be of great importance. But I am persuaded, that, in the present state of our knowledge with regard to many diseases, these researches and their results can claim only a subordinate position, and that they ought not to usurp the place of knowledge, which has a higher practical value and a greater scientific importance. In short, the knowledge that delirium or epilepsy may be induced by over-work and anxiety appears to be, in every respect, more valuable than any hypothesis or speculation as to the chemical or microscopical changes in the blood or in the brain which may be supposed to be the proximate cause of these diseased conditions.

Those who have done me the favour to attend to the description which I have given of the symptoms which result from over-work, from anxiety, and from various kinds of mental emotion, will anticipate the method of treatment which I am about to advocate. Indeed, if the symptoms have been correctly described, and assigned to their true causes, the method of treatment can scarcely admit of dispute.

[To be concluded.]

(a) On Diseases of the Heart.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. VII.

TWO CASES OF EXTRACTION OF LOOSE CARTILAGES FROM THE ELBOW-JOINT.

By CHARLES DEANE STEELE, Esq.
Surgeon H.M.S. Arethusa.

J. W., aged 27, able-bodied seaman, presented himself on the 12th of August, 1852, after being aloft reefing topsails, complaining of pain in the posterior aspect of elbow-joint, inability to straighten it completely; pronation and supination perfect. He had previously been on the sick-list for fourteen days with pain and swelling of the elbow, after exerting himself violently in rowing a race, but had been discharged to duty August 9, apparently well. There was not any displacement of the bones of the joint, but slight crepitus or crackling could be detected at the ulnar side of olecranon, which led to the belief that a fracture had taken place through the olecranon without displacement. The arm was put up in a straight splint, and kept quiet twenty-eight days. On being let loose, any motion or exertion caused pain, and the same crepitus could be felt just under the ulnar nerve. It was now placed on an angular gutta percha splint, and kept there for three weeks; it was then let loose; still full extension could not be performed, nor could he use it, there being a sense of weakness and occasional pain. One day he suddenly felt something slip between the head of the radius and olecranon. A small hard substance could be felt, and slightly moved, and this spot was tender. It was again bandaged to the angular splint after some time; when let loose again, although the foreign body could be felt in the same position, he was unable to use the joint freely, being unable to extend it fully; the sense of weakness and occasional pain remained. A subcutaneous knife was introduced, and an endeavour made to displace the foreign body, but without avail. An incision was then made down on it, and it was extracted from the joint. It proved to be a piece of semi-ossified cartilage, of the size and shape of a kidney-bean, its surface glistening; the small end was towards the surface. The wound was closed immediately by three sutures, and isinglass-plaster in the intervals, over that goldbeaters' skin and two pads of lint were placed, the latter so adapted as to press the edges together; it was then placed in an angular splint. This was done December 6th; the wound was entirely healed by the 23rd, and he was sent to duty January 20th, 1853, since which he has had perfect and full use of the joint. It was contemplated that, by keeping the joint quiet, the body might have formed a bed for itself, when it would not have interfered with the motions of the joint. The substance, as it was felt under the finger, seemed to be about the size of a split-pea, and it was slightly moveable; therefore it was inferred, that the subcutaneous incision would have permitted it to be destroyed, but cutting on it, or to either side, and the introduction of Liston's artery-forceps would not start it; this arose from its longest diameter being protruded or fixed between radius, humerus, and ulna. After so many incisions and so much handling, it is rather surprising that the wound closed so readily as it did, for on the fourth day it was seen to be united at all points under the goldbeaters'-skin. This desirable end might have been attained so easily from the joint having been so long kept in a quiet state before, and from the foreign body being removed, leaving the joint in a better condition than while it was there. From the time of the operation until the wound had well closed, he was kept on low diet, and took the solution of morphia in ten minim doses every four hours.

E. D., aged 21, ordinary seaman, June 29, after lifting a heavy weight—the fire-engine—he felt great pain in his left elbow; no difficulty in moving the joint; increase of pain while extending the joint; it cannot be effected fully; pronation and supination perfect. There appeared to be considerable thickening about the lower part of the humerus, as if it had previously been fractured through the condyle. This he denied, but stated that, three years ago, while an apprentice in a Barking smack, he had great pain of the elbow every night when he went to bed, and also stiffness; that he had been to Mr. Busk, of the Dreadnought, but had received no benefit; that subsequently he had been under Mr. Hilton, at Guy's Hospital; that then the arm had been put up in angular pasteboard splints, after which it got well, and he has not felt any inconvenience up to the present time. A bandage was applied to the arm, and spirit lotion ordered, the arm to be supported in a sling. After a few days it became more painful and swollen, when twelve leeches were applied, followed by fomentations and a continuance of the lotion. On the 20th of July there was very little swelling, no pain; but it could not be extended fully for the pain it occasioned, and a sense as if the joint were locked. At the radial side of ulna, just between the outer condyle of humerus and head of radius, where there ought to be a depression, a swelling was detected, and a hard substance could be felt. It was tender here on pressure, and pain, which was caused on extending the arm, radiated from this. The hard substance was very slightly moveable longitudinally, but not laterally; on flexing the arm it sank in so as barely to be felt, and on extending it again it protruded; and if this were done suddenly, there would be a loud snap on the joint, with considerable pain. It was now kept perfectly quiet in an angular splint made of gutta percha, until August 26. On removing it there was not any change; the motion of extension was still interfered with, and he felt unable to use his elbow; the hard substance could be felt more prominent from the wasting of the muscles.

He was put under the influence of chloroform, and a longitudinal incision was made down on the foreign body. On exposing it, and lifting it through the opening in the synovial membrane, it was found to be adherent by one side, which had to be divided ere it could be removed. It was white and glistening, of the size of a small hazel-nut; there was a rough spot on one side, as if it had recently been broken off from an adhesion, and on this side there was a sort of pellicle, where it adhered before it could be separated from the joint. The wound was closed accurately by three sutures, and isinglass-plaster intervening between the stitches; over all a large piece of gold-beaters' skin; then two pads of lint, so as to press the sides of the wound together; over all a bandage. It was then fastened to a well-padded angular splint.

September 1.—The wound has united at all points; there have been pain, heat, and swelling of the elbow, but all appearance of inflammation has been subdued by leeches and spirit lotion; it is still on the splint, but there does not appear to be any reason to fear his recovering the full use of the joint. It is quite evident that an attempt to remove the foreign body by subcutaneous incision would have failed, since it was so firmly attached; therefore, the clear incision down to it was to be preferred. The difference in the season of the year has doubtless had an influence in preventing the latter wound from healing so readily as the former, for the thermometer has been standing at 80° ever since, and when the former was done it was only at 65°; besides, the latter patient is a man of less placid mind.

Both cases have taken place within fourteen months, out of a crew of 500 men, which is singular. They both occurred under parallel circumstances, after some severe exertion; it is quite clear that they must have been fixed in some place in the joint which admitted of its performing its motions; doubtless they were gradually increasing in size, some sudden violent exertion disturbed them from their attachment, and thus they became the hindrance to the joint performing its duties which they appeared to be. It is strange that they should both have found their way into the same locality. The former man has never had any rheumatic attacks, but it appears as if the latter had been suffering from something of that sort while in the Barking smack.

TWO CASES OF INGUINAL HERNIA,

IN WHICH THE SAC WAS PUSHED BACK WITH THE INTESTINE.

By JAMES PAGET, Esq., F.R.S.
Assistant-Surgeon to St. Bartholomew's Hospital.

[Partly read to the Abernethian Society, Feb. 12, 1852.]

Case 1.—A strong and healthy-looking waterman was admitted into St. Bartholomew's Hospital, under my care, on the 19th of August, 1851. He was 23 years old, and had had double scrotal herniæ for ten years. For these he had always worn a truss; and whenever either of them protruded, he had been able to return it easily, by lying on his back and slightly pressing the swelling.

In the evening before his admission, while making some great exertion, the hernia on the left side became of larger size than usual,—it was now larger than his fist. When he went to bed, he tried to reduce it, and pushed it harder than had generally been necessary. It appeared to be reduced; but he thought that "some of it stopped," near the situation of the internal ring. Directly after this, he had great pain at and about the ring, such pain as kept him awake all the night. Next morning, his bowels were freely opened; and an enema, administered soon after his admission, returned with fæcal matter.

At half-past two p.m., I found him with no expression of illness, but looking ruddy and tranquil, and disposed to sleep. He had just been in a warm bath. His pulse was 72, full and strong; his tongue furred; his skin natural.

In the course of the left inguinal canal, one could just see, and more plainly feel, a slight fulness; but it was not more nor other than might depend on an empty hernial sac descending as far as the external ring. The left spermatic cord felt larger than the right, but no hernial sac could be distinctly traced as connected with it. The left testicle was higher than the right, and appeared unusually drawn up towards the external ring. Pressure over the internal ring was very painful; and similar pain, in a less degree, was caused by pressure on any part of the space between this ring and the umbilicus, but not on the space between it and the crest of the ilium or the external ring. Pressing backwards deeply behind the internal ring, one could obscurely feel something firm but ill-defined, which had nothing corresponding to it on the right side; and the lower part of the left rectus abdominis muscle was more tense and firm than that of the right. On coughing, impulse was felt from the internal to the external ring, but no further. The patient complained only of pain at and about the internal ring, and occasionally of griping pain at and about the umbilicus.

It seemed probable that this was a case in which either the hernia was returned *en masse* with the sac, or a portion of intestine remained girt at the internal ring, the rest being returned; but it was suggested that, while scarcely any signs of strangulation were yet manifested, the operation might be for a few hours deferred. Half an ounce of castor-oil was given. The patient soon after fell asleep; he slept soundly for two hours, and, on awaking, vomited; and then slept for another hour. His condition seemed unchanged. Five grains of calomel were given, and he again slept naturally for nearly two hours. Then, when he awoke, he looked ill; his face was not so florid, and had an anxious appearance; the parts about the inguinal ring were more tender, and his tongue was rather dry; he was thirsty, and had more severe griping pain; but his pulse was only 67, and had nothing unnatural in its beat.

He had grown worse rather than better in the five hours' delay, and I therefore operated at once. The inguinal canal was laid open in its whole length; and the lower border of the internal oblique and transverse muscles being freely divided, a hernial sac was exposed, extending from the internal to the external ring. During exposure, it became full and tense, and felt as if it contained omentum; but, when it was opened, only serous fluid, with some coagulated fibrin, escaped from it. The walls of this sac were half a line thick; it was white and smooth on its outer surface, and would have contained about half an ounce of fluid. When I passed my finger along and through the sac, towards the abdominal cavity, all at first appeared free and natural; I could feel only a large coil of small intestine, as if an empty ordinary hernial sac had been laid open, and the finger had been passed into a healthy abdominal cavity. But, when the finger was directed far backwards, towards the back of the abdominal cavity, I felt, with its extreme point, something tightly constricting the most distant part of the coil of intestine. It was soon clear that this tight constriction was effected by the mouth of a hernial sac, pushed back with the intestine. I therefore pulled gently on the part of the sac which had been opened, and which lay in the inguinal canal, and presently drew down the remainder of it. This formed a nearly globular swelling, between two and three inches in diameter; it was filled with small intestine, which was dark with congestion, and very tightly constricted by its mouth. The mouth of the sac, sharp-edged, hard, and unyielding, was now divided, and the intestine was without difficulty returned into the abdomen.

The patient spent the greater part of the twenty-four hours following the operation in sound sleep; but as often and as long as he was awake he was restless with pain about the internal ring, the hernial sac, and the umbilicus; indeed, both this pain and the tenderness on pressure were, at times, as great as before the operation; the rest of the abdomen was pliant, and painless when pressed. His face was generally flushed and anxious; his skin warm, and generally dry; tongue dry and brown-furred along the dorsum, but moist at the edges and tip; pulse ranging from 96 to 114, variable in size, generally hard; thirst more than natural. His abdominal breathing was diminished; he had no vomiting or action of the bowels; and he complained of nothing but the pain above mentioned.

During these twenty-four hours, leeches were four times applied over the seat of pain; and after each time the pain was temporarily diminished, and his pulse became softer. Sixty-five leeches were thus used. No medicine was given; and he took nothing but a little bread, and tea, and water.

In the second day, he had much less pain, and it was nearly limited to the seat of the hernial sac and the part at which the peritoneum had been separated from the abdominal walls. He could bear pressure everywhere else, and there was no feeling of tension. His pulse was 96, softer and fuller than on the previous day; his tongue all moist and chiefly white-furred; his skin warm, soft, and moist; his face tranquil, and less flushed. Thus he remained all day, frequently sleeping soundly; but at night the pain increased, and the seat of the wound became swollen, as if an abscess were forming under the integuments. The bandage and pad put on after the operation, were removed; twenty more leeches were applied, and after them a poultice. The same abstinence from food was all day voluntarily observed, and no medicine was given.

During the third day after the operation, his condition was one of constant slight improvement in his general symptoms, without diminution, but rather with some increase, of the pain and swelling in the groin, and now, also, in the scrotum, as if about the testicle. Here the integuments were red, swollen, firm, and very tender. The wound was nearly all closed, but discharged from the remaining openings a scanty thin fluid.

In the evening of this day, as the pain about the groin increased, eighteen more leeches (making ninety-eight since the operation) were applied. He took in the day about a pint of bread and milk.

On the fourth day, the pain, after the last application of leeches, had greatly diminished; he had slept well through the night, and his general symptoms were still improving. His bowels were still unmoved. A common enema was injected, and soon returned with a free evacuation of hard, and some fluid, fæces. He took bread and milk during the day, and felt and looked nearly well.

From this time his recovery was uninterrupted. He had a free purulent discharge from the wound, and from a narrow suppurating tract leading from it into the scrotum, but both steadily healed, and he left the hospital well at the beginning of October.

In May, 1853, he told me he had been well and hard-working since he left; the hernia operated on had never since descended, but he had been much more often than before subject to the descents of that on the opposite side.

Case 2.—William Lyons, 41 years old, a tall, muscular cabinet-maker, of pallid, unhealthy appearance, and of rather intemperate habits, was admitted under me on the 25th of August, 1853. He said, that he had been subject to scrotal hernia for twenty-three or twenty-four years, and had worn a truss, and was able to return the hernia whenever it descended. He had had no serious trouble with it

till about five weeks ago, when it "came down," but, instead of a swelling in his scrotum, he found one in his groin, like that with which he was now admitted. He could not remove it, and, therefore, came at once to the hospital, where Mr. Fletcher, the house-surgeon, ordered him a warm-bath and some opiate, and where, while he was asleep, the hernia "went back of itself." The last descent of the hernia into the scrotum had been on some day in the week previous to its appearance at the groin, and on that occasion he had an impression that, when he returned it, it "went the wrong way." Still he remained well after this, and no appearance of the hernia was observed till the morning of this his second admission, when (from no known cause) he had occasional vomiting, and, during his straining, the swelling came in his groin again. This occurred at seven a.m.; his bowels acted shortly after; he was admitted at eleven a.m., after having tried in vain to reduce the hernia in a warm-bath; and I saw him at half-past one p.m.

He was pallid; his face was expressive of severe suffering; and he often writhed with abdominal pain and griping about the umbilicus. He occasionally tried to vomit, and ejected small quantities of frothy mucus. In his left groin, at and just within the internal inguinal ring, one could feel a firm, ill-defined swelling; but it was so painful, and so sensitive to pressure, that it was not possible to examine minutely the parts behind it, or deeper than it. In the rest of the inguinal canal, there was a slight feeling of fulness, but no other change, and one might have thought it healthy. The finger, inverting the scrotum, could be pushed into the external ring, and far along the canal, without meeting any obstacle. The abdomen was moderately pliant, soft, and not tender on pressure. One might have felt nearly sure, that, in this case, the hernia was returned with the sac, but for the patient's account, that it was in this same state five weeks previously; that it had then returned almost spontaneously, and that, for nearly six weeks, it had not been in the scrotum. But, whatever might be its state, the indications for an immediate operation were sufficient, and were followed.

On laying opon the inguinal canal, there appeared in it, and extending just beyond the external ring, a collapsed portion of hernial sac, with thin, opaque walls, containing a small quantity of clear serous fluid. It was but slightly adherent to the surrounding tissues; and, when the lower border of the internal oblique and transverse muscles was freely divided, this portion of sac was found to be continuous with another part, which was distended with fluid, and stretched the internal ring, and seemed to extend far backwards. Passing my finger on the exterior of this distended part of the sac, it seemed to go through a widened internal ring, and thence, without violence, backwards towards the sacro-iliac symphysis, or downwards to the brim of the pelvis; it did not easily pass upwards. Presently I found, that, in passing my finger on the external surface of the sac, as far backwards as possible, it seemed, at the furthest distance, to turn inwards as if towards a gradually narrowing neck and mouth of the sac. I tried to pull down what thus appeared to be the pushed-back sac; but it did not move. I therefore opened the sac at the part distended with fluid, and then, pulling it down, at the same time as the parts about the internal ring and the ring itself were pulled upwards and outwards, brought the more distant portion gradually into view. This portion, which had been pushed back behind the internal ring, was about two inches in diameter, and its thickened narrow mouth tightly constricted a piece of small intestine between three and four inches long. The intestine was very dark, and its coats were thickened with congestion and with effused blood; but when the sac's mouth was divided it was returned without force.

In the twenty-four hours following the operation the patient often slept for short times, but was restless and in pain about the seat of the hernia in the intervals, till he had forty drops of laudanum. After this he slept more soundly, and was more refreshed. His countenance was much less anxious; his pulse ranged about 100, and was generally pretty full and soft; his respiration without constraint; skin warm, and slightly moist; tongue thinly brown-coated and moist; urine free and clear. The abdomen was everywhere soft, pliant, and painless upon pressure, except about the place of operation. No vomiting had occurred since the operation, and the bowels did not act.

In the second day, no material change ensued, except that the pulse fell to less than 100, ranging from 90 to 96, and becoming smaller and weaker, and that often, especially towards night, there was profuse warm sweating. Some beef-tea was ordered for him (he had in the previous day taken nothing but a little bread, with tea or water).

During the third day he still often sweated profusely. He looked and felt more feeble and depressed, and he complained of aching pains in his limbs. His pulse also had less power. In other respects he appeared stationary, and the abdomen was still painless, except for the smarting and tenderness at and near the wound. Considering his former habits of life, and fearing lest, if he became still feebler, some low and unmanageable peritonitis should ensue, I ordered for him in the evening four ounces of wine, with more beef-tea.

On the fourth day he said that he had felt at once better for the wine, and had slept soundly, and with refreshment after it. Through this day he was less depressed; his pulse was from 84 to 90, and of natural size and power; his skin of natural temperature and moisture, scarcely sweating even at night; he had some appetite. The bowels remained inactive, and a common enema was directed. The wound was uncovered, and the sutures removed. None of the skin had united, but the deeper tissues felt as if closed in, and there was no deep suppuration.

After the enema the bowels acted freely twice, and from this time his progress to complete recovery was not interrupted.

The essays by Mr. Luke (a) and others more lately published, have given so full a knowledge of the usual characters and treatment of herniæ, in which the sac is pushed back with the intestine, that new cases such as these require but few observations.

In both these cases the rule was confirmed, that the erroneous mode of reduction is apt to occur in none but old herniæ; and this, though at first it may seem strange, is what might be expected: for a condition necessary to the event is, that the protruded intestine should be more tightly constricted than the mouth of the sac is, so that it may be more difficult to push the intestine through the mouth of the sac than to push the sac, or part of it, through the inguinal rings. Now, this condition can scarcely exist, unless the hernial sac have been long protruded, so that its mouth, enclosed within the narrow margin of the internal ring, may have become thickened and indurated, and less extensile than the tissues external to it.

Moreover, these two cases confirm the rule, that the reduction *en masse* is especially likely to happen in old oblique inguinal herniæ. The rule is due to the condition just mentioned. In the majority of such herniæ, there is an annular thickening and contraction of the mouth of the sac, which appears to be due to the formation of new and tough fibrous tissue in and external to the peritoneum. This thickening forms a band or ring, one or two lines wide, which, when the mouth of the sac is exposed from without may be seen and felt as an annular constriction. It is this which constitutes the stricture in a great majority of strangulated inguinal herniæ; this which needs to be "scarified," or thinned and made extensile, when the hernia, strangulated by it, is to be returned without opening the sac. Now, such an annular thickening of the mouth of the sac occurs, if not exclusively in the oblique inguinal herniæ, yet far more commonly in them than in those of any other form; and, for the reasons above assigned, it makes them more liable than others to the accident of reduction *en masse*.

Neither of these cases could show exactly the manner in which the hernial sac is removed from its connexions by the force used in the reduction. One could observe no ecchymosis on the outer surface of the sac, no signs of a violent severance of its tissues from those that surrounded it. The appearance was rather as if, though the mouth of the sac might have been violently separated from the internal ring, yet the rest of the sac had been pushed back by the looser cellular tissue around it being inverted, as the tissue round a testicle is inverted when it can be pushed into the inguinal canal.

The best collective evidences for the reduction *en masse* appear to be:—1st. The signs of strangulation continuing, or first ensuing, after the apparent reduction of a hernia; 2nd. The loss of a hernial sac, more of which, according to

(a) "Medico-Chirurgical Transactions," Vol. XXVI., and *Medical Gazette*, February 8, 1850.

the history of the case, ought to be felt in or beyond the inguinal canal; 3rd. A feeling of fulness at the internal ring, and of an ill-defined, firm swelling in the abdomen behind or below the ring; 4th. An amount of pain at and about the internal ring, which is quite disproportionate to that in any other part of the abdomen, as well as to the other signs of strangulated hernia; 5th. The unusual drawing-up of the testicle.

In these particulars, the cases I have related corroborate those already published, and confirm the rule, that, when these signs are found coincident, we should act in the belief that the reduction *en masse* has taken place. But the cases presented two rare and deceptive features.

1st. In each of them, the pushing back of the sac was so far incomplete, that the lower portion of it, containing fluid, remained in, and in one case projected a little beyond the inguinal canal. Feeling this portion of the sac, one might have assumed that no more had ever projected beyond, the abdomen. But the cases show that we must count, among the indications of this accident, not only the complete disappearance of a hernial sac, but the marked diminution of one; that it may excite a suspicion, if we can feel, in and beyond the inguinal canal, only a much smaller hernial sac than, according to the history of the case, there should be. If, in either of these two cases, the hernia had been properly reduced, its empty sac should have been felt, not only in the inguinal canal, but along the descending portion of the spermatic cord.

2ndly. In the second case, the sac had been pushed from its connexions five or six weeks before the severe strangulation ensued, and, once in the course of that time, intestine had probably been strangulated in, and returned from, the displaced sac. Such an event has not, I believe, been previously recorded; but a single occurrence of it diminishes the confidence with which we might expect that, in all these cases, there would be the history of a very recent reduction of a hernia.

The incompleteness of the displacement of the sac, to which I just now referred, suggests a rule in operating. If, in the suspicion that a hernia has been reduced *en masse*, the inguinal canal be laid open, and no sac at all be found in it, the probability of an erroneous reduction is increased; but if, instead of no sac, one be found containing fluid, we might be apt to conclude that this is the whole sac, and that the intestine has been duly reduced from it. But the cases show, that the part of the sac containing and strangulating intestine may be pushed back from the internal ring, and that another part, containing fluid, may remain in the inguinal canal: they thus establish as a rule, that, in all such suspicious cases, we must not desist in the operation without being perfectly satisfied that all is right in the abdominal cavity, so far as it can be reached from the inguinal canal. In both the cases here related, after the exposure of part of the sac in the canal, the detection of its displaced but still constricting mouth was impossible, except by such an examination as would have been unjustifiable in an ordinary case. The sac's mouth was only just within reach of the forefinger, and the sensation received by the outstretched finger touching the intestine in the sac was at first deceptively like to that from intestine in the abdomnal cavity.

I would add a remark on the after-treatment of strangulated hernia, as illustrated by these cases.

The abstraction of blood by nearly a hundred leeches, in the three days following the operation, in the first case, was intended against what appeared to be an active local inflammation of the peritoneum and adjacent tissues, in consequence of the violence used in the displacement of the sac and in the operation. The giving of wine on the third day after the operation, in the second case, was dictated by the fear that a peritonitis would presently ensue, against which treatment might be of little avail.

The effects of both these opposite treatments appeared to be good; and they indicated, as many other facts do, that there are at least two forms in which peritonitis ensues after operations for hernia. In one class of cases, it appears essentially the local consequence of injury; in the other, it is also, and rather, the local indication of a general blood-disease. In the one, it is an active local disease, amenable to local treatment; in the other, it is only one part, one feature, of a constitutional disease of low type, which local treatment can scarcely affect for good.

We may probably compare the cases of the two classes with those of phlebitis after amputations; of which, some are simple local inflammations of injured veins; others are inflammations of veins, associated with diseases of many other parts, and declaratory of diseased blood. The parallel would hold in many respects, and, among them, in this,—that the peritonitis or phlebitis of local origin and nature ensues very early after the operation, or is continuous (in the case of peritonitis) with that which preceded the operation; while the disease of constitutional origin, whether peritonitis or phlebitis, comes on later, and with an interval of two, three, or many more days, in which no signs of it may be detected. There are similar differences and correspondences in the earlier and the later erysipelas after operations; the former is mainly a local disease; the latter is the localised indication of a general disease; and, as in the corresponding cases of peritonitis and phlebitis, the one is a comparatively trivial, the other a very grave, disorder.

Now, the respective indications of the earlier and the later occurrence of phlebitis and of erysipelas after operations, are, I believe, recognised by many; and the time that has elapsed between the operation and the access of the disease is often reckoned among the facts determining the plan of treatment. A similar rule should be held concerning operations for hernia. In general, if peritonitis ensue within twenty-four hours after the operation; or, if it existed before the operation, and continue or is increased after it, it may be assumed to be chiefly a local disease, a simple inflammation of injured parts, which may be treated by local or other bleeding, by abstinence from food and stimulus, and perfect rest; or which, if it be slight, may be left to spontaneous recovery. If, on the other hand, the peritonitis first manifests itself more than twenty-four hours after the operation; it is probably an indication of a general blood disease of some low type, for which opium and well-regulated food, or even stimulants, afford the best hope of remedy.

I need hardly say, that this difference in the time of first appearance must not be taken as alone sufficient for the diagnosis of the two forms of peritonitis, or for guidance to practice; I believe only that it may be reckoned among the most useful indications. Neither may twenty-four hours after the operation be fixed as an exact time by which, according to their advent within or beyond it, we might class all the cases of peritonitis; it is, I believe, a fair general estimate, but nothing more. Nor must the one form of the disease be regarded as exclusively a local, or the other exclusively a constitutional, malady; each is only chiefly the one or the other; and, in different cases, we may find the constitutional and the local elements of disease prevailing in various proportions.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

CASES OF OTO-MENINGITIS AND ABSCESS IN THE BRAIN.

(Continued from last week.)

[Under the care of Dr. PEACOCK.]

We have been favoured by Dr. Peacock (now of St. Thomas's Hospital) with the notes—of which our report is an abridgment—of the three following very instructive cases, which occurred under his care in the Royal Free Hospital during the time that he held the appointment of Physician to that Institution.

Case 1.—*Chronic Suppuration of the Internal Ear.—Injury to the Head.—Large Abscess in the Brain, opening into the Arachnoid Sac.—Local Arachnitis.—Death.—Autopsy.*—Phœbe Collier, aged 23, a maid-servant, was admitted, in a state of almost insensibility, on the 20th of August. It was ascertained from her friends, that, after an attack of measles at the age of five, she had become subject to discharge from the left ear and deafness, both of which symptoms had continued to recur at intervals ever since. Eight years ago, there had been an interval of three years, during which her hearing had been good; but, for the last five years, she had been deaf on the affected side, and subject also to constant pain in the head. On the 14th inst., she had fallen on the stairs, striking her head violently on the mat; her consciousness was for the time lost, but soon afterwards recovered. She had continued, however, to complain of increasing pain in the head; and, on the 19th, had become delirious.

21st.—She is nearly insensible, being with difficulty roused to answer questions. Skin hot and dry; tongue furred; pulse quick

and vibratory; bowels freely open by medicine given yesterday evening. The gums are spongy from the effect of a mercurial course administered before her admission.

Ordered C. C. ad ʒxij. nuchæ. Haust. antim. pot.-tart. (gr. ½) 2ndis horis. The head is to be shaved, and ice applied.

23rd.—Immediately after the cupping, she became much more intelligent, recognising her friends who came to see her, and complaining of violent pain in the head. During the night, however, she was violently delirious. To-day she is less feverish; pulse 100, and feeble; head not nearly so hot; no thrill or sharpness in the beat of the temporal arteries; skin cool but dry; extreme deafness; pupils moderately sized and slowly moveable. She lies in a state of half-consciousness, but is capable of being roused, and, when so, displays a degree of intelligence, and can be got to protrude the tongue, which is seen to be dry and glazed. Rep. med. empl. lyttæ nuchæ.

24th.—The patient has passed a quiet night, and slept a little. She is now more easily roused than yesterday, and can be got to answer questions, though in an imperfect manner. Tongue red, dry, and glazed; pupils dilated, and very slightly sensible to light; skin cool and moist; pulse quiet and feeble; cheeks flushed. The right hand and arm are affected with tremors and twitchings, and there is a constant convulsive movement about the throat which occasions hiccough. Haust. salin. ammon. ʒj. ter die. Empl. lyttæ temporibus singulis.

26th.—In the evening of yesterday, she became so low, that it was necessary to administer a small quantity of wine. In the night the head continued so hot, and so much delirium was present, that a few leeches had to be applied. Since then she has gradually sunk into coma, and is now moribund, the pulse being quite imperceptible.

Death took place at four in the afternoon, seven days after the first occurrence of severe cerebral symptoms.

Autopsy Twenty-four Hours after Death.—On removing the calvaria, a large quantity of dirty-coloured and very fetid matter escaped from the left side, which was found, on further search, to have been derived from a large abscess in the left hemisphere of the brain. This abscess occupied the entire length of the outer side of the hemisphere, and was separated from the lateral ventricle by a narrow band of firm and much-altered cerebral substance; it was bounded externally by softened brain of a bright yellow colour. The interior of the cavity was lined by a firm villous coating of lymph. At the base of the middle lobe, directly over the petrous portion of the temporal bone, the matter had burst through the wall of brain-structure which surrounded it, and lay in immediate contact with the dura mater, which latter was coated with a thick layer of soft yellowish lymph. There was some soft lymph effused into the subarachnoid tissue around the optic commissures and origins of the nerves at the base of the brain. The convolutions of the left hemisphere were flattened out, and their intervening sulci obliterated; the brain-substance was very soft, and, when examined by the microscope, displayed fragments of broken nerve-tubes, mixed with exudation corpuscles and much granular matter. Both lateral ventricles contained large quantities of turbid serum. The surface of petrous portion of the temporal bone was free from any apparent disease, but the tympanum and its connected cavities were full of thick and very fetid pus; their lining membrane was thicker and harder than natural, and very readily separable from the bone. The membrana tympani itself was destroyed by ulceration at its centre, thickened and cartilaginous at its borders. There was no evidence of injury to the bones of the head. Nothing worthy of note was observed in the viscera of the trunk, all of which were carefully examined.

Remarks.—In this case there were two distinct causes, by reference to either of which the cerebral lesion was explicable; first, the long-continued internal otitis; and, second, an injury to the head. *Case* 3, which is to follow, is, probably, a much better example of the ordinary course of pathological events when the brain becomes involved in inflammation in consequence of otitis. In it, the inflammatory action had seemingly spread onwards, by progressive steps, through the chambers in the temporal bone, through the internal auditory canal, involving the trunks of the two nerves which there enter, thickening and indurating them, and completely destroying their function, lastly spreading to the meninges of the brain. The surface only of the latter was affected; there was no abscess or softening in its substance. In the case just related, however, although the disorganised condition of the internal ear was as far advanced, yet the disease had not spread to the brain by direct contact of tissues. An abscess had formed in the hemisphere of the brain corresponding with the affected ear, but it had not been preceded by meningitis, since what there was of the latter had evidently been produced by the bursting of the abscess into the arachnoid sac, and the consequent escape of pus. Now, it is quite within the range of possibility that otitis, even not involving either the internal auditory canal, or any part of the intra-cranial surface of the temporal bone, or complicated with meningitis, might yet be the cause of an abscess within the brain, since instances are plentiful in proof of the occasional efficiency of a morbific cause in exciting inflammatory action in a neighbouring viscus with which it has no direct structural connexion. Most likely, in the case under consideration, the two causes acted conjointly, the injury to the head being, perhaps, the more important of the two. It will be observed that, at the examination, there were, however, no traces of injury to the bone discovered, and that, therefore, the blow received must have acted merely by concussion. The interesting observations of Dr. Bright relative to the frequency of numerous punctate extravasations of blood into the cerebral substance in the class of cases which have been hitherto deemed instances of pure concussion without organic lesion, go far in explanation of the occasional termination of such cases in local suppuration or softening of the brain. Granting, and the fact is one supported by several authorities, that the effect of a blow on the head is sometimes to induce the rupture of numerous minute vessels within the brain and the effusion of small points of blood, it is easy to suppose that, in case a patient thus injured be careless in his habits of life after such an accident, and subject himself to mental excitement, to the influence of stimulants, or of cold, the portion of brain so injured may, instead of gradually recovering itself, soften down by a process of low inflammation, or even suppurate.

Case 2.—*Chronic Suppuration of the Internal Ear.—Deafness, with Facial Paralysis.—Extension of the Inflammation to the Meninges of the Brain.—Death.—Autopsy.*—Ann Carter, aged 24, a married woman, was admitted under Dr. Peacock's care, on March 6th. She stated that she had been ill for a month, having then rather suddenly began to suffer severe earache and pain in the right side of the head. From childhood she had been subject to discharge from the right ear, and, about last Christmas, she had received a blow over the right side of the head in a fall; since which, the pain to which for many years she had been liable at times, had been much aggravated. For three weeks she had been unable to shut her right eye, and the face had been drawn to the left side. She was quite conscious and intelligent, and complained much of severe pain in the head, which rendered her restless, and unable to sleep at nights. There was no loss of sensation in any part, and the tongue could be protruded without deviation to either side. No difficulty in swallowing, or loss of power over any of the limbs; pulse quick and sharp, but not strong; pupils small. There was a discharge of fetid pus from the ear still continuing. Ordered to have the head shaved, and to be cupped on the scalp to eight ounces; the ear to be frequently syringed with warm water. Empl. lytt. nuchæ.

℞ Hydr. chlorid. gr. ij. ter die.

9th.—Considerable improvement has resulted from the treatment; and, until an hour ago, the pain in the head had been much relieved. At that time she was suddenly seized with loss of consciousness, and the mouth became much more drawn to the left side than before. She has now regained her sensibility, but lies moaning incessantly, and complains of extreme pain in the head. The pupils are dilated and fixed; the tongue covered on the dorsum with a dirty whitish fur. Ice is to be applied to the scalp, and eight leeches over the affected ear. The calomel powders are to be continued every night and morning.

10th.—The leeches have somewhat relieved the pain; but she is still almost insensible. The gums are sore. Omit the powders. Repeat five leeches over the ear.

11th.—Much the same. Empl. lyttæ nuchæ.

℞ Hydr. cum cret. gr. v.; pulv. ipecac. co. gr. iv.; horâ somni sumend.

13th.—Yesterday she seemed better, and spoke quite rationally; but this morning she has again relapsed into a state of insensibility, attended with frequent convulsive movements of the whole body and the occasional utterance of loud screams. The pupils are quite motionless. There is clonic spasm of the right side of the face, the mouth being much drawn over, and the eye kept closely shut. The right arm is rigidly flexed, and the left is frequently convulsed. The head is drawn back, and there is great difficulty in opening the mouth, which, when roused, she can be got to attempt. When addressed, she appears to comprehend imperfectly, and states that she has severe pain in the head.

Rep. hirudines et empl. lyttæ. Rep. pulv. bis die sumend.

14th.—Has been much more quiet since last note. Is now quite intelligent, and complains much not only of the headache, but of the severe pain produced by the spasms of the muscles of the back and abdomen, as also of a sense of suffocation from con-

striction of the throat. She can, with great difficulty, extrude the tongue.

15th.—Until this morning she continued much in the condition described yesterday, when, while in the act of drinking some beef-tea, she suddenly became convulsed, and died at once.

The autopsy, performed four hours after death, revealed excessive general congestion of the meninges of the brain. There was not much subarachnoid effusion, excepting at the base of the brain, around the pons Varolii and medulla oblongata, where the nerve trunks were all matted together by an extensive effusion of pale yellowish gelatinous lymph. The lateral ventricles contained at least two ounces of pale but turbid serum; the trunks of the left portio dura and auditory nerves were very much altered in character, being closely adherent together, much thickened, of a brownish colour, and semi-cartilaginous hardness. At the entrance of the meatus auditorius internus they became united to the dura mater, which, although healthy at other parts, was here scarcely adherent to the bone, thickened, and covered with greenish yellow lymph. On sawing across the petrous portion of the temporal bone, the chambers of the internal ear were found full of curdy, yellowish and very fetid pus. They were denuded of lining membrane, and the bone was quite bare. Projecting through the external opening was an elongated polypus, which had its attachment by a very narrow pedicle to the margin of the membrana tympani. No disease at all connected with the fatal result was detected in any of the abdominal or thoracic viscera.

Case 3. — *Obscure Cerebral Symptoms.—Death.—Autopsy.—Three Distinct Encysted Abscesses in the Brain.*—William Royall, aged 30, a sailor, was admitted into the Royal Free Hospital under the care of Dr. Peacock, on March 30. He stated, that he had been feeling ill for a month, and had suffered repeated attacks, of shivering during the last few days. He was, however, so listless, and his intellect was so much obscured, that it was impossible to elicit from him any satisfactory account of his illness. He complained chiefly of pain in the back; the pulse was feeble, about 42 in the minute; and the tongue furred.

On the 2nd of April, he was still more obtuse in intellect than before; he lay constantly moaning to himself, but could be made to answer questions when roused. He had been noisy during the night, but not violently delirious. There was no paralysis. The pulse was 52, and of feeble power; the tongue covered with a thick white fur at its root; the eyes glassy; the forehead furrowed; the pupils contracted and insensible to light. He had been treated by blisters to the nape and the application of cold to the head.

About eight o'clock in the morning, he was suddenly seized with a violent convulsive fit, which was rapidly followed by coma. The pupils became widely dilated and motionless; the breathing stertorous. The right arm and both legs were very rigid. Death took place at half-past eight in the evening.

Autopsy.—The skull-cap having been removed, the superior surface of the right hemisphere of the brain was seen to be extremely flattened; the cortical layer, instead of its natural grey tint, was a pale salmon-yellow colour; the convolutions of the left hemisphere were also flattened out, but to a less degree than those of the right. On slicing the right hemisphere, a large quantity of greenish-yellow, thick, purulent matter escaped from the anterior lobe; and a cavity capable of containing a hen's egg, but somewhat irregular in shape, was found in this portion of the brain, being situated a little in front of, and external to, the corpus striatum. It was bounded by firm parietes, and surrounded by numerous small extravasations of blood into the adjacent cerebral substance. Beneath this abscess, there existed another, which extended very nearly to the under surface of the anterior lobe, and was separated from the membranes only by a thin layer of grey matter. At the base, in the situation corresponding with this abscess, the membranes adhered firmly together, and the grey matter had a dull leaden hue. In addition to these two, there existed yet a third abscess in the outer and upper part of the same hemisphere; this was, however, not larger than a nut; it was bounded by indurated cyst-walls, and surrounded by firm cerebral substance; the lateral ventricles both of them contained a considerable quantity of clear serum; the membranes of the brain were united together along the longitudinal fissure by old adhesions, and those at the base were opaque, thickened, and also adherent to each other. The dense structure by which the abscess-cysts were in each case surrounded, was found, when examined microscopically, to consist almost solely of inflammatory exudation structure, with scarcely any admixture of cerebral tissue. There were some patches of atheroma in the coats of the aorta, but, with that exception, the viscera of the trunk were in a normal condition.

In the absence of a reliable history of the case, it is not a warrantable conclusion, that the above is an example of *idiopathic* abscess in the brain. Most probably the man, who, as a sailor, would have been particularly exposed to accidents, and very likely to be regardless of precautions afterwards, had received some blow on the head, and that the cerebral suppuration was a consequence of concussion. (See remarks on *Case* 1.)

Summary of the Cases of Abscess in the Brain.—To the series of five cases of cerebral abscess, (see last week's Report,) which we have now recorded, we might, did space permit, add another, which occcurred recently in Guy's Hospital, under the care of Dr. Gull. The patient, a man aged twenty-five, had suffered from otorrhœa, following fever for six years previous to the fatal attack, which latter was marked by intense pain in the head, sleeplessness, and some wandering, which gradually merged into complete coma, and terminated in death about a fortnight from the commencement of the head symptoms. There was afterwards found caries of the petrous portion of the temporal bone, disorganisation of the internal ear, and a large collection of matter in the right hemisphere of the brain. In the *Medical Times and Gazette* for April 23, p. 424, will be found details of another case, in which suppuration of the brain took place in consequence of concussion, attended with fracture (very little displacement) of the base of the skull. The patient, a man, aged 23, lived nearly a month after the accident, and his illness was characterised by a peculiar form of restless delirium, in which the habit of using the most disgusting language was a very prominent feature. He had, throughout, a parched, black tongue, and a dry, hot skin.

From the analysis and comparison of the seven cases thus before us, we do not seem able to obtain any more definite information as to the premonitory symptoms or diagnosis of abscess in the brain than has been done by former observations. The duration, in one case, extended from the first indication of cerebral implication over the unusually long period of seven months; in the others, it varied from two months to a few days only. In almost all there was severe pain in the head; in all the mode of death was by coma. The condition of the skin, tongue, pulse, nervous functions, etc., varied extremely, not only in the different cases, but even at different periods of the same case. The third case of Dr. Peacock's, that of Royall, offers a good illustration of how indefinite may be the symptoms present in this lesion. In it the indications of cerebral mischief were in fact not very different from those common to fever, and the patient was at first supposed to be labouring under that disease. Although of extreme interest to the pathologist, yet the preceding cases do not, it must be confessed, afford any very valuable practical suggestions. All of them terminating in death, and examples, indeed, of a disease almost necessarily fatal, the contemplation of them does not yield much of what, it should never be forgotten, is the one true end of all pathological science: "Fruit, to the relief of man's estate." One lesson,—the importance of prevention,—may, however, be learned from them. In all the cases in which a history was obtainable, there had been either a concussion of the head or protracted suppuration within the ear, and it is evidently to the more careful and effective treatment of these affections that the efforts of the scientific surgeon should be directed, in order to get rid, if possible, of the exciting causes of so irremediable a disease, when once developed, as abscess in the brain.

CHARING-CROSS HOSPITAL.

SOFTENING OF THE BRAIN, ATTENDED BY EPILEPSY, AND FOLLOWED BY APOPLECTIC EFFUSION INTO THE PONS VAROLII—DEATH—AUTOPSY.

[Under the care of Dr. ROWLAND.]

John Woodley, aged 43, a painter, admitted June 28, 1853. For the last six months he has been subject to epileptic paroxysms, which have recurred at intervals of five or six weeks. Some hours previous to these attacks, he is accustomed to feel confused and giddy, and unable to find the words that express his wants; and at all times, since his illness, the memory and judgment have been seriously impaired.

It is also stated, that he has had several attacks of painter's colic, and on one occasion palsy of the right hand; that his habits have been intemperate, so much so as to have once brought on delirium tremens; and that he has repeatedly sustained violent injuries to the head.

On the 2nd of March last, he was in the hospital for severe pleurodynia. There were, however, at that time evident symptoms of cerebral disease. The intelligence was rather weakened, and he suffered from frequent attacks of vertigo.

A few days prior to his re-admission, he had a violent convulsive seizure, in which the right side was deprived of voluntary

motion, and, for several days, there was considerable stupor; the limbs have now in a great measure recovered their strength, although not completely; the memory, especially of words, is still evidently enfeebled. He complains much of a constant, distressing apprehension of danger, feeling as if a fit was coming on. A pill of sulphate of zinc and hyoscyamus is to be given three times a-day, and an aperient mixture.

July 10.—A blister having been applied to the nape, he felt better, and the giddiness and other uncomfortable sensations had in some measure subsided. At his own desire, he attended the service of the chapel in the afternoon. Almost immediately on returning to the wards, he was attacked with violent convulsive strugglings, foaming at the mouth, and other epileptic symptoms. In a little while this state gave place to deep coma, stertorous breathing, and total insensibility. The pulse was full and bounding. He was immediately bled, and other means were resorted to without benefit. He died at half-past twelve, without showing any return of consciousness, about eight hours after the seizure commenced.

Upon examination, the membranes of the brain were found slightly injected, with partial and loose adhesions to the surface. Cloudiness of the arachnoid marked, and nearly universal. The ventricles widely distended with thin limpid fluid. The parts within these cavities, and the whole general substance of the brain, of normal consistence, and free from undue vascularity.

The pons Varolii on the whole of its left side, the left crus cerebelli, and a portion of the pons on the right side, immediately beyond the mesial line, were completely broken down, and in some parts diffluent. In this softened material a large sanguineous exudation was found; the effused blood was loosely coagulated, and mingled with shreds of nervous matter; a portion of blood had escaped into the base of the cranium. The vessels going to the softened matter had a white, shining appearance.

The microscope showed the exudation corpuscles thickly planted at some points of the diseased structure, but they were very unequally distributed.

The *post-mortem* examination was performed under the superintendence of Mr. Avery, and at its conclusion, Dr. Rowland made some very instructive comments on the case, of which the following statement comprises the more important:—

Remarks.—The mass of the brain having been perfectly sound in this case, and the morbid change almost strictly limited to the pons Varolii, an opportunity seems to be afforded of learning the peculiar symptoms belonging to affections of that portion of the encephalon, which are still very unsatisfactorily made out. It would be difficult, however, to point out any sign belonging exclusively to this lesion, and which might serve in its diagnosis from affections of other cerebral regions. Some of the symptoms, however, supposed to indicate disease of the pons Varolii, were absent in the present example.

The extravasation of blood, there can be little doubt, did not occur at the commencement of the last seizure, but in the struggles of the epileptic paroxysm. The exact moment of this accident is even clearly marked by the change in the character of the symptoms; thus, the convulsive movements, foaming at the mouth, and facial distortions of epilepsy were suddenly replaced by deep coma and stertorous breathing; the latter symptoms announcing the escape of blood into the texture. The history of this case was indeed beautifully illustrated in the morbid appearances found after death.

In a disorder so obscure in its pathology as epilepsy, any well-ascertained fact is valuable. In this instance, the complaint is found in connexion with morbid changes at the base of the brain. It will be remarked, that although death followed immediately on the epileptic fit, there was no cerebral congestion, which is supposed by some to be the immediate cause of the paroxysm; while others imagine that this condition arises during the struggle, and gives rise to many of the attendant symptoms. In this instance, at least, the brain was free from undue vascularity; and in many cases of epilepsy it is difficult to sustain this theory of its origin.

Among the symptoms which, it is asserted, arise from diseases of this portion of the brain, is palsy of the superior extremities. The paralysis, however, in this patient took the hemiplegic form, affecting the limbs opposite the brain-lesion. The function of sensation was not impaired.

It is remarkable, that, although the great bulk of the brain and the whole of the hemispherical ganglia escaped all injury, the memory was so seriously affected. It is still more curious, that this absence of recollection was more particularly evident in regard to words and expressions. When agitated, this patient could not recollect names most familiar to him; but, at other times, he could express himself correctly, although always with hesitation and doubt.

In this we have another example, proving the incorrectness of Bouillaud's opinion, that loss of memory of words is dependent on disease of the anterior cerebral lobes. This symptom, on the contrary, seems to belong, in a remarkable degree, to cerebral softening, under all circumstances, and irrespective of locality.

The symptomatology of apoplexy of the pons Varolii usually given in systematic works, is, "Palsy of the four extremities, tetanic rigidity, almost instantaneous death." This definition is far from being borne out in the example under consideration, in which there was nothing to distinguish it from apoplexy of other regions. The symptoms would be likely to vary, however, according to the extent of the injury. In Woodley, it was almost limited to one side of the pons. When the whole of that body is involved, palsy might attack all the limbs, and death take place suddenly.

Medical Times & Gazette.

SATURDAY, OCTOBER 15, 1853.

THE PROFESSION AND THE VACCINATION ACT.

A very important letter has been placed in our hands from the General Register Office, in reply to a gentleman in private practice who had intimated to the Registrar-General that the Medical Profession would refuse to give the certificates required by the Vaccination Act. The following is a copy of the letter:—

"General Register Office, Oct. 6, 1853.

"Sir,—I am directed by the Registrar-General to acknowledge the receipt of your letter of the 4th inst. in reference to the duties imposed upon the Medical Profession under the provisions of the Compulsory Vaccination Act of 16th and 17th Vict. c. 100.

"In reply to your remarks upon this subject, I beg you, in the first place, distinctly to understand, that, in furnishing Medical Practitioners throughout the kingdom with vaccination books and forms, as directed by the eleventh section of the statute, the Registrar-General has had to perform a purely ministerial duty, and that in his official capacity he is not required to express any opinion as to the legal obligation of medical men in private practice to perform gratuitously the duties it enjoins upon them. At the same time, he has no objection to state, for your information, and that of other Medical men, that, according to his reading of the Act, the remuneration provided by the sixth section is payable only to those Medical officers and Practitioners who may hold vaccination contracts (see Clause 1), and, therefore, that Medical men who, in the course of private practice, undertake the vaccination of children, must (unless they do it gratuitously) necessarily look for payment to the persons who employ them. Should they, however, altogether refuse to vaccinate, the Registrar-General apprehends that this result must follow,—namely, that the parents will, in all such cases, be driven to adopt the only course then open to them, that of taking their children to be operated upon by the public vaccinator; for the Act is unquestionably binding upon the parent of every child born in England after the 1st of August last (section 2); and those parents who, after having received notice from the Registrar according to section 9, shall neglect to have their children vaccinated either by their own medical attendant, or by the public vaccinator, will incur the penalty of 20s. imposed by that Clause.

"The Registrar-General considers, moreover, that, under the Act, it is the bounden duty of every Medical Practitioner who, in the course of private practice, performs successfully the operation of vaccination upon any child, to deliver a certificate thereof to the parent or person in charge of the child, and a duplicate of it to the Registrar; and that if he neglect or refuse to do so, although he will not incur a *pecuniary* penalty, he will render himself liable to an indictment for misdemeanour, it being a well-established rule of law, 'that, if a statute enjoin an act to be done, without pointing out any mode of punishment, an indictment will lie for disobeying the injunction of the Legislature.'

"I have the honour to remain, Sir, your obedient servant, (Signed) "Thomas Mann, Chief Clerk."

After a careful perusal of the Act, which we published in full with the accompanying forms of certificates at pp. 222-3 of the present volume, we must say that we entirely agree with the reading of the different Clauses expounded by the Registrar-General in the above letter. The sixth Clause clearly restricts the payments to contracts made by Guardians or Overseers with Medical officers or Practitioners; and the fourth Clause distinctly directs, that, "after the successful vaccination of any child, the Medical officer or Practitioner who shall have performed the operation, shall deliver" a certificate, and transmit a duplicate to the Registrar of Births and Deaths of the district. So with the other certificates of a child being in an unfit state for vaccination, or insusceptible of the vaccine disease.

However unjust this may be,—and we pointed out the injustice long before the Act had become law,—it is the law of the land, and, so long as the Act remains unamended, it would be unseemly for the Profession to refuse to obey its provisions. Any one refusing would "render himself liable to an indictment for misdemeanour," and though this charge might not be preferred, yet, as the parents or guardians of the children must obtain the certificate to avoid the fine, those who refuse certificates must inevitably lose their patients.

One great mistake of the Act was entrusting the execution to the Guardians of the Poor. They are empowered to contract with any Medical Practitioner, but they are induced to do so with their own Medical officers only; first, in order to make the office more desirable and profitable; secondly, to induce other Practitioners to vaccinate gratis, and thus diminish the charge on the poor-rates, in order to prevent their patients going to the Union surgeon.

Before the Act passed, we pointed out the injustice of remunerating a Medical man for an operation, an inspection, and various certificates by a fee of one shilling and sixpence; but, however inadequate this sum may be, it will form a sensible addition to the salary of Union Surgeons, and of those Medical men who are registrars of births and deaths. These are not the men to complain. They are benefited by the Act. It is those who vaccinate extensively, and give certificates, but can obtain no remuneration, because the Poor-law Guardians will not contract with them.

It is high time for a movement to be made for the introduction of an Act, in the next session of Parliament, to amend that which is now the law of the land. The principle of compulsory vaccination, as we have all along insisted upon, is absolutely necessary to clear away the disgrace of Great Britain being the last European country where small-pox extends its ravages, and this principle we rejoice to see established by the authority of Parliament. But the objections to entrusting the practical application of the principle to the guardians of the poor are so great, and the remuneration to vaccinators is so inadequate, that we shall hope to see these two points made the grounds for numerous petitions for an amendment of the Act. It is not by resisting the law, but by Petitions to Parliament for its amendment, that the Profession is likely to obtain redress.

The fairest plan would be to accept certificates from any legally-qualified practitioner, to allow parents to select their own attendant, and to pay upon the delivery of the certificate. There would be some little difficulty in this plan, as the Poor-law Guardians could only be expected to pay for certificates of vaccination of the poor, or of paupers, and it might not be easy to define this class with accuracy. If rich as well as poor were paid for, and 1s. 6d. were paid from the county rates for every child born and vaccinated, the ratepayers might not be well satisfied. We suspect, however, that this would be the most satisfactory plan, placing the execution of the Act entirely in the hands of the Registrar-General, allowing the district Registrars to draw on the county rates, and paying any legally qualified medical practitioners for every certificate sent in in the proper form.

A Correspondent reminds us that there is an extraordinary difference in the amount of pay allowed to the Superintendent-Registrars throughout the kingdom for sending returns of qualified Medical men, and the pay allowed to Medical men for vaccination and filling up and signing two complicated certificates, and sometimes four or more, relating thereto.

The pay is: To Superintendent-Registrars for returning the names and abodes of legally-qualified Medical men in their separate districts, when the number is under twelve ..	£2	0	0
When twelve and under eighteen	2	10	0
When eighteen and not exceeding twenty-four	3	0	0

—a duty which consists of their calling upon each Medical man, and requesting him to sign his own name and qualifications on a printed paper, which, in any district containing twelve surgeons or more, may be done in two or three hours at the most. While the pay allowed by Act of Parliament to educated gentlemen for each successful case of vaccination, watching the case, and filling up the aforesaid certificates, is from 1s. 6d. to 2s. 6d.; and some children require vaccination five or six times.

This is really too bad! It would appear as if all classes were able to secure "a fair wage for a fair day's labour," excepting the Medical Profession, and this, we believe, arises in a great measure from their very proper pride of being unwilling to incur the character of being mercenary, and also from willingness to do the State some service. We do not complain that the Registrars are over-paid, but that the Medical Profession alone must submit to absurdly inadequate compensation for the services they render to the State.

MR. GUTHRIE'S INTRODUCTORY LECTURE.

The introductory lecture lately delivered by Mr. Guthrie, at the opening of the Medical School of the Westminster Hospital for the present season, is deserving of special notice, inasmuch as it deviates considerably from the usual style of such inaugural harangues. Instead of the stereotype and solemn tone of these annual effusions, Mr. Guthrie indulges his hearers with a general and lively disquisition *de omnibus rebus et quibusdam aliis*, and his observations are often marked by excellent good sense, clothed in homely but expressive language, and illustrated by anecdotes which are smart and appropriate. So numerous are the topics introduced by Mr. Guthrie that we cannot pretend to follow him upon all points; but there are some statements made by him in reference to Medical education and the College of Surgeons, which demand more than a passing notice. We may remark, that, although we are often amused and instructed by Mr. Guthrie's facts, we are not always convinced by his reasonings; and he seems so completely to identify the College of which he is undoubtedly a distinguished ornament with the cause of Medical science, that, judging from his language, we can hardly persuade ourselves that he believes in the competency of any other Medical body to educate and examine students. This egotism, however, is very natural, and Mr. Guthrie's *bonhomie* is so great that we are seldom disposed to quarrel with his self-laudations.

He tells us that in the season 1850-51, 1044 students were registered at the College of Surgeon, as studying in London: and that 370 obtained the diploma. In 1851-52, 1141 registered, 404 receiving the diploma. In the year 1852-53, 1105 were registered, 476 obtaining the diploma. Now, remembering that these 476 candidates are qualified to practise only one branch of the Profession, and that a limited one, inasmuch as surgical cases do not constitute more than perhaps one-tenth of the whole number of cases attended, we really think that the supply is at least quite equal to the demand; indeed, considering the difficulty of acquiring professional practice in the present day, we should venture to think that it possibly even exceeds it. Mr. Guthrie, however, views the matter in a different light; for, says he, "it appears that, of all the students educating in the different schools recognised by the College, very many go forth to the world at large without a certificate of competency in the profession of surgery, of which they take the title, and thus impose upon the public; *for it may not for a moment be understood that all these gentlemen would not obtain such certificate of competency or diploma, if they had the information required to give in exchange for it.*"

Now, this sentence seems to involve a considerable number of fallacies. Mr. Guthrie apparently concludes that, because 1000 students register their names, and 450 pass the College examination, therefore the odd 550, or at least very many of them, go into practice illegally. If this were really the case, or if it represented the truth only approximately, the Profession and the public must be in a most pitiable state. Think of the results only in three years; and, taking Mr. Guthrie's numbers, we should have in that period 3290 students registered—1250 sent forth with the diploma of the College, and 2040 sent forth without any diploma at all! What a deluge of qualified and unqualified surgeons poured out triennially upon a suffering public! For our own parts, we consider that the 1250 are quite sufficient; more especially when we recollect that there are some other educational bodies in the United Kingdom which teach and examine in surgery besides the London College of Surgeons, and which also send forth their annual contributions in the form of surgical practitioners.

But Mr. Guthrie fears that the deficiency of qualified surgeons, which he considers so deplorable, may perhaps be accounted for by the mistaken view commonly entertained by students, that the examinations at the College of Surgeons are more severe of late; but he says that "this is a great error; for, if any change has taken place, it is otherwise,—they are rather less than more severe; or, perhaps it should be said that, while the examinations are the same, the judgments are more lenient."

This view propounded by Mr. Guthrie certainly deserves the praise of originality; at any rate, we can assure him that this is the first time we ever heard of any but the very worst class of students being deterred from the College of Surgeons by any such apprehensions.

Again, Mr. Guthrie, thinking that the students of the present day are overtaxed as to their expected acquirements, broaches a proposition that, instead of the four years which are now expended in the manufacture of a Surgeon, three might probably be sufficient; and that the three years' lectures and hospital practice might with propriety be reduced to two. "Formerly," says Mr. Guthrie, "two sessions only were required; and I have to regret the share I took in insisting on three, for students have not come up better prepared than they did twenty years ago."

To follow Mr. Guthrie through all the meanderings of his very entertaining but eccentric discourse, might perhaps afford amusement, and some profit; but, before concluding the subject for the present, we have a few serious words to offer. Supposing that the only qualifications for a member of the Medical Profession were what they were fifty years ago,—namely, a smattering of anatomy and a superficial acquaintance with surgery,—three years, or even two, or perhaps six months or six weeks, might be sufficient, and, by the help of grinders, a greater number than at present of druggists' apprentices and pastrycooks' shop-boys might be diplomatised by the College, and thrust into the ranks of our Profession; but, willing as we are to laugh at Mr. Guthrie's jokes, we cannot do so at the expense of the sick and the suffering; and, anxious as we have ever been to alleviate the labours of the student, we cannot consider that the present term of study is at all too long, or that it can be abbreviated with safety to the public. Anatomy and surgery are of paramount importance to the practitioner; but he who knows *only* these, has very much still to learn, and four, or even five years, are by no means too much for the purpose.

SUCCESSFUL PROSECUTION BY THE APOTHECARIES' COMPANY.

A druggist, named Arnold, has lately been prosecuted in the County Court, Whitechapel, at the suit of the Apothecaries' Company, for practising medicine without possessing a legal qualification; and a verdict has been obtained by which the defendant is fined 20*l.* and to pay the costs of the action.

We are happy to record this instance of a successful attempt to suppress illegal practice; and we believe that, if the Society were to exercise a due amount of vigilance, many more offenders of the same class as Arnold might be subjected to summary punishment. The custom of practising behind the counter has always been pursued by druggists, and the Profession has lost thousands annually by this species of traffic; but, as yet, no law exists by which the offender can be brought to justice. Emboldened, therefore, by the impunity which so far attends their proceedings, it is notorious that many druggists have openly visited the sick at their own houses, thus clearly bringing themselves within the operation of the law. When we consider that these persons practise chiefly among the ignorant and the poor, it is still more imperative on the authorities to enforce the powers confided to them by the Legislature; inasmuch as the upper classes alone have the means of discriminating between the qualified and the unqualified practitioner.

As in this and other instances the authority of the law has been vindicated, and the suffering poor protected from the practising druggists, it is surprising that the Society of Apothecaries has but rarely entered the lists with those who are open and avowed quacks. It will be stated, perhaps, that there are legal difficulties in the way of prosecution in such cases; but still, we think, that the attempt might be made. Admitting that those who practise homœopathy, hydropathy, etc., without legal qualification to practise medicine, might possibly be able to escape from conviction on the ground that they do not supply drugs in the ordinary sense, we conceive that, at all events, the botanical quacks, who dose their patients with lobelia and cayenne pepper, might be taken under the care of the Apothecaries' Company, and a fertile source of mischief thus be effectually suppressed. It is possible, also, by this means, that the harpies who pollute our newspapers with their filthy advertisements, and fill the imaginations of young men with groundless fears, might be checked in their nefarious proceedings.

THE CHOLERA.

There are some important laws of cholera in relation to the seasons which are deserving attention.

The two former invasions of England by the epidemic occurred at the end of harvest, and extended their ravages till the close of the following years, running their course in each case in fifteen months. In every instance the greatest amount of fatality in this country has been soon after the harvest. Without assuming any closer connexion between the cholera and the wheat plant than there is between the Goodwin Sands and Tenterden steeple, we cannot withhold the remarkable passage in the cholera report which points out a very curious analogy in the histories of the plant and the epidemic. "The cholera in England kept pace in its development with the wheat plant, which took root in October, germinated in the winter, flowered in June, filled in July and August, was cut down by the reaper before the first week in September, when cholera was most rife, and would have been dead ripe in October and in November, when cholera ceased." No descriptive observations will enable the reader so clearly to perceive the relation between the months of the year and the fluctuations of the epidemic as the inspection of the following table of

DEATHS IN ENGLAND FROM CHOLERA DURING EACH MONTH THAT THE EPIDEMIC REIGNED.

Months.	Deaths from Cholera in England.		Of the Total Deaths from Cholera the total per cent. in each month.	
	1831-2.	1848-9.	1831-2.	1848-9.
1831—48.				
October.....	...	354	...	·651
November.....	97	376	·314	·691
December.....	282	375	·912	·689
1832—49.				
January.....	614	658	1·986	1·210
February	708	371	2·289	·682
March	1,519	302	4·912	·555
April	1,401	107	4·530	·197
May	748	327	2·419	·601
June	1,363	2,046	4·408	3·761
July	4,816	7,570	15·574	13·916
August	8,875	15,872	28·699	29·178
September	5,479	20,379	17·718	37·463
October..	4,080	4,654	13·194	8·555
November	802	844	2·593	1·552
December.....	140	163	·453	·300
Total.....	30,924	54,398	100·000	100·000

In each of the years presented in the Table there was a gradual increase in the number of deaths from the period of the commencement of the epidemic. In 1831-2, this progress continued for five months, and then sunk down, so as to encourage the hope that it was dying away. In 1848-9, there was a similar gradual progress for four months. In the former case, the lowest point was reached in May; in the latter, in April. Then came the fresh eruptions, reaching their high numbers in August and September; after which period the storms, having expended their fury, rapidly ceased. In the diagram, showing the relation of temperature to cholera from day to day, in 1849, the line of temperature fluctuates during January, February, March, and April, but without any rise; and during the same months, as the above Table shows, the cholera declines, dipping as low as only 107 in all England in the month of April. Then the temperature and the cholera both rise until August, when the heat attains its greatest height. Not so the cholera, which continues to mount with rapidity until September, when it shoots up to its highest point, after which it as rapidly descends. It would be wrong to infer, from this departure from the parallel between the temperature and the epidemic, that supposed relations were disproved. The radiating power of the sun in relation to us is greatest at Midsummer, but our maximum heat is not reached until August; and we see a perfectly analogous case in the fact, that the cholera reaches its culminating point some time after the temperature has made a corresponding advance.

Our experience hitherto shows a relation between the seasons in England and the intensity of the epidemic, which is more accurately represented by the Table than it could be described by any verbal expression. It would be no argument against this position, that, in other places, instances could be shown in which cholera raged in the cold season. We know that in St. Petersburg it has raged with great violence in the winter; and that in Scotland it existed during intense frost in January. Exceptional instances of this kind may perhaps be accounted for by local conditions, and may only assist to prove the rule, as perhaps is already done in the case of St. Petersburg, where the system of heating the dwellings may create, by artificial means, a condition perfectly analogous to our natural cholera harvest.

During the intense season of the last cholera invasion, much attention was directed to the atmospheric changes which were supposed to precede or accompany the various outbreaks. A discovery of the genesis of the epidemic was anticipated from observations on the electrical state of the atmosphere at St. Petersburg, where, indeed, the electricity appears to have been disturbed during the whole course of the epidemic, being "so much diminished that the machines could not be charged." To make these phenomena available for the purpose they were intended, they should have been accompanied by evidence that such disturbance in the neighbourhood of St. Petersburg had not taken place before or since, and that similar phenomena were observed in many other places while the cholera was present. These phenomena were not general. There was no loss of power in the magnet at Hamburg, or at Berlin, where observations were made. In London, during "the cholera quarter," the magnets were seldom disturbed, and "the amount of electricity, though less than usual, seems to have diminished only in proportion to the less amount of humidity in the air."

There is, however, one observation in reference to the state of the atmosphere during the choleraic eras which is of great importance, and which corroborates the views we have taken of the agencies prevalent during these seasons. Mr. Glaisher, of the Royal Observatory, Greenwich, states, that the horizontal movement of the air during the whole of this period was *only one-half of the usual amount;* that the period was distinguished by a thick, stagnant atmosphere; that the air was, for the most part, very close and oppressive; and that, on some days, when there was a strong breeze blowing at the top of the Observatory, and over Blackheath, there was not the slightest motion in the air on the banks of the Thames.

This observation acquires increased importance from a comparison with the description, given by Mr. Thom, of the atmosphere of Kurrachee some time before the dreadful outbreak of cholera in that town, when "the temperature was unusually high, the quantity of moisture in the atmosphere was greater than he had ever seen it before in any part of the world, and light, weak, and unsteady winds, or calms, had prevailed in the early part of June, instead of the strong, steady winds, and the overcast sky, for which June and July are remarkable in Kurrachee; and finally, there had been excessive rains. The people, as the result, suffered from languor and oppression, and inability to undergo the slighest fatigue without extreme exhaustion. For ten days before the outbreak of the epidemic, it was a common remark among the old hands, that it was regular "cholera weather." The Report of the Board of Health, whence this account is extracted, adds, that "It is important to bear in mind that these physical conditions of the atmosphere which thus oppress the vital powers are the very conditions under which noxious animal and vegetable refuse decompose with the greatest rapidity, and in which the products are carried in greatest quantity into the blood by the respiratory organs."

The inquiry which has been made into the mortality of cholera in England has, in the most satisfactory manner, shown that, *cæteris paribus,* there is a close and constant relationship of the epidemic to elevation. It has been observed in a former paper in this series, that there is a close connexion between the general health of this country and the distribution of cholera. Now, the tables of mortality in England show that, as a general rule, the mortality declines as we ascend rivers, and that the majority of healthy districts are at certain elevations above the sea.

The relation between the level of places and the strength of the cholera has been most carefully tested in the case of London, and the result has been the discovery of the mathematical correspondence between these two elements under consideration.

The districts of London have been classified according to their elevation above the level of the Thames. They are divided into those the elevation of which is not on an average above 20 feet, and at this level the deaths from cholera were 102 in every 10,000. In the second group, at from 20 to 40 feet elevation, the deaths in the same number were reduced to 65. In the third group, from 40 to 60 feet high, the numbers sank to 34 in 10,000. In the fifth group, with an elevation of from 80 to 100 feet, the deaths were but 22 in 10,000. In a district 100 feet high the mortality was 17; while at Hampstead, about 350 feet above the level of the Thames, the deaths were only 8, of which 1 resulted from infection brought from Wandsworth.

It was found, on further examination of these facts, that the mortality from cholera on ground under 20 feet high being represented by 1, the relative mortality on each successive terrace is represented by one-half, one-third, one-fourth, one-fifth, one-sixth; so that the mortality from cholera, at each successive elevation, is one-half, one-third, one-fourth, one-fifth, one-sixth of the mortality in the terrace immediately below it.

To do justice to Mr. Farr, by whom this law was discovered, and for the guidance of scientific inquirers, who may wish further to understand and test it, it is necessary to add the following paragraph from his Report:—

"The elevation of the five terraces may be represented by 10, 30, 50, 70, 90 feet. The elevations of the two higher districts are 100 and 350 feet. It will be observed, that the mortality at 100 feet is 17; at 50 feet, 34 in 10,000; consequently, at half the elevation the mortality is doubled. The half of 50 is 25, and the double of

the mortality 34 is 68. Now, observation gives 65 in 10,000 as the mortality at 30 feet of elevation. As the processes of dividing the elevation, and of multiplying the mortality by 2 may be carried on *ad infinitum*, it is evident that the mortality is not strictly in the inverse ratio of the heights of the soil."

We may add, however, that this inverse ratio is maintained as accurately as is requisite for the theory, bearing in mind the various modifying circumstances which must produce some little deviation from strict mathematical accuracy. For example, the advantages which are afforded to Hampstead by its elevation are somewhat diminished by the deficiency in the supply of good water; and the disadvantage of some lower levels is compensated by the better supply of water, and by the means and appliances secured by the wealth of the inhabitants.

In considering the law which is thus announced, it is scarcely necessary to observe, that it must be always viewed in connexion with the circumstances which may impede its operation. It is quite possible to convert the most elevated spots into unhealthy places, and render them sources of pestilence to the surrounding districts. Salisbury, Merthyr Tydvil, Bilston, Newcastle-under-Lyme, and St. Giles's, are on levels favourable to a healthy state, and have suffered purely from causes which it was within human power to prevent.—*Times.*

PUBLIC INQUIRY IN NEWCASTLE.

The Committee of the medical gentlemen of this town, who last week met, and passed Resolutions declaring the arrangements recently adopted in Newcastle and Gateshead, for the prevention and treatment of epidemic cholera, to have been defective; that the members of the Medical Profession resident in these towns, not having been consulted as to those arrangements, disclaimed all responsibility for them; and that the Home Secretary (Lord Palmerston), and the Chief Commissioner of Public Works (Sir William Molesworth, Bart.) to whom this expression of feeling was to be forwarded, be respectfully urged to cause a public inquiry into all the circumstances connected with the late excessive mortality in these towns, have since had several meetings, and are actively engaged in promoting the proposed inquiry.

The General Petition has since been prepared, and is now in course of signature, and we append it, as giving, in graphic outline, the grounds on which the public inquiry prayed for is demanded :—

TO THE RIGHT HONOURABLE VISCOUNT PALMERSTON, G.C.B., HER MAJESTY'S PRINCIPAL SECRETARY OF STATE FOR THE HOME DEPARTMENT.

The Memorial of the undersigned Inhabitants of the Borough of Newcastle-upon-Tyne,

Humbly Sheweth,

That this town has recently been the seat of an epidemic, unprecedented in modern times, for its virulence and fatality. That since the epidemic cholera of 1831-2, it has been severely visited by epidemics of influenza, scarlet fever, typhus, measles, and small-pox.

That on the present occasion, Newcastle and Gateshead have, within a month, lost nearly two thousand of their inhabitants, while other towns in the same district have escaped with comparative immunity.

That the above-mentioned circumstances seem to show that there exist in Newcastle some special causes for these periodical inflictions.

That in the opinion of many of the resident Medical Practitioners, the arrangements recently adopted for the prevention and treatment of epidemic cholera in this town have been lamentably defective.

That in addition to the terrible destruction of life thus occasioned, great pecuniary loss has been inflicted upon your Memorialists by the increase of poor-rates, the stagnation of trade, etc., while numerous families have been impoverished, and plunged into deep affliction, by the untimely fate of their natural guardians and supporters.

That for the future protection of the inhabitants of Newcastle against the recurrence of such frightful sources of general insecurity and domestic woe, a public impartial inquiry into all the circumstances connected with the late excessive mortality appears absolutely necessary.

Your Memoralists, therefore, humbly solicit your Lordship's prompt attention to this painful subject, and venture to hope that you will think it consistent with your duty, as a Minister of the Crown, to recommend our Gracious Queen, whose sympathies for the afflicted have never been appealed to in vain, at once to issue Her Royal Commission for the prosecution of such inquiry on the spot. And your Memoralists will ever pray.

In December, 1849, one of their Superintending Inspectors held a public inquiry in Newcastle, and received a mass of oral and documentary evidence, reports, etc., all indicating, most unmistakably, the wretched and neglected condition of the poor, the general disregard of sanitary regulations, and the absence throughout the greater part of the town of every provision for health and decency. For reasons best known to the General Board of Health itself, the result of that official inquiry into the sanitary condition of Newcastle has not yet been published. The facts elicited by the Engineering Inspector who conducted that inquiry, and by two Medical Inspectors who afterwards visited Newcastle, should certainly have sufficed to convince the members of that Board of the deplorable condition of this town, though the very same facts are now paraded as novel discoveries. From the preceding statements it is, therefore, evident that the General Board of Health must have been fully acquainted with the dangerous state of Newcastle in a sanitary point of view, at the moment when epidemic cholera was steadily advancing from the north-east. And it is equally certain that the information which their officers had previously collected on the spot, was utterly disregarded, when they could treat with so much indifference the intelligence of the actual arrival in this very town of the much-dreaded pestilence.—*Newcastle Journal.*

THE METROPOLIS.

Cholera gives decided indications of a disposition to increase; in three previous weeks the fatal cases were 16, 29, 47; last week they rose to 66, of which 29 occurred to males, 37 to females. The majority of the deaths were among persons of middle age; 26 occurred under 15 years of age, 36 at 15 and under 60 years, 4 at 60 years and upwards. In the corresponding week of 1848, soon after the epidemic of that period made its appearance in London, the number of deaths from cholera was 30; in the corresponding week of 1849, when it was passing away, the number was 110. The 66 cases of last week were thus divided over the Metropolis :—In the West Districts, 9 (pop. 376,427); in the North, 5 (pop. 490,396); in the Central, 2 (pop. 393,256); in the East, 8 (pop. 485,522); and on the South side of the Thames, 42 (pop. 616,635).

The Registrar-General requests that medical informants inquire specially in all cases whether the attack of cholera commences by "diarrhœa;" and to state the interval of time in *hours* and *days* between the appearance of diarrhœa and the supervention of spasms, or of the other characteristic symptoms of cholera.

DEATHS from SCARLATINA, TYPHUS, DIARRHŒA, and CHOLERA, Registered in LONDON in the last Thirteen Weeks, with the MEAN TEMPERATURE for the same periods.

	July 16.	July 23.	July 30.	Aug. 6.	Aug. 13.	Aug. 20.	Aug. 27.	Sept. 3.	Sept. 10.	Sept. 17.	Sept. 24.	Oct. 1.	Oct. 8.
Scarlatina.	27	26	23	33	30	27	18	32	43	34	48	47	58
Typhus	47	51	46	42	60	48	37	48	37	39	49	57	49
Diarrhœa and Dysentery..	54	74	83	115	141	131	144	157	137	80	94	71	72
Cholera	3	6	9	4	19	10	18	16	7	16	29	47	66
Mean Temperature	58·7	59·6	60·3	61·6	61·2	60·4	58·6	55·7	56·1	57·6	54·6	52·4	48·6

THE PROVINCES.

NEWCASTLE.—The cholera, so far as appearances go at present, seems almost to have ceased. No deaths are recorded on the 11th. The following table shows the number of deaths from cholera and diarrhœa registered each day in Newcastle, and the aggregate registered mortality from both causes at the close of every day :—

Date.	Cholera, each day.	Diarrhœa, each day.	Both.	Total, close of each day.	Date.	Cholera, each day.	Diarrhœa, each day.	Both.	Total, close of each day.
Aug. 31...	1	0	1	1	Sept. 22...	59	1	60	992
Sept. 1...	1	0	1	2	,, 23...	63	4	67	1059
,, 2...	0	1	1	3	,, 24...	72	6	78	1137
,, 3...	3	3	6	9	,, 25...	42	1	43	1180
,, 4...	0	2	2	11	,, 26...	53	3	56	1236
,, 5...	4	2	6	17	,, 27...	35	2	37	1273
,, 6...	6	1	7	24	,, 28...	27	1	28	1301
,, 7...	6	0	6	30	,, 29...	29	5	34	1334
,, 8...	5	0	5	35	,, 30...	20	4	24	1359
,, 9...	20	1	21	56	Oct. 1...	11	1	12	1371
,, 10...	17	3	20	76	,, 2...	13	1	14	1385
,, 11...	21	0	21	97	,, 3...	19	2	21	1406
,, 12...	29	2	31	128	,, 4...	10	4	14	1420
,, 13...	27	0	27	155	,, 5...	10	1	11	1431
,, 14...	58	1	59	214	,, 6...	10	1	11	1442
,, 15...	98	3	101	315	,, 7...	8	3	11	1453
,, 16...	101	4	105	420	,, 8...	3	1	4	1457
,, 17...	101	9	110	530	,, 9...	6	3	9	1466
,, 18...	93	7	100	630	,, 10...	1	0	1	1467
,, 19...	94	6	100	730					
,, 20...	108	10	118	848					
,, 21...	80	4	84	932	Total.....	1364	103	1467	...

Of the total number who have perished by the epidemic in this town it appears that little more than 1-7th were under 15 years of age, while 1-14th were above 60 years of age. Up to this time it would appear from the returns that 1000 able-bodied persons have

been destroyed. The average age of all whose ages have been returned up to this time is 33½ years.

GATESHEAD.—The number of deaths registered in Gateshead parish from cholera, exclusive of diarrhœa, has been :—

1st week	10
2nd ,,	99
3rd ,,	148
4th ,,	82
5th ,,	20
Total	359
Add diarrhœa	36
Five week's mortality	395

The daily returns have been as below:—

Date.	Cholera.	Diarrhœa.	Total.
Sept. 2 to 30 inclusive	343	31	374
On October 1	4	0	4
,, 2	4	1	5
,, 3	6	3	9
,, 4	1	0	1
,, 5	1	0	1
,, 6	0	1	1
,, 7	1	0	1
,, 8 ,, 9 ,, 10	12	1	13
Total	372	37	409

LIVERPOOL.—The cholera has broken out among the German passengers on board the American emigrant-ship Isaac Wright, which put back to this port on Tuesday, having struck on a rock N.N.W. of Cape Clear on the 28th ult. Before the vessel reached the Mersey, 47 passengers were thrown overboard, and after making the river, three more died and were carried ashore. It was then found necessary to remove a considerable number to the hospital, at the workhouse, three dying in the carts on their transit thither. From the 8th to the 10th of October there have occurred 26 new cases of cholera. Of these 18 were German emigrants (chiefly passengers from the Isaac Wright), 2 Irish emigrants, 2 inmates of the workhouse, and 4 residents of the town. 12 deaths have taken place,—viz., 7 German and 1 Irish emigrant, 1 inmate of the workhouse, and 3 residents of the town, all in the same street ; 3 of the German patients were from an emigrant-ship, the Emma Field, now lying in the river, with between 400 and 500 passengers on board. On the 11th a house-to-house visitation commenced in the locality in which the three deaths from cholera have occurred. On the same day 7 new cases were reported to the officer of health, 4 affecting emigrants (3 foreign, 1 Irish), and 3 inmates of the workhouse, none of whom had had communication with these emigrants. Among the new cases are 2 of the Isaac Wright's passengers, 1 passenger from on board the Garrick, and 1 from the Antartic. No new case has been reported from the town.

BERLIN, Oct. 7.—With the return of autumnal, almost wintry, weather, the cholera has relaxed much of its virulence here. The number of fresh cases daily is now below 15. The highest amount of daily cases has been 46 in a population of 430,000 : this is higher than it ever was before in any former visitation. The total number of cases since the first week in August, when the epidemic first showed itself, is 1151, of which 740 have died. The Artillery and Engineers' School has lost four of its teachers by cholera, of whom three were staff officers ; this, however, has not arisen from any peculiarity of the locality, as the teachers did not inhabit the building, and none of the pupils have been affected. Along the shores of the Baltic also the disease appears to be relenting. In Copenhagen it is just declared extinct ; of 7525 cases, 4083 have been fatal. In Stockholm, which was last affected, the culminating point seems just to have been reached,—out of 4078 cases, 2424 ended with death. In St. Petersburg also the cases show a gradual decrease, but I have not the totals at hand. A physician of this place has lately proposed a plan to the Sanitary Commission of Berlin to institute, at small distances from each other, houses of call, where Medical men, appointed for that purpose by the authorities, should be always in attendance.

Dr. Mackintosh, in a letter to the *Times*, speaking of the reaction obtained by injection of salines, says :—"The problem, then, that remains to be solved is, how to make the re-action thus obtained permanent. Might not this be obtained by introducing into the saline solution to be injected one of the proximate principles of the blood (albumen), to such an extent as to make the solution of the same specific gravity as that of the serum of the blood ?" The impropriety of writing in this manner to a daily paper is too evident to require remark.

REVIEWS.

Practical Observations on Aural Surgery and the Nature and Treatment of Diseases of the Ear. With Illustrations. By W. R. WILDE. London. 1853. 8vo. Pp. 506.

The reputation Mr. Wilde has acquired by his numerous contributions to the medical and general literature of the day, and the knowledge that we possess of his career, induced us to take up his "Aural Surgery" with a more than common interest.

We believe that it is an axiom established in the minds of all who do not run while they read, that it is as necessary to know the "author" as the "book." For upon his qualities, moral no less than mental, and upon his opportunities of informing himself on what he writes, depend the value of his labours and the faith with which the reader may confide in his views.

Mr. Wilde was pupil of the late celebrated Abraham Colles, Professor of Surgery in the College of Surgeons in Ireland, who made use of him to carry out numerous pathological investigations in which that great man was constantly engaged. He was then known no less for the patient industry and success with which he conducted researches generally dry and uninteresting to young minds, than for the extraordinary energy and activity of mind which he brought to bear upon every topic connected with the advancement of his studies, or with those branches of the science of medicine which fell in his way.

His education for becoming a future teacher was further improved by much travel, and by a residence in some of the most celebrated continental schools.

Thus armed with the most advanced professional knowledge of his day, he devoted himself (secretly led, no doubt, by the peculiar qualities of his mind) to the practice of ocular and aural surgery, in which the habits of quick perception, long-practised and delicate manipulation, patient investigation, and the talent for generalisation could be brought to bear with the best effect in increasing the miserably scanty knowledge of the Profession on the latter subject.

The Work before us is the result of ten years of labour. The experience afforded by an extensive private practice has been enriched by that of an hospital devoted solely to the treatment of diseases of the ear and eye.

The assertion of Mr. Wilde's claims to authority as a teacher, or to our confidence as a writer, would be imperfect, and, indeed, valueless, did we not add that which every page of his book discovers, that he is no mere theorist, has no crotchets, resorts to no unintelligible jargon to hide ignorance, appeals to no doubtful or speculative hypothesis, but founds his deductions on the plain and solid basis of pathological and analogical induction, and, by applying the advanced state of medical, surgical, and ophthalmic knowledge to the treatment of diseases of the ear, on rules intelligible to every reader, and which assures him that he has fallen into the hands of a master who fails solely, when fail he does, from the intricacy of the subject, and not from a departure from the true and only basis of all our knowledge —a patient and enlightened pathological research.

It appears that one of Mr. Wilde's earliest aspirations was, that he might be one day able to rescue aural surgery from the hands of the empiric into which the passion of the learned for generalising and simplifying had allowed it to fall. With what effect he has accomplished this determination a perusal of his book will show ; and, before proceeding with the analysis of it, we may state, that he himself has taken the most effectual steps to avoid falling into that category of vaunting pretenders who have been for years the opprobia of the healing art, by promulgating his opinions in every way, and by the establishment of an hospital, maintained with great and increasing reputation,—the first clinic ever known in Great Britain for aural diseases. His theories, deduced from the plain rules of pathology, as known and acknowledged over all the civilised world, he has submitted to the test of bedside application ; and there is not, he assures us, one new view or statement in his book that has not been repeatedly reduced to the touchstone of practice in the presence of a large and already-educated class of pupils. Finally, to fully appreciate the value of the work, it is right to say, that, among his contemporaries in Dublin, there is not a man more thoroughly respected for candour and honesty, and for an

unquenchable enthusiasm to advance the interests and utility of his Profession.

The First Chapter consists of a curious review of every previous known author on aural diseases. In this he gives to each the honour due, and most fairly lauds the exertions of a Saunders, a Kramer, and a Toynbee, while, with no less liberal hand, he lashes the quackeries of pretenders, and the ignorance of their supporters. The Glycerine quackery, among others, receives its deserved exposure.

The second Chapter gives the plan of the work, and proposes several small improvements, such as a new speculum, etc. Mr. Wilde condemns the use of lamps or other artificial illumination for examining the tympanum, and recommends the use of the sun's rays and his speculum alone as all-sufficient. Nor can he agree with Kramer on the value of that once grand "dodge" of Eustachian catheterism, the true value of which has long been settled in the pages of this Journal, in the war carried on between him and the estimable German author, to whose true merits, however, Mr. Wilde has always paid a due tribute.

"We have all heard," says Mr. Wilde, "a great deal about catheterism of the Eustachian tube,—of the marvellous and instantaneous effects attributed to it,—of the accidents which may occur,—and of the difficulties which beset the operator in his endeavour to introduce an instrument into the faucial opening of the passage which leads into the middle ear. I know few subjects upon which there is more general ignorance than the value to be attached to Eustachian catheterism, or to the best mode of employing it. Some writers would lead us to suppose that this operation is of use in a far greater number of aural diseases than, according to my experience, is the fact."

We will but add one quotation more, to give Mr. Wilde the opportunity of giving the *coup de grace* to this over-valued remedy; and we do so the more readily, as we know that it is held out among ourselves as a most useful operation, and, we regret to add, is very generally practised in France:—

"It is really preposterous to imagine how such an effect could be anticipated; and one would be inclined to call in question the common sense of the proposers, but that a solution may be offered, at least in Dr. Kramer's case, by the perusal of the following paragraph of his book:—'It must always be kept in view, that the cavity of the tympanum, which first receives the etherous vapour, is extremely small, and that even when *the vapour passes through this cavity into the labyrinth, by means of the foramen ovale, it has to fill an equally small*, or even still smaller space, than that formed by the cavity of the tympanum!' Can it be that Dr. Kramer has forgotten his anatomy, or that the school of Johannes Müller credits the assertion, that in an ear where the structures of the tympanum are perfect, vapour passes through the foramen ovale, closed by the base of the stapes, and its surrounding membrane and ligaments?—or does endosmose, the only principle on which a plausible explanation can be offered, really exert such an influence as that here alluded to? If this be the principle (although he does not make any allusion to it) by which Dr. Kramer would account for the action of his favourite remedy, one would have thought, from a knowledge of the anatomy of the parts, that the membrane closing the foramen rotundum would be a better medium for the passage of the gas than the base of the stirrup bone. But yet this is not all; the vapour is to *fill* the cavity of the labyrinth, thus replacing the perilymph, in order to come in contact with the expansion of the auditory nerve! This opinion is, however, on a par with the proposition made by the same author, and to which I have adverted at page 105,—to judge of the state of the auditory nerve by the introduction of a catgut, an ivory, or a whalebone bougie into the cavity of the tympanum. Mr. Jones has, in his essay already referred to at page 32, reiterated all these absurd opinions regarding nervous deafness; not, however, as expressing his own ideas on the subject, but prefaced by this careful proem,—'The following is a sketch of "nervous deafness," as commonly drawn by authors.'"

The third chapter we consider probably the most valuable in the book, as it contains a set of statistical tables such as we have never seen equalled for accuracy of detail, and which, as being the results of observations made in the presence of the Profession, must always possess the highest value among such investigations. At page 114 is a collection of 200 cases, taken from upwards of 2000, whose symptoms are so fully described as to satisfy every wish of the inquirer.

Mr. Wilde's next effort is a nosological table, which he has improved upon and enlarged from one he published in 1844, in his "Contributions to Aural Surgery." It is good and useful.

The perusal of this book satisfies us that it has not been written to satisfy the cravings for mere popular patronage. On the contrary, it is a truly scientific work, written for the Profession, and bearing the impress on every page of the deep reflection of a clear-headed, sagacious, practical surgeon, and we are happy to find from the preface, that the sound views propagated by the author on this and other subjects connected with aural diseases have met with deserved acceptation in Germany and in America, and that the work is to be reproduced in those countries.

We have narrowly looked through the work, to see how Mr. Wilde proposes to cure incurable diseases—a rather favourite theme with theoretical and impracticable men, and the paradise of quacks—and what hopes he holds out to the Profession to deal with such affections as tinnitus, nervous deafness, etc., etc.; and we are glad to find that Mr. Wilde supports no knavery, but honestly and fairly confesses the small power that the skill of the present day has over such distressing maladies. We are fully persuaded that this sincere confession of an ignorance deeply to be regretted will not injure the work with the Profession.

On the whole, we have no hesitation in expressing our opinion, that the book is by far the best treatise on "Aural Surgery" which has yet appeared in any language; that it will raise the already high reputation of its author, and take a permanent place among the best of the standard works which adorn medical literature.

Notes Worth Noticing Relative to the Cholera. By Dr. Gillkrest, Inspector-General of Army Hospitals. Pp. 67. London: W. J. Golbourn. 1852.

During the epidemic visitation of cholera to this country in 1832, Dr. Gillkrest devoted himself to a laborious investigation of the disease, and the results of his experience are recorded in the pamphlet now before us. He is a decided non-contagionist, and advocates his views with considerable force. He is also opposed, as may be expected, to the adoption of quarantine regulations, as the disease has spread rapidly notwithstanding such precautions. On the other hand he maintains, that persons who have been in close contact with the sick, and who have breathed the exhalations from the corpses of fatal cases, have very commonly escaped, unless their bodies were predisposed to the disease by intemperance, extreme poverty, or previous illness.

Homœopathy: its Globules (Bubbles) Analysed. By W. J. Cox, M.R.C.S., M.B., etc. Second Edition. Pp. 84. London. 1853.

We are happy to welcome the second edition of this excellent pamphlet, which, in a brief and summary manner, exhibits the frauds and follies of the homœopathists and their doctrines. We cannot conceive how any person in his senses can resist the force of the arguments which Mr. Cox adduces. We admire the dashing and truthful style of the book, and recommend it to our readers; and, if any lingering doubts as to the value of homœopathy should remain in their minds, we think that a perusal of Mr. Cox's pages is calculated to dispel them.

The Potato Disease.—Dr. Muspratt recommends, as a preventive of the potato disease, the discontinuance of the use of animal manures, and the employment of mineral composts containing a large quantity of common salt.

Important Scientific Invention.—A letter from Berlin, of the 17th, says:—"It is well known that the paper prepared for photography grows more or less black by rays of light falling on it. One of our young painters, M. Schall, has just taken advantage of this property in photographic paper to determine the intensity of the sun's light. After more than 1500 experiments, M. Schall has succeeded in establishing a scale of all the shades of black which the action of the solar light produces on the photographic paper; so that, by comparing the shade obtained at any given moment on a certain paper with that indicated on the scale, the exact force of the sun's light may be ascertained. Baron Alexander Von Humboldt, M. de Littnowl, M. Dove, and M. Pongendorff have congratulated M. Schall on this invention.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

CONTRIBUTIONS TO THE "EXAMINATION OF THE URINE."

By Professor J. VOGEL.

The author's observations bear upon the amount of secretion, the specific gravity, and the colour of the urine. He regards the urine, not as a sign of local disease, but in its signification upon the general change of material in the body.

The quantity of the urine cannot be determined by weighing, but by measurement in standing glass vessels, which are graduated in cubic-centimetres,—1000 cubic-centimetres, of specific gravity 1030, weigh 1030 grmm. Thus can be learned both the whole quantity excreted in the twenty-four hours and the differences of amount for shorter periods, governed by various influences.

Two sources of fallacy must be borne in mind. First, it is never quite clear at the commencement of the observation, whether or no the bladder be completely empty; and, secondly, the loss of urine during the evacuation of the fæces can only be guessed. Considerable accuracy may, however, be obtained by a repetition of the experiments.

The quantity of urine voided by a healthy man in the twenty-four hours varies between 1000 and 3000 cubic-centimetres; the hourly secretion is from 20 to 200 cubic-centimetres. The causes of these variations are partly internal, partly external; some transitory, others of longer duration; some simple, others complicated. The influence of drink is the most remarkable. It may increase the secretion, within four hours, to three or even ten times the normal quantity. The influence of different diuretic medicines requires further investigation; as also the effects of other watery secretion in diminishing the flow of urine; likewise the influence of atmospheric changes. The medium quantity of urine in relation to the weight and length of the body is of varying amount. The quantity poured forth in the night is generally the least; while in the morning it increases, and in the afternoon or evening attains its maximum. There are, however, no conclusive observations upon this point in the case of women, children, and old men. People who are accustomed to void daily large quantities of urine, bear indifferently both hunger and thirst. Diseases which disturb the urinary secretion, are more dangerous in them than in other persons in whom the excretion takes another channel. But when the disease is characterised by excess of urinary secretion, recovery takes place more rapidly than in other persons of different habit.

As regards the quantity of urine secreted in disease, the author found it normal in many chronic feverless complaints, more especially in women. It exceeded the normal quantity but rarely; as in diabetes mellitus and insipidus. The quantity was diminished in the greater number of affections; mostly in acute fevers, at the end of chronic diseases, or in dropsy.

The specific gravity is of use to reduce quantity to weight; but it gives an uncertain representation of the amount of solid parts to the watery. Trapp, who endeavoured to correct Becquerel's Tables, gives, as an approximation, the simple rule to subtract 1000 from the found specific gravity, and to double the remainder; the product gives the weight of solid parts contained in 1000 parts of urine. The following conclusions are deduced from the relation of the quantity of the urine to its specific gravity. As a rule, specific gravity and quantity stand in opposition to one another. When urine whose quantity is far below the standard shows a high specific gravity, it indicates abstinence from drink, or excessive watery excretion in other channels. A great secretion of urine, with low specific gravity, proves great absorption of fluid. Low specific gravity, with diminished urinary secretion, points to disturbance in the secreting function, as in Bright's disease: an abundant secretion, with high specific gravity, leads to the supposition that sugar is excreted. The medium specific gravity of a healthy man is 1020; according to Becquerel, it is 1018·9. A man weighing 100 kilogrammes (200lb.) voids in the hour 103 grammes of urine; of which 4·1 grammes, or rather more than a drachm and a quarter, is the weight of solid parts. In most chronic diseases, the amount of solid parts is diminished; while in two classes the quantity of urine is excessively increased: in one, there is an addition to the number of solid constituents,—namely, in diabetes mellitus and insipidus, attended with emaciation, etc.; in the other, namely, hydruria, there is diminution of the solid parts and loss of specific gravity. In the latter case, there is no emaciation, and the process favours the elimination of morbid products, as in many cases of dropsy. In acute fevers, the quantity of the urine is less, but the specific gravity increases in proportion as the amount diminishes. The urine, in such cases, contains, it is true, less solid matter than that from a perfectly healthy man, but not less than that voided by a person suffering from some chronic complaint. Such patients are in the position of one starving, the solid matter of the urine being obtained at the cost of the body. At the quick approach of death there has been noticed a continued increase of specific gravity with a continued decrease in the urinary secretion. When death ensues from injury to the medulla oblongata, the quantity of urine remains considerable to the last, but the specific gravity is small. A great amount of combinations of chlorine will be poured forth in the hydruria which removes hydræmia; and this agrees with the observation of Schmidt, that a deficiency of albumen in the blood may be supplied by the taking up of a certain quantity of chloride of sodium.

The Author arranges the colour of the urine under three divisions, namely, yellow, red, and brown; and he establishes the colour by comparing it with definite mixtures of camboge, camboge and carmine, camboge, carmine, and Prussian blue. Each of these falls into three subdivisions, namely, pale yellow, bright yellow, yellow; reddish yellow, yellowish red, red; brownish red, reddish brown, brownish black. These hues can be accurately obtained by different dilutions of the above-mentioned colours. In health the colour of the urine varies mostly between reddish yellow and bright yellow; but every individual has some standard of colour of his own. In diseases the colour varies greatly. Pale urine is voided in hysterical and nervous patients; in many cases of anæmia, in convalescence. In all feverish attacks the urine is yellowish red or red, containing absolutely more colouring matter than in the normal state. In many cases of typhus, in Bright's diseases, in scorbutic attacks, it becomes brown or brownish black, from admixture of blood discs. The author succeeded, by boiling, in separating a coagulum of hæmato-globulin in these last cases, after which the urine was paler.—*Archiv. fur Wissenschaft. Heilk.*

SURVEY OF THE PRACTICE OF M. ROUX DURING THE FIRST SEMESTRE OF THE YEAR 1853.

During this period twenty important amputations, and one resection of the elbow, have been performed. This division comprises amputations of the breast, all in women, to the number of seven; they have all been attended with wounds of great extent. Three patients died; two of phlegmonous erysipelas; the third of pleurisy. There was this fact in common, that the disease came on as the large wound was contracting. The erysipelas showed itself after sudden atmospheric changes from heat to cold. Of those who lived, one had a severe attack of erysipelas of the side and arm. In two cases only did M. Roux attempt union by first intention. In one the wound, four inches long, united almost completely by the fourth day. The second wound, almost of the same extent, united in a similar manner by the fifth day. Strapping was applied, but no ligatures. The fourteen other amputations were performed upon limbs. One operation, performed upon a person suffering from suppurated white swelling, was unsuccessful, the patient dying on the sixth day of purulent infection. A disarticulation of the shoulder was also unsuccessful; the patient lost much blood during the operation. Two days afterwards he had secondary hæmorrhage, which rendered necessary the removal of the dressings and the application of three ligatures. In the course of the same evening he was attacked by broncho-pneumonia, and he died on the 13th of May, the ninth day after the operation. The disease of the arm was of cancerous nature. A third patient died from secondary abscess after Chopart's operation on the foot. Of the eleven amputations of limbs remaining, one was performed on the forearm, five on the thigh, and five on the leg. Almost all were cases of white swelling. Nine were cured by the operation, but of these one is still in the hospital labouring under phthisis. Two

died; one, an old man, who had suffered from gangrena senilis,—the mortified foot was removed, but the gangrene spread upwards along the limb; and a second, who sank under sloughing of the integuments over the sacrum. M. Roux endeavoured, in all these cases, to obtain union by first intention. The success was general. The attempt failed in two cases only; one, the case of gangrena senilis; and the other, a case of organic disease in a foot in which the limb was much wasted, and the integuments could not be retracted.—*L'Union Médicale.*

BICHROMATE OF POTASS IN THE TREATMENT OF SYPHILIS.

By Dr. HEYFELDER.

The experiments, as yet few in number, tried by the Professor at Erlangen, confirm, in great measure, the results announced by MM. Vicente and Robin (*Gaz. Med.*, 1852). One gramme of the bichromate is mixed with a sufficient quantity of extract of gentian to make eighty pills. The patient, who is obliged to observe rigid diet, takes one pill every night, for the fourth time; then he takes two pills, one at night the other in the morning. Should nausea or vomiting supervene, some extract of opium must be added. From the tenth to the thirteenth day, three pills are given; commencing from the sixteenth day, four pills; from the twenty-fourth day, four pills. In this way the patient takes, in thirty-one days, 160 pills, and the cure is completed. Dr. Heyfelder added to the above treatment the decoctions of sarsaparilla or of guaiacum. The patients were all females. *Case* 1. Syphilitic ulcers of the throat; condylomata about the anus; treatment from Dec. 26 to Jan. 25; cure. *Case* 2. Ulcers of the throat; condylomata about the anus; swelling of the tibia; treatment from March 24 to April 24; cure. *Case* 3. Ulcers of the pharynx; condylomata of the labia and anus; cure in three weeks. *Case* 4. Condylomata about the anus; cure in fifteen days. *Case* 5. Leucorrhœa; phagedænic ulcers of the vagina; salivation on the twelfth day; omit the medicine; no change in the syphilitic symptoms.—*La Presse Belge.*

We must pronounce these experiments unsatisfactory, because it is well known that the greater number of common venereal affections may be cured, especially in women, by rest and cleanliness, in about a month or six weeks, the time occupied by Professor Heyfelder in the treatment of the above-mentioned cases. Moreover topical applications were also used, to which a considerable share of the improvement must be attributed. In two of the cases, nausea and sickness supervened.

FOREIGN CORRESPONDENCE.

MEDICAL SKETCHES IN GERMANY.

No. II.—HEIDELBERG.

The University of Heidelberg is, in many points of view, one of the most remarkable in all the circle of the German States; it ranks among the oldest, and from an early period in its history, its professors, and the doctrines taught in its several faculties, have exerted considerable influence in fashioning the literary fabric of Central Europe. The situation of the city of Heidelberg, at the entrance of the valley of the Neckar, with a broad plain extending from the foot of its richly-wooded hills to the eastern banks of the Rhine, which here throws several serpentine curves as it courses along from Spires to Manheim; its proud castle, commanding the pass to the fertile slopes of Neckarlandstein, all form attractive features in the landscape, as the traveller approaches from the west, whence, perhaps, the most imposing effect is produced, on our visiting Heidelberg, for the first time, as the contrast presented by the plain he has traversed, prepares him, as it were, for the grandeur of the *Heiligeberg*, the *Kaiserstuhl*, and the mountainous chains with which they are continuous. We have said that Heidelberg is one of the oldest Universities in Germany; those of Prague and Vienna are the only ones whose date of foundation is antecedent to that of Heidelberg. The University of Paris had already acquired great renown; that of Prague (founded, 1384, by Charles IV.) was rising into distinction, when, in the year 1386, the Count Palatine, Rupert I., a Prince of more piety, good spirit, and zeal, than commonly existed at that period, determined to found a University in Heidelberg. Having obtained the necessary authority from the Pope, he opened the University, on the 18th of October, 1386, with much attendant festivities. In the commencement, there were only three Professors, the most celebrated of whom was Marsilius Von Inghen, previously Professor at Paris, where he had acquired great repute. Marsilius, as Professor of the then dominant scholastic philosophy, read logic. Reginald, a Cistercian monk, read on the letter of Paul to Titus; while Heilmann Wunenberg, from Worms, propounded a book of the Natural History of Aristotle. It is highly probable that, in these discourses, a very great latitude was allowed in the choice and manner of treatment of the subjects; and that, in the readings of Wunenberg, what was then known of medicine, was introduced in a general way. The success of the three Professors appears to have been very considerable, even at first; for we find it stated, that, already in the first year, there were over 500 students. Additional Professors were soon required, and, with a liberal munificence, the Prince Rupert invited and paid men of science from other Universities. For a long period the Medical Faculty was but poorly endowed, Lambert von Ostkirchen being the only Professor of Medicine from 1387 to 1393. At the death of Rupert, the founder of the University, his successor, Rupert II., seems to have regarded the interest of the young Institution with an almost equal solicitude. Passing over a considerable interval, we find that the Medical Faculty, in the early part of the seventeenth century, possessed three Professors, of therapeutics, pathology, and physiology; and, moreover, the importance of botanical, and especially of anatomical, knowledge, appears to have been fully recognised; for it is stated that, by law, the bodies of condemned criminals were obliged to be given up for dissection. In the long reign of Karl Theodore (1742—1799), who so befriended the Arts and Sciences in his native country, the University of Heidelberg, as well as all other Institutions of the State, participated largely in the munificent spirit of the Prince.

Curious tales are told of the wild doings of the students of Heidelberg, even at early periods in the history of the University. So many young men assembled from different quarters, more or less strangers in their new abode, united among themselves by community of philosophic studies and pursuits, combining the deep and earnest exercise of mental ability in the brightest period of its bloom, with all the still half-boyish vivacity of youth or early manhood,—this large assemblage of young spirits, as in almost all other similar Universities soon came to be separated in tastes, thoughts, and feelings, from the surrounding more sober inhabitants; and if there were no actual feelings of hostility between the students and the citizens, it required but little on either side to fan the spirit of opposition and jealousy into something more formidable; and thus we not unfrequently meet with accounts of very serious outbreaks, dignified in the local annals with the name of *studentenkrieg*—students' war. One of the most remarkable of these outbreaks occurred so early as 1406. Two young students quarrelled with an officer of the Court, and from words it came to blows, the officer having used most offensive language. The officer vowed vengeance, and, having collected a large number of the Court people, noble and ignoble, they fell, with all kinds of weapons, on the house of the Rector Johann, of Frankfort, who was also a professor, and with whom many of the students resided, and to whom many more had fled for refuge. In the midst of the tumult the bells were rung, the common people filled the streets, a report spread abroad that it was an order of the Emperor, the city gates were shut, and all shouted aloud that students and long-robes of every kind should be all put to death. At length the Bishop of Spires came to try to quell the storm, and, in the name of the Emperor, called for a truce; but for a long time it was all in vain; the people only rushed on the more wildly and madly, broke into the Rector's house, and those students were fortunate who could either conceal themselves, or escape by the roof and windows; many were beaten to death, many spitted, or killed in other cruel ways. The Professors flew for succour to the Emperor, who was much concerned to hear of these disturbances. He forthwith commanded peace, and gave many stringent orders; the guilty were punished; and, as the story goes, the Empress and her three sons were ill-affected towards the University and the students, the Emperor, at the instance of Matthew of Cracow, commanded that his sons and relations should solemnly bind themselves to protect

the University under all circumstances, which, accordingly, they were obliged to do, on the following day, in the presence of the assembled members of the University. Thus was the hatred of the courtiers and young nobility towards the University for a long time suppressed.

In Carl Friederich Von Baden (1800 et seq.), the University may be said to have had a second founder; and in the name now given to it, Universitas Ruperto-Carolina, the share which this prince had in placing it on its present level is fully recognised. Its allowances from the State were raised to 66,000 florins, of which 50,000 were bestowed in the salaries of more than forty professors. The University was divided into three sections—theology, jurisprudence, and medicine; State economy (a much more comprehensive science than that known as *political* economy with us); this, with the fifth and last section, a general one, formed the philosophical faculty. We are now at the period when the medical school of Heidelberg, under a host of illustrious names, acquired its world-wide reputation. We need only mention the array of distinguished men who filled the chairs in this department. There were eight ordinary professors—Professor Moser, the Privy Councillors Conradi and Tiedemann, Professor Schelver, Privy Councillor Nägele, Professors Gmelin and Chelius, with Dierbach, Fohmann, and Leuckart. If space permitted, we might, in other departments, cite the names of Leonhard and Leger Iser. It is unnecessary for us here to notice the various works of this distinguished school in anatomy, physiology, and anthropology, chemistry, surgery, medicine, and midwifery. The names we have cited have become incorporated with the very foundations of our modern medical literature in their several departments. Some of these great names still honour the professional lists of the University. Tiedemann still holds his chair, but professes no more, as, though still in a green old age, he leaves the more onerous duties to his worthy and energetic representative, the *privat-docent* in the department of experimental physiology and anthropology (Dr. Jacob Moleschett). Chelius is still to be found daily in his *clinique*, the admiration of all foreign visiters for his urbane manners, his still vigorous diagnostic judgment, his still fortunate successes as a great operative surgeon. Death has placed another name on the records of chemical discovery, Gmelin; while the lamented loss of Nägele and his sons, all three within a year, still leaves a gloom over Heidelberg. We shall resume next week, with some more particular account of the recent and present states of this school, and those who now fill its professorial chairs.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, Oct. 11, 1853.

DEATH UNDER CHLOROFORM.

About a fortnight ago, while the students were assembled in the operating theatre of the Infirmary, to see Mr. Syme's operation of perineal section performed by Dr. Dunsmure, and while chloroform was being administered preparatory to the operation, the patient suddenly expired. Every expedient that was possible under the painful circumstances was immediately resorted to by Dr. Dunsmure and his colleagues, but, unfortunately, without effect. I cannot but think, that a great error in the administration of chloroform prevails in the hospital here. Sufficient precautions are not used to allow a free admixture of atmospheric air with the anæsthetic. When this is attended to, the patient can be put under the influence of the drug more easily and with less suffering to himself, and can be kept under it for many hours consecutively. In hospital practice its administration is commonly entrusted to some raw dresser, who, thinking he cannot give enough of a good thing, squeezes a towel saturated with it over the mouth, where it is kept firmly applied, so that the admixture of chloroform with atmospheric air is rendered impossible.

MICTURITION EXTRAORDINARY.

Some amusement has been excited in the Medical circles, by a racy story which is in circulation, and which is, I believe, quite true. Many methods of getting into practice have been chronicled, but this novel *à priori* one has the merit of being entirely *sui generis*. A few weeks ago, a Medical gentleman on the south side of the town, who has lately encumbered himself with a gig, horse, and boy, for the due use of which he seems greatly at a loss, was observed dashing down the road leading to Granton, a suburb three miles from Edinburgh.

All heads were turned to see who it was. Some urgent case, some dreadful operation, were the surmises. Suddenly he turned into a side lane, threw the reins to the boy, performed personally the operation indicated in the heading, and then resuming his seat, quietly turned his horse's head homewards.

MEDICAL JOURNALISM.

The surmises obscurely hinted in my last have become facts since the appearance of the October number of the *Monthly*, in regard to the difficulty, to drop all metaphor, which its conductors have experienced in getting matter. I had been a little premature in my statement as to Dr. Bennet having left the *Monthly*, and attached himself to the old *Edinburgh*.

It would appear, from what has subsequently transpired, that Dr. Wood did not purchase the latter for himself, but for a body of gentlemen, who have since issued a circular calling on the Profession at large to take shares, to prevent the Journal becoming the tool of any party. It is understood that Dr. Seller, formerly editor of the *Northern Journal*, and for a short time joint editor with Dr. Bennet of the *Monthly*, is to have the management of this adventure.

One remarkable phase in this affair I am, however, at a loss to explain. Towards the close of last week it was confidently reported, that the rupture between Mr. Syme and Dr. Bennet, which the *Monthly* seemed so anxious to publish far and near, had caused the former gentleman and all his friends to desert the *Monthly*, leaving the latter undisputed master of the field to crow as loudly as he liked. On Saturday, emissaries from the *Edinburgh* were busy canvassing for shares, on the ground of a junction between the two. Subsequently Dr. Bennet denied the truth of their statements, and there has been neither apology nor explanation on their part. I am certainly of opinion, that the Profession are entitled to know which of the two parties has deceived them. Deception there certainly has been; but one thing seems certain, that the Professors who formerly edited the *Monthly*, although they have removed their names from its cover, are, nevertheless, determined to maintain their old ascendancy over it, and to preserve it as an exclusive journal advocating class interests.

GENERAL CORRESPONDENCE.

CHOLERA IN NEWCASTLE AND THE LATE MEDICAL MEETING.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the leading article of the *Lancet* of last week, it is stated, that "some of the medical men" of Newcastle "are angry at the mode in which they have been, to a great extent, superseded by the officers of the Board of Health." That, Sir, is taking but a very limited view of the matter; and one which falls far short of doing justice to those Medical Practitioners in this town who met to preserve their own honour and that of the Profession to which they belong; and to declare, that with arrangements which were tardy in the extreme, and imperfect as tardy, they had nothing whatever to do, and therefore were wholly irresponsible for the calamities caused by such negligence; but they had a purpose far beyond this, too, which was to do their best for a public impartial inquiry into all the circumstances connected with the late outbreak of cholera in Newcastle, and thus endeavour to benefit for the future the poor, and by consequence the rich; for the former cannot be dying by pestilence in the midst of the latter, without these in their turn being smitten by the plague, which their indifference to the well-being of their poorer brethren may have done much to cause.

The medical men in this town feel angry with more than the mode in which they have been set aside, and the want of courtesy with which they have been treated by the officials of the Board of Health; they feel an entire want of confidence in the Board itself constituted as it now is; for what reliance can they feel in a body self-convicted like the Board of Health in London. Dr. Gavin was heard to state publicly some days ago, when pressed by Dr. Fife on the matter, that "it," the Board, "had been a complete failure." That Board has had for years before it all the information and ten times more of the wretched sanitary state of Newcastle-on-Tyne, which they are now so pompously parading before the public as recent discoveries by Mr. Lee, their engineering inspector. No need had they, Mr. Editor, to send any engineering inspector down

here to seek them information; they knew well what Mr. Lee was to find, and he is only sent down to Newcastle for the purpose of refurnishing them with these facts, which they have laid aside too long to be used now. It would not do for Mr. Edwin Chadwick to publish, in October, 1853, what ought to have been reported on in 1850; so the Board of Health, or rather Mr. Chadwick's Board, send down Mr. Lee, that they may get the old facts re-supplied, and publish them as specimens of their activity, and thus mislead the public.

Had the Board of Health acted promptly on the information transmitted to them that epidemic cholera had reached Newcastle, instead of writing word that they were watching the disease on the Continent,—a comfortless assurance to a people who had the actual disease in the midst of themselves,—many valuable lives had been saved, many a poor orphan's tear spared, and many a widow's sigh unheaved. The curse of the fatherless and widow is upon them for their apathy, and the prayer of the afflicted is, that a Board so impotent as the miscalled Board of Health may soon be numbered with the things that were. With their officials sent down here the medical men have no quarrel beyond this, that the arrangements made by them were, in the first instance, lamentably defective; that they entirely set aside and tried to palsy the efforts of the local medical practitioners, while they themselves did little but make tedious speeches, sounding their own praises of what they had done in places far removed; and they appear now to be uniting with the local corrupt bodies, whose self-interest, incapability, and negligence have only been equalled by the Board of Health itself. I am, &c.

Oct. 10, 1853. A Lover of Honesty.

QUININE IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the interesting Leading Article on "Cholera," which appears in to-day's issue of the *Medical Times and Gazette*, reference is made to two cases of cholera treated by me with injections of solutions of quinine into the veins. I think it right to state, that the experiments were made in conjunction with Mr. Marshall, and ought, in fact, to be attributed to that gentleman rather than to me; inasmuch as he had previously investigated with great care the effect on animals, of injecting solution of quinine, salicine, and caffeine into the veins, with the view of trying a similar experiment in cholera when an opportunity should occur. As I had previously determined to try injections of various substances into the veins in desperate cases, I was only too happy to aid Mr. Marshall in his investigations, when cases of cholera occurred to me which were adapted for the experiment.

We had been led, from Mr. Marshall's experiments on dogs, to anticipate great results from the quinine; and I am not prepared to say, although both our cases were fatal, that the quinine may not prove hereafter to be very useful. It would be very interesting to know the details of the cases operated upon by Mr. Spencer Wells.

With respect to alcoholic injections, they were tried, I believe, largely in the London Hospital, and I think, also, at St. Thomas's or at Guy's, and an important lecture was published some time afterwards by Dr. Little.

It has occurred to me, whether injections of aldehyde might not be substituted for alcohol. The experiments of Duchek show, that this substance is formed in the system with great rapidity from alcohol, and that it is highly stimulant. It does not exert the coagulating effect on albumen which alcohol does, and is much more diffusible. It would, therefore, appear to possess the advantages, without the evil effects of the spirit; ether also might be tried. In spite of all the failures which have followed the effect of injections into the veins, I cannot but hold to the opinion, that, in the last two or three hours of life in profound cholera, when the chances of recovery from natural or medicinal causes are almost infinitesimal, the venous injections afford us the only possible means of giving the patient a last chance of recovery. No one who has ever seen a single case in which, by this plan, a man has been drawn back from the very brink of the grave, will decidedly condemn it. It is true, that we do not yet know precisely how to use this method; but that it is to be in some way effectually employed, I firmly believe. I am, &c.

13, Harley-street, Oct. 9. E. A. Parkes.

ON DEATHS FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

Sir,—A case of death from the administration of chloroform occurred last week in the Edinburgh Infirmary. Thanks to Heaven, it happened in the broad daylight of a public Institution, —where these things cannot be hid in a corner,—and not in the private sick-room of a parturient lady, nor in the operating-chambers of some practising surgeon, in either of which cases it would doubtless have been smothered in oblivion.

The professor of clinical surgery would not cut a fistula in ano, however small the incision; would not apply the actual cautery, although he stoutly maintains the pain is so momentary it becomes inappreciable; nay, I fancy now, would not think of thrusting a bistoury into an abscess,—and any one who has followed his practice knows how frequently these things occur,—without first requesting a handkerchief and phial of chloroform.

The Edinburgh Medical Press has done all in its power to proclaim the complete safety of chloroform; and if any fatal cases have occurred in this city, it has known also to bury them in silence, and has strained every nerve to invent some strange hypothesis, such as the adulteration of the drug, faulty mode of administration, etc., to account for the deaths from its employment that have happened in other places and countries,—events which were quite to be anticipated in the natural course of things. Sometimes, however, unpleasant truths—simply because they are truths—become known in spite of all attempts to conceal them. Thus, in a late Number of the recently deceased *Monthly Journal*, we have read a long account of some experiments with chloroform, written by a gentleman who had excellent opportunities of witnessing the private practice of Mr. Syme. If that paper has served no other good purpose, it has at least effected one,—it has undeniably shown how very near the gates of death chloroform has led its victims.

Now for the facts of the actually fatal case:—A stout, healthy young man, whose chances of a long life no insurance company would have been but too happy to accept, entered the operating theatre of the Royal Infirmary to have a stricture of the urethra dealt with according to the manner of Mr. Syme. (Remarkable coincidence!) The patient was laid upon a table, chloroform was begun to be administered, the patient struggled violently; however, by the help of dressers, clerks, and assistant-surgeons, he was held close to the table, and the inhalation proceeded. The operation was about being commenced, the perinæum had just been shaved, when a gentleman expressed some doubts as to the character of the radial pulse; another imagined to sound that of the posterior tibial artery, but he found the pulsations there quite distinct. Both continued, however, to keep their fingers applied. After a short pause, each almost simultaneously exclaimed, "It's stopped!" Startling announcement! Windows thrown open; tongue seized with artery forceps, drawn out of the mouth; chest squeezed; abdomen pressed upon; the electric battery made to work upon the thorax; cold water dashed upon the face and head; the trachea opened, a tube inserted,—all in vain; life had deserted its tenement. It should be remarked, as an effect of the galvanism, respiration went on for some time, although the heart's action never recovered itself. The patient was carried to the dead-house. Two days afterwards, the body was examined; and, with the exception of a few old pleuritic adhesions, every organ presented the most exquisite specimen of health.

This case must necessarily suggest to every Medical man many important reflections.

1st. It shows that chloroform is not so entirely innocuous, not so completely devoid of danger, as the Edinburgh Professors would have the world believe.

2nd. The insignificance of the operation. Indeed, Mr. Syme maintains, it is almost destitute of pain, never gives rise to hæmorrhage, is exceedingly easy in execution. Is, then, the administration of chloroform warrantable in such a case?

3rd. Was the operation absolutely necessary? On this point the opinion of the Profession is divided. However, now there can be no two opinions as to the preferable course of treatment. Far better, surely, to have a stricture remedied by the somewhat slower, but infinitely safer process of dilatation with bougies, than run the risk of the inhalation of chloroform for the purpose of having it divided, not to take into account the dangers inseparable from the operation itself.

4th. The state of the pulse should be attended to, as betraying the first symptom of impending danger. This is in direct opposition to the oft-repeated and published advice of Mr. Syme: "We never attend in this Infirmary," says he, session after session, to his clinical pupils, "to the condition of the pulse while chloroform is being administered. If the ribs go on rising and falling, all is well." In this case we have an instance of the movements of respiration progressing fifteen minutes after the cessation of the heart's action. When that occurred, had death not truly supervened?

5th.—As to the mode of death, and the remedies employed,

From tracheotomy having been performed, and artificial respiration attempted to be induced, we must infer the medical attendants imagined the patient was dying from asphyxia, and that most probably in consequence of a spasm of the glottis. Mistakes, in such emergencies, are excusable; but whoever, in asphyxia, or spasm of the glottis, ever saw the movements of respiration succeed one another so smoothly and so regularly; or even the process of respiration to continue after the stoppage of the circulation? To our mind, the case presented itself as one of mere syncope, dependent on the too strongly sedative influence of the anæsthetic on the nervous system, thereby influencing the action of the heart. If it had been treated on such pathological data, we think the chances of recovery might have been increased. The head should be lowered, the arms and legs elevated, so as to afford the proper stimulus, in sufficient quantity, to awaken the temporarily subdued energies of the nervous system. Ammonia applied to the nostrils, and the use of the other remedies suitable in cases of diminution of the vis nervosa.

May we not conclude, from the above, that chloroform should be reserved for certain cases only; cases which demand the annihilation of pain as a point of paramount importance, with a view either to the proper performance of an operation, or to the ultimate recovery of the patient. Let the Edinburgh Professors modify their doctrine, and caution the medical student, that chloroform may sometimes prove fatal, and, therefore, should not be used indiscriminately. Yours, SURGEON.

Edinburgh, September 30, 1853.

DR. JUNOD'S HÆMOSPASIC APPARATUS.

[To the Editor of the Medical Times and Gazette.]

SIR,—You have been so good as to insert in your Journal of September 10, two reports upon my hæmospasic apparatus; and you notice, very properly, the difference between the results recorded in the two documents. In asking you to publish, also, those I now enclose, I would only remark, that when the results obtained are not so favourable as they generally are, the reason is either that the apparatus is not applied at the proper time, or with sufficient perseverance, or that the vacuum is produced too rapidly, in order to save time.

I am surprised that Dr. Maclean did not also allude to a case he treated in Chatham Garrison Hospital, when a patient affected with hemiplegia, after a single application of the apparatus, recovered not only the power of moving himself freely, but also that of speaking; and the mouth, which was drawn towards the left ear, was immediately restored to its normal position, as if by magic.

I may state, that I have numerous other certificates in addition to those I now send you, which prove not only that the application of my apparatus is painless, but that it constitutes one of the most powerful therapeutic agents that the practitioner can command.

One of the most remarkable effects of the apparatus is the facility with which the state of the pulse may be modified. In a few moments it may be reduced to a thread, brought down to 40, or raised to 120, according to the rapidity with which the vacuum is produced.

With regard to the letter of Mr. Wall, I should remark, that, in his case, as generally occurs, the pulse, five minutes after the removal of the instrument, fell to 92.

I am, &c. T. JUNOD,
Doctor of Medicine of the Faculty of Paris.

Royal Edinburgh Asylum, May 23, 1853.

From a number of cases in which I employed Dr. Junod's hæmospasic apparatus, I have selected the two following, as illustrating some of the advantages to be derived from its use:—

Case 1.—M. M., a young woman, aged 23, labouring under acute mania, four weeks' duration. At the time of using the instrument she was very excitable, face flushed, eyes suffused, incessantly shouting and gesticulating. Head hot; pulse 110, weak. She was suffering from acute œdema of both legs, arising from continued restlessness. After the exhaustion had been continued for ten minutes, the pulse fell to 90, appeared to be calmer, and, although she still shouted, her voice was much weakened.

At the expiration of half an hour the apparatus was removed; was now tolerably composed; declared that the pain had left the head; pulse 76, weak, easily compressed; countenance pale, voice weak and tremulous.

The instrument was applied about four p.m. From this hour up to bedtime she voluntarily kept her bed, had a good night's rest, and on the following morning was much more composed. Three days after there was a slight return of the excitement; the instrument was again applied for fifteen minutes, with similar results. Since the last application (a period of three weeks) she has continued slowly to improve.

Case 2.—P. L., aged 40, a strong able-bodied man, garden-worker, labouring under a sharp attack of bronchitis; pulse 104, full and strong; skin hot, considerable feverishness; respiration much impeded; mucous râles over the whole chest. In fifteen minutes the pulse was reduced to 84, and in thirty minutes to 72 per minute; breathing much relieved.

Two hours after the removal of the instrument the pulse had risen to 84, but was soft and compressible; respiration still easy. With the exception of a demulcent mixture, no other treatment was adopted. In four days he was at work in the garden, convalescent.

It has been used twice in cases of sciatica, with considerable benefit.

I conceive it to be totally unnecessary for me to add anything by way of eulogium. Facts such as I have detailed clearly demonstrate how important an adjuvant Dr. Junod's apparatus is certain to prove in the treatment of disease.

THOS. S. ROWE, M.D.,
Assistant-Physician Royal Edinburgh Asylum.

Liverpool Northern Hospital, June 8, 1853.

I have witnessed the application of Monsieur Junod's exhausting apparatus on the leg of a patient suffering from pleuritis, (the result of fracture of the rib.)

The effect produced upon the pulse was very remarkable. Before the application its frequency was—

Before	96	per min.
15 minutes afterwards	120	,,
20 ,,	140	,,
25 ,,	150	,,

In construction, the apparatus appears to be exceedingly simple and easy of application. I am of opinion that it is an excellent substitute for blood-letting.

The patient expressed himself as immediately relieved by the application; and at this time (seven hours afterwards) continues to be free from the severe pain previously felt in his side.

I may also add, that the effect produced upon the volume of the pulse was no less remarkable than on its frequency, as our patient was reduced nearly to a state of syncope, which was relieved by removing the instrument.

W. B. WALL, House-Surgeon.

Melville Hospital, Chatham, Feb 20, 1853.

I have tested this instrument in Melville Hospital, and arrived at the following results and conclusions:—

Applied to the leg, I have seen it induce syncope in six minutes.

In a case of fever, with delirium, flushed face, and bounding pulse, half an hour's application to the lower extremity produced a feeble pulse, blanching of countenance, reduction of temperature by six degrees, and temporary rationality.

It was used in many other cases with similar results. It acts on the principle of dry cupping, and injects the part to which it is applied with blood, enlarging the limb. This state, however, disappears in a day or two without injury, and the syncope can be graduated by the dexterity of the operator.

I consider it an excellent adjuvant in all cases of congestion, when we do not wish to deplete, and in all cases where we wish temporarily to suspend muscular action, as in strangulated hernia, and the different luxations.

I think it a valuable addition to the number of hospital instruments. (Signed) ARCH. M'CLATCHIE,
Assistant-Surgeon Royal Marines.

A CONGRATULATORY ADDRESS has been presented to Dr. Thomson by sixty-eight of his friends and students, at Glasgow, on his appointment to the Chair of Chemistry at St. Thomas's Hospital. A copy of the address has been sent to us, but our space does not permit of its insertion.

MEDICAL WITNESSES.—In a case at Bow-street Police Office, Mr. Jardine took the opportunity of informing medical witnesses, that the impression prevailing among some Surgeons that they could not get their expenses allowed unless they were subpœnaed as witnesses, was quite erroneous. No doubt, if a medical gentleman, or any other person, volunteered his evidence at the Old Bailey, without having had it included in the depositions taken before a magistrate, he could not claim compensation for his services; but in all cases where the attendance of a Surgeon was requested by a magistrate, the usual sum was allowed as a matter of course. It was important that a right understanding should exist upon this point, for the greatest inconvenience might be occasioned by the refusal of a gentleman to attend upon such erroneous grounds.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

THE PRESIDENT in the Chair.

OCTOBER 8, 1853.

The first meeting of the Session of the above Society was held on Saturday last, when a very large number of Fellows and visiters attended.

The President, Dr. Forbes Winslow, announced the election of Dr. Theophilus Thompson and Mr. Bishop, as Lettsomian Lecturers; and of Mr. Henry Smith as Orator, for the present Session. He also referred, in a short introductory address, to the proposed meetings for the consideration of physiological subjects, and to the loss which the Society has sustained on the death of Mr. Barlow, so recently appointed the Orator of the Society. The re-appearance of the cholera, in a very malignant and fatal form, was also noticed, and an intimation given that the Society might profitably determine if there are not some general principles in the pathology and treatment of the disease.

Dr. Crisp then gave the details of the following case of duplicate placenta, which had occurred in the practice of Mr. I'on, and which he believed to be unique:—

CASE OF DUPLICATE PLACENTA.

Mr. I'on writes:

"Mrs. D. applied to me on August 24, 1853, to attend her in her approaching accouchement. From her own statement, she was then six and a-half months advanced in utero-gestation. She was considerably larger than usual at that period, and was suffering from general anasarca. Diuretics were prescribed, and she continued to improve until the 31st. On the morning of the 31st, I received a summons to attend, as labour was apprehended. On an attempt to relieve the stomach, something, as she said, appeared to give way, and uterine hæmorrhage was the result. On my visit, I found she had lost a considerable quantity of blood; but as the uterine contractions were feeble, and the discharge had nearly ceased, I did not deem it proper to interfere, but desired to be called in case any renewal of the hæmorrhage should occur. I paid her a second visit about ten p.m. The pains had augmented considerably, and, on instituting an examination, the os uteri was found partially dilated, and the head presenting behind the membranes. These were ruptured to arrest the hæmorrhage, and to increase the expulsatory efforts of the uterus. In about half-an-hour the fœtus was expelled: it was dead, and filled with serous fluid. The circulation had evidently ceased for some days; indeed, I believe, it was entirely obstructed by anasarcous distension. Two or three coagula were expelled with the fœtus, but the hæmorrhage entirely ceased. In about a quarter of an hour uterine action recurred, and with the assistance of abdominal pressure the placenta was thrown off. The uterus still feeling large through the abdominal parietes, a second child was diagnosed; but when uterine action came on, which was stimulated by abdominal pressure, the morbid mass now exhibited was thrown off, and the organ then obtained its normal dimensions. Mrs. D. was delivered of a dead child, on December 21, 1852, and the catamenia, up to the period of her present confinement, had not occurred since the middle of February."

Dr. Crisp stated, that the mass weighed nine ounces, and exhibited under the microscope clear evidence of its placental character. There was no fatty degeneration; the uterine surface was quite normal. A large portion of the inner surface was covered with the membranes, but there was no trace of a cord, and the tufts were much enlarged, giving the appearance of an ordinary placenta which had been immersed in water for some months.

The President then read a Paper

ON SOME UNRECOGNISED FORMS OF MENTAL DISORDERS.

Dr. Winslow wished to direct the attention of the Profession to some complicated, varied, and often obscure affections of the nervous system disordering the mind. The morbid states to which he referred might be viewed as pseudo-anomalous and eccentric deviations from certain predetermined cerebral and psychological conditions. He wished to avoid the discussion of the question, "What Constitutes Insanity?" and to confine the attention of the Society to those abnormal phases of the mind in which the party may be said to be mentally disordered, but not insane. Dr. Winslow would restrict the term "insanity" to those deviations from mental health accompanied by positive aberration of the ideas, conjoined with lesions of the volition, clearly justifying the exercise of moral restraint; and to those derangements of the intellect which authorise us in bringing those so affected under the protective influence of the law. Dr. Winslow was anxious to confine his attention to those cases where the mind might be said to be pathologically disordered, but not legally insane, and to direct the notice of the Profession to a large class of disordered phases of morbid intellect floating upon the surface of society which had not hitherto been sufficiently recognised as the effect of certain morbid cerebral conditions, bringing those so affected within the reach of remedial treatment. The disorders to which Dr. Winslow referred were confined principally to the passions, affections, propensities, and moral sense. The attack often assumed the character of an exaggeration of some single passion, appetite, or emotion. This morbid cerebral state might exist without arresting medical attention, or demanding legal interference. These affections were generally insidious in their character, of slow growth, almost imperceptible, originating important changes in the delicate and highly organized vesicular nervous matter of the brain, and giving rise to morbid alterations in the manifestations of the passions and affections. As this form of mental disorder is known frequently to exhibit itself in either a perversion of the feelings, aberration of the affections, and erratic conduct, it often engenders much concealed misery within the sacred circle of domestic life. The patient whose morbid condition is not appreciated, may exhibit great cruelty, and commit acts of brutality towards those who have the strongest claims upon his love, kindness, and forbearance. The naturally gentle, truthful, retiring, and self-denying, become quarrelsome, cunning, and selfish; the diffident, bold; the modest, obscene; piety degenerates into hypocrisy, or is exalted into fanaticism. Parties so affected manifest all the characteristics of intemperance, both in thought and actions; they are wayward and eccentric, their conduct often giving rise to the suspicion that they are either drunk or mad. Occasionally the disorder exhibits itself in a want of veracity amounting to positive disease. In these pseudo-anomalous pathological conditions of the mind, what are termed the reasoning and reflective faculties remain intact; consequently, the actual state of those disordered is not suspected even by their most intimate associates, until the affection becomes apparent, by the party committing some overt act of insanity. A patient with a mind under the influence of positive disease, has been known, for a period, to exercise great powers of self-control. He sits at the head of his own table, goes to the Stock Exchange, to his counting-house, and to his bank, and engages actively in his professional duties, without exhibiting evidence, very conclusive to others, of his actual morbid condition. He may be an unrecognised monomaniac, and acting under the terrible and despotic influence of one predominant morbid idea, be bringing ruin and desolation upon his once happy home. He may recklessly squander a fortune which has been only accumulated after years of anxious toil. He may become brutal, vicious, criminal, a drunkard, a suicide, as the result of an undoubtedly morbid state of his mind, and yet, pass through life as a sane, rational, and healthy man. In actual practice, all the delicate and varied shades of such unrecognised and neglected mental alienations are met with. Parties so disordered exhibit violent antipathies, harbour unjust suspicions, affect singularity of dress, gait, and conversation, are easily excited, are subject to violent and ungovernable paroxysms of passion, from the most trivial and insignificant causes; are lost to all sensibility and delicacy of sentiment, refinement of manner and conversation; are often obstinately and pertinaciously rivetted to the most absurd dogmas; are litigious, and prone to controversy. This disorder may manifest itself in morbid imitations, in an inordinate vaulting and mad ambition; in an absorbing lust of praise; in an insane desire for notoriety; in a depressed, exalted, or vitiated state of the sexual appetite; in morbid views of Christianity, and is often associated with a profound anæsthesia of the moral sense. These sad affections are symptomatic in many cases of unobserved, and consequently neglected, cerebral disorder, either originating in the encephalon, or produced by sympathy with morbid processes existing in other tissues, in close organic relation with the great nervous centre. These conditions occasionally succeed violent febrile attacks, more or less involving the healthy action of the brain and nervous system, and are often known to be the sequelæ of injuries of the head inflicted either in early or advanced life. They are also unhappily seen in association with genius; and—as the biographies of Cowper, Burns, Byron, Johnson, and Pope establish—the best, the most exalted and highly gifted conditions of the mind do not escape unscathed. Dr. Winslow then cited the particulars of several deeply interesting cases, illustrative of each form of this class of unobserved mental alienation, occurring both in adults and in children which have been brought under his own observations. He

then referred to two other forms of unrecognised cerebral disorders manifesting themselves in attacks of oinomania or insanity, exhibiting itself in uncontrollable and inveterate habits of intemperance, and to cases of neglected suicidal insanity. He then directed the attention of the Profession to the frightful amount of untreated mental depression associated with an irresistible suicidal propensity, which had prevailed within the last twelve or eighteen months. In many cases it appeared from the evidence adduced at the Coroners' court, that the mental disorder had existed for weeks, and occasionally for months, without giving rise to the suspicion of the presence of any dangerous degree of cerebral mischief, likely to lead to the commission of suicide. There are few morbid mental conditions, Dr. Winslow remarked, so fatal in their results as these apparently trifling, evanescent, and occasionally fugitive, attacks of mental depression. This state of the brain is fraught with mischief, and is almost invariably associated with the suicidal impulse. Many a person, apparently rational and sane, has committed suicide under the overpowering and crushing influence of some latent and concealed delusion. "For six months," writes a patient, "I have never had the idea of suicide night or day out of my mind. Wherever I go an unseen demon pursues me, impelling me to the act of suicide. My wife, my friends, my children, observe my listlessness, my gloom, and my despondency, but they know nothing of the worm that is gnawing within." Is not this a type of case more generally prevalent than we imagine? May it not be said of this unhappy man, with a mind tortured and driven to despair by a terrible and concealed hallucination urging him on to suicide, as the only escape and relief from the acuteness of his misery,—

"He hears a voice we cannot hear,
Which says he must not stay;
He sees a hand we cannot see,
That beckons him away."

Dr. Winslow, after making some observations on the subject of oinomania, and pointing out the necessity of recognising this form of cerebral disease, as one amenable to treatment, adverted to a phase of mental alienation, occupying, as he remarked, a kind of neutral ground between positive lunacy and the stage of incubation, accompanied with an intense consciousness of the presence of a morbid condition of mind. In this state the patient knows that he is not as he should be, and prays earnestly for relief from his sufferings. Up to a certain point, the power of self-control is retained, and the case affords to superficial observers no positive symptoms of mental alienation. "Would to God," exclaimed a lady, who was distressingly conscious of her morbid state of thought, "Would to God I were either mad and incoherent, or relieved of this agony of mind." While in this intermediate state, patients often ask the question, when describing their symptoms, "Is this madness, or am I insane?" Dr. Winslow then referred at some length to the characters of Hamlet and Lady Constance, and cited passages from the writings of Shakspeare illustrative of this strange phase of morbid mind. He then observed, that he might be asked, (and the question naturally suggested itself to the mind when considering anomalous cases like these), how can we accurately diagnose between such morbid conditions and those natural states of the passions, emotions, and appetites, which, fraught as they may be with mischief, cannot be viewed otherwise than as healthy manifestations? In all these cases it is often the sudden and prolonged departure from natural habits, states of feeling, phases of passions, that justify a suspicion of the existence of mental alienation. This disorder of the mind occasionally exhibits itself in a simple exaggeration of some one predominant passion or train of thought; and in these, as well as in other cases, the only safe standard to which we can appeal is the *natural and ordinary character of the patient* whose mind is the subject of investigation. A man may be brutal and yet be sane; he may be subject to violent passion, and be of sound mind; he may love to riot in scenes of licentiousness, without justly exposing himself to the imputation of insanity; he may be guilty of cruel and inexcusable acts of improvidence, and yet not a fit subject for a Commission of Lunacy. Nevertheless, in many cases, all these symptoms constitute conclusive evidence of the existence of serious mental disorder. A naturally irritable man may be excited into a paroxysm of passion by circumstances calculated to engender such a state of emotions; but the passion allied to insanity is often fanned into a flame by the most trifling and inadequate causes. Healthy passion generally subsides after the removal of the exciting cause; but such is not the case with morbid emotions. Apart from the susceptibility to passionate excitement, and the presence of great irritability of temper, the observing eye of the physician will generally discover in connexion with the case other mental as well as physical variations from the natural and healthy condition of the mind and body, to assist him in arriving at a safe diagnosis. This morbid condition, whether exhibited in ungovernable passion, in alienation of affections, in perverted appetites, in irritability of conduct, in loss of all sense of right and wrong, is generally associated with restless days and sleepless nights, as well as with impairment of the general health. Every case, however, must be viewed in relation to its individual characteristics, and to itself as a standard, and not in reference to any *à priori* theory, or predetermined test.

[The above is but an outline of Dr. Winslow's elaborate paper.]

Dr. Copland stated his belief, that these forms of mental disease have already been recognised in all their bearings by the Profession, but not by the public, and pointed out the importance of recognising their earliest manifestations. He believed, that many vicious propensities, as intemperance, passion, and abuse of the sexual function, have been developed by cultivation by persons in good mental and bodily health. In other instances they have resulted from injury or from fever. He also referred to the classification of the faculties of the mind as liable to disorder,—the instinctive, common to animals and man; the intellectual, proper to man; and the moral, proper to civilised man.

Dr. Sibson quoted the observations of Bishop Butler in his sermons, that the continued exercise of any sensual function induces a demand for further gratification; but at the same time lessens the pleasure attending it; and this Dr. Sibson considered to be applicable to instances of intemperance and cruelty. He considered, that we ought to discriminate between the duties of the Judge and of the Physician, and that it was clearly to the advantage of society, that such cases of mental disease should be separated from the community. He asserted, that the disease is prevalent among the highest class of minds, and that cruelty was the prevailing passion in such minds at the era of the French Revolution.

Dr. Webster, in reply to some remarks by Dr. Crisp, stated that insanity is more prevalent in civilised than in savage communities, and that it has greatly increased in modern times. This he attributed to the religious and political agitations of the day, and to the erroneous ideas prevalent regarding education—an education of the sentiments, and not of the intellect. It had been shown, that insanity is as prevalent in Ireland as in Norway, and double of that in England, amounting to no less than 1 in 430 persons.

Mr. Dendy said, that every man has the seeds of madness within him, and that they develope themselves by cultivation. In such instances the madman should be regarded as a criminal. He considered that the narrow views of the Judges in reference to this disease may be attributed to their legal education.

Dr. Cormack was also of opinion, that the public, and not the Profession, is at fault in reference to these mental disorders. He considered them to be unsuited to the restrictions of an asylum, but to be fitted for the exercise of kindness with firmness, and the medical attention of physicians devoted to the study of mental pathology. At puberty a predisposition to mental disorder is observed, and if not then checked, will run on into positive insanity.

Drs. Crisp and Camps, and Messrs. Clarke and Streeter, continued the discussion, and dwelt upon the propriety of exhibiting kindness in the treatment of such cases, and of permitting the criminal Judges to decide according to the nature of each case.

The President having replied, the Society adjourned.

PHYSIOLOGICAL MEETING.

Dr. Forbes Winslow, President, in the Chair.

October 10, 1853.

The attendance of Fellows and visiters at the opening meeting of this new department of the Society was very good, and gratifying to those who have taken an interest in its formation. The number of visiters was particularly worthy of remark; and since any professional man may gain admission on the introduction of a Fellow, it is hoped and believed, that many will avail themselves of the opportunity. We were pleased to see present physiologists of distinction, among whom we particularise Professor Bowman.

Dr. Crisp announced his discovery of valves in the splenic vein, and presented preparations of the spleen of various animals. He had not discovered them in man, or in any of the quadrumana, and had sought for them in vain in the capybara, one of the highest rodents; but he had found them in the carnivora, ruminants, and the pachydermata, and believed them to be universal in those orders of mammals. The preparations exhibited them in the horse, in which animal they varied in number from 3 to 6 pairs; the tapir, the sambur, deer, giraffe, adax, zebra, and ass. The small veins terminating in the splenic vein, are furnished with a valvular orifice, and so

numerous are these veins that he had counted 109 valvular openings in the splenic vein of the tapir. There are no valves in the portal and mesenteric veins. In reply to an observation by Mr. Richardson, Dr. Crisp expressed his belief, that interest and practical value attached to this discovery on account of the limited class of animals in which these structures are found.

Mr. Henry Lee exhibited a small calculus, having a surface-coating of oxalate of lime, which had been lodged in the prostate gland for a period of two years, and which had the appearance, on one side, of having moulded itself to the form of the opening of the ductus ejaculatorius. Mr. Lee then read a paper upon

THE MODE OF ABSORPTION OF MORBID POISONS, AND OF THE SYPHILITIC POISON IN PARTICULAR.

He divided poisons into those which begin to produce their effects immediately they are applied, and those in which an intermediate morbid action is necessary before their specific operation can be manifested in the system. To the last class belongs the syphilitic poison. Mr. Lee considered that, if the morbid process by means of which the syphilitic poison enters the constitution be interfered with or disturbed, the corresponding effects on the system would also be altered; and that this primary morbid action was, in many cases, under the control of the surgeon. He considered in detail the various inflammatory primary syphilitic affections, and traced the different effects which they were calculated to produce. Especial allusion was made to the rare occurrence of secondary symptoms after specific inoculation, in the experiments which had been made with regard to syphilization. This, and other facts connected with the absence of any constitutional affection after certain kinds of primary disease, were explained, according to Mr. Lee, by the nature of the morbid action at first set up. He insisted particularly, that if this action were cut short in its early stage, or if it were modified in some particular ways which were mentioned, (and as had happened in the experiments upon syphilization,) then that no constitutional disease would result.

Dr. Lankester congratulated the Fellows, on the auspicious opening of the physiological section, and considered, that it fully warranted the efforts which had been made to establish it. He considered it no disadvantage, that Mr. Lee's paper was partially pathological, since physiology and pathology should go hand-in-hand. He wished to know, if Mr. Lee considered that the whole mass of blood is infected by the syphilitic virus, or, if that condition is confined in any case to a small portion of the fluid. He thought the opinion was gaining ground, that disease rather arose from certain products generated within the system, than from substances introduced from without.

Dr. Snow thought that Mr. Lee had not established the position, that the absorption of syphilitic virus into the general system was due to the veins, to the exclusion of the lymphatics; and that, if a new chancre should arise on the cut surface of a syphilitic excrescence, it would be rather due to the virus lurking in the neighbouring solid structures, or in the extra-vascular liquor sanguinis, than to the absorption by the veins. He did not deny the statement, that the character of the virus is changed in its progress through the lymphatics; but he denied the inference, that the system would thus be protected, for the virus is also changed when secondary symptoms are induced, as is proved by the fact, that the matter from secondary sores will not re-induce the disease by inoculation. He also disputed the statement, that the supervention of suppurative, ulcerative, or phagedænic ulceration in a primary sore arrests the action of the poison. Secondary symptoms do show themselves after the occurrence of an indurated, non-suppurating bubo in the groin.

Mr. De Meric objected, that Mr. Lee had not supported his ingenious theories by experimental and practical proof, and denied the accuracy of some of Mr. Lee's inferences. M. Ricord still asserts, in opposition to Mr. Lee's statement, that an indurated sore which is followed by secondary symptoms, usually has a suppurating bubo; and, further, that the mode of absorption is not at present accurately determined.

Mr. Dendy believed, that matter taken from the secondary sore of the throat would induce the disease by inoculation, and that inflammation of the lymphatics would not destroy the action of the syphilitic virus.

Mr. Richardson and Dr. Cogswell denied the possibility of the transmission of the poison by the nerves alone, the former considering it to be due to absorption by the vascular structure of the nerve, even in the almost instantaneous death following the application of aconite and hydrocyanic acid.

Drs. Camps, Bird, and Crisp, took a part in the discussion, the latter making the startling statement, that nearly the whole of the physiological deductions of Hunter have been disproved at the present day.

Mr. Lee having been repeatedly congratulated upon the success of his paper, replied that Mr. De Meric had misstated the doctrine of Ricord, who showed that it was not indurated sores which were followed by suppurating buboes, but ulcerating sores; indurated sores being followed by hard, small buboes, like a nut or almond, which do not suppurate.

The Society then adjourned.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

October 7, 1853.

A special meeting, convened by the President, was held this evening to consider the best method of investigating and treating epidemic cholera, should it appear within the district of the Society. The attendance of members was unusually large. The President, Dr. James Arthur Wilson, on taking the chair, stated, that, in consequence of the violent outbreak of cholera in Newcastle, and the existence of various indications that the Metropolis would sooner or later be visited by it, he had thought it desirable that the Society should assemble a fortnight earlier than their accustomed time of meeting, to take several points into their consideration. The first question, of course, would be, Have we cholera in the district? If not in the district, he could answer from his own experience that it was on the very confines of it, having himself seen a fatal case two days previously, in St. George's Hospital. Then, are there any circumstances in the district likely to induce a visitation of cholera? Under this head he could not but allude to the disgraceful state of the still unclosed Ranelagh Sewer, on the banks of which occurred some of the very worst cases in 1849, and which was constantly the habitat of typhus and pestilential fevers. And, lastly, what was to be done with the cholera when it did come? He explained the course taken by the Society in 1848 and 1849 to obtain records of cases, with the view of throwing light on the history and pathology of the disease. Deeply regretting that it had not been more successful, he, of course, could not recommend the revival of a scheme which had failed, but he still hoped that some plan would be devised by which the Society might contribute its quota to the investigation of the coming epidemic. In reference to treatment, it was to be feared we were too much where we were when the disease came upon us before in 1831 and 1848. Still, some new methods had been suggested for consideration; as, for example, the treatment by sulphuric acid. One thing, at all events, it was to be hoped he had learnt,—not to be looking after specifics, but to treat cholera as we would any other disease, according to the circumstances and symptoms of each individual case.

A most animated conversation ensued, and was maintained till after ten o'clock. It resulted in the appointment of two Committees; one to draw up a Memorial to be presented to Lord Palmerston on behalf of the Society, representing the injury to the health of the district resulting from the present state of the Ranelagh Sewer; the other to consider the best mode the Society can take of inquiring into the history, progress, pathology, and treatment of cholera in this district. It is intended that the latter Committee—which consists of the President, Dr. Barclay, Dr. Fuller, Dr. Aldis, Mr. Haden, Mr. Martyn, Dr. Cumming, Dr. Murphy, Mr. Baines, Mr. Keen, and Dr. Seaton—should act in concert with the Cholera Committee of the Epidemiological Society.

From the testimony of the members present, it did not appear that any case of cholera had yet been seen in the western district.

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. Greenhow, Esq., President, in the chair.

Mr. R. H. Wilson communicated the following notes of a case of

COMPOUND FRACTURE OF THE SKULL.

I was called, on the 18th of December, 1851, to attend James W., aged 4 years, who had been amusing himself, along with companions, on a wagon, the body of which was supported on the framework by a central pivot. At the time of the accident his head was resting on a large iron hook projecting from the framework, when, by some means, the body of the wagon fell with great violence on his head, producing a severe compound comminuted fracture of the skull.

On examination, I found a gaping, lacerated wound of the integuments, about three inches in length, extending from near the

inner canthus of the right eyelid upwards and slightly outwards to the apex of the cranium.

The frontal bone, immediately beneath the wound, was much comminuted, and, upon removing three or four pieces of detached bone, the opening into the cavity of the skull, caused by the fracture, extended from near the right internal angular process of the frontal bone upwards and slightly outwards to near the centre of the coronal suture. The opening at its centre would be about three-quarters of an inch broad, narrowing towards its extremities, and from the lower extremity the fracture passed backwards along the base of the skull, from near the internal angle of the frontal bone, through the roof of the orbit, so that a probe could easily be passed in this direction for the length of half an inch. Another fracture extended from the inner extremity of the supra-orbital ridge outwards, nearly on a line with the ridge, to the union of the frontal bone with the squamous portion of the temporal; and, as the remaining cranial portion of the frontal bone on the right side was quite loose and moveable, I imagined that, besides the fracture, the union of the frontal with the parietal sphenoid and temporal bones had been partially severed. The dura mater was not ruptured, excepting near the lower extremity of the opening into the cranium, where my finger easily passed to a distance of at least half an inch into the substance of the brain. The point of the hook had evidently punctured the membranes, and pierced the brain to a considerable depth.

The hæmorrhage was at first profuse, but soon abated. In a few days the opening through the dura mater was seen to be completely closed by a layer of lymph, which quickly threw out healthy granulations, and the wound healed.

From such an accident I naturally anticipated much constitutional derangement, but was agreeably disappointed. Immediately on the receipt of the accident, so slight was the shock the nervous system had received, that the child extricated himself, and was running home, when a person near hastened to his assistance. For a few hours after the accident the loss of blood caused some depression, but not to such an extent as to require any stimulants.

Saline purgatives were administered during the first fourteen days, so as to keep the bowels constantly free. There was little or no febrile excitement. From the second day the child sat regularly up in bed, playing with his toys, and exhibiting no unhealthy symptoms excepting some degree of feverishness, such as is generally shown by children recovering from illness. On the twentieth day after the accident, the wound being closed, the child was allowed to play about the room; and on the forty-second day, it was sufficiently recovered to require no further attendance.

Mr. S. M. Frost exhibited an extensive collection of

MIDWIFERY INSTRUMENTS.

After offering some remarks upon the construction and adaptation of some for the purposes they are intended to serve, he showed a select few, which he had invented or simplified, and with which he thought all the operations required to be performed in labour could be properly effected.

Mr. J. S. Pearse presented a case of

MONSTROSITY,

showing a deficiency in the development of the arch of the middle cranial vertebra. The head was quite flat, appeared almost to form part of the chest, and had the arms projecting away from the sides.

Mr. Andrew Bolton read the following notes of a case in which he had exhibited

MORPHIA AND CHLOROFORM IN PUERPERAL CONVULSIONS.

Elizabeth ——, aged 22, unmarried, at the full period of a first pregnancy, healthy, but for some time in a desponding way, was seized, January 9, at four a.m., with pain in head and loss of vision. At eight a.m. I was summoned in time to witness a severe convulsive paroxysm, attended with stertor, lividity of countenance, and apparent impending suffocation. Twenty ounces of blood were drawn from the arms, and the cold douche unsparingly used to head and shoulders. In ten minutes she was calm again, the pulse reduced in tone 100. On examining the os uteri it was felt high, slightly dilated, and extremely rigid. The mere introduction of digits sufficed to bring on the convulsions, which recurred again and again, with intervals, of five or ten minutes, the whole muscular system participating in the spasms.

11 a.m.—Paroxysms continue, and she is with much difficulty restrained. At the suggestion of my father, two drachms of sol. morph. Ph. L. were given, producing an hour's repose.

Half-past 12.—Dose of morphia repeated, convulsions having recurred with increased violence; countenance and general surface pale; the extremities cold. As her condition appeared hopelesss, should the paroxysms continue, chloroform was administered on a piece of linen, in half-drachm doses, and its full effects kept up for three hours. At 2 p.m. there was a slight return of convulsion; skin warm and perspiring; the os uteri was found steadily dilating; and from her uneasy movements it was apparent that uterine action had begun.

Half-past 3.—The membranes were ruptured; and brisk uterine action ensuing, a dead child was expelled, immediately followed by placenta. She regained her senses during the expulsive efforts, but appeared entirely ignorant of her previous condition. Recovery followed without any bad symptoms.

In conclusion, I would remark, that the convulsions were in no measure mitigated by the depletion, which was carried to the utmost; nor was there any yielding of the os uteri until the chloroform was inhaled.

Mr. J. S. Denham related the following case of

OVARIAN DISEASE.

A. C., aged 33, in comfortable circumstances, had been the subject of ovarian disease for above eight years, induced by exposure to cold suppressing the catamenia, which ever afterwards remained irregular and scanty, often absent altogether for many months.

She married shortly after the illness produced by the cold; chlorosis supervened shortly after this, accompanied with some fulness in the hypogastric region, which, by treatment, was from time to time alleviated. By and by, the fulness of the abdomen increased, with complete suppression of menses. She then imagined she was pregnant, and made suitable arrangements for her confinement, but this not taking place, she consulted several medical men, who gave very opposite opinions.

She came to South Shields to reside, where she fell under the care of Mr. William Coward, to whom I am indebted for the tumour,—obtained at a *post-mortem* three days after death.

Her symptoms, about fifteen months before death, simulated pregnancy most strikingly,—her abdomen enlarged just as, in this condition, it is wont to do; complete absence of catamenia, with an accompanying dark areola of nipples; and the lady was certain about the matter this time, as she felt the fœtal movement; Mr. Coward being of a different opinion. She consulted an eminent surgeon, who gave a strong opinion in favour of the lady's view of the matter. The enlargement grew so great, that it was quite apparent that pregnancy was accompanied by ascites. Tapping was delayed, so as to afford time for the birth of an ordinary child. No child came to light; and as the symptoms had got very urgent indeed, she was tapped on the 2nd of May last. After the withdrawal of the fluid the enlarged ovary could be felt distinctly, although a vaginal examination did not aid the diagnosis previously.

By the use of pressure to the tumour, she made a partial recovery, but incautiously exposing herself to the night air in coming from a friend's house, she caught cold, and excited the diseased action again. Ascites came again; she required the trocar once more on the 26th October last as a palliative measure. She survived about one month more in a state of great debility. Diarrhœa was most constant during the whole course of her disease, being most probably a vicarious discharge, as the urine was very sparingly secreted indeed.

The tumour, weighing twelve pounds, was firmly attached to the spine, pelvis, and adjacent viscera, the liver being atrophied by the pressure; the heart was forced upwards and to the left side, the lungs being an inconceivably small substance; the kidneys were quite schirrus-like, being fibrous in structure and hard in texture; there were about two gallons of fluid in the abdomen when we made the *post-mortem*.

This case is interesting from the various opinions given by very experienced practitioners as to its real nature, and from so many medical men agreeing with the patient as to her pregnancy.

MEDICAL NEWS.

Oxford.—The Vice-Chancellor has appointed J. Phillips, Esq., of Magdalene College, Secretary to the British Association, to the Deputy Readership in Geology, vacant by the demise of the late H. E. Strickland, Esq.

Cambridge.—The examinations for the Licence *ad Practicandum in Medicinâ* will commence on Monday, October 31. Candidates for the degree of Bachelor of Physic will be examined at the same time by the Regius Professor of Physic, the Professor of Anatomy, and the Downing Professor of Medicine. Gentlemen intending to offer themselves for examination, are to signify the same to the Regius Professor of Physic, on or before Monday, October 24.

ROYAL COLLEGE OF PHYSICIANS.—A Deputation from the Royal College of Physicians had an interview (Oct. 5) with the General Board of Health. The Deputation consisted of Dr. Mayo, Dr. Francis Hawkins (Registrar), Dr. Wilson, Dr. Nairne, Dr. Gull, Dr. Barker, and Dr. Owen Rees (Censor).

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College, at the meeting of the Court of Examiners on the 7th inst. :—

CHAMBERS, HENRY, South Australia.
DUKA, THEODORE, Calcutta.
HESTER, JAMES, Oxford.
HOLLAND, ROBERT CAR BRACKENBURY, Bristol.
NOOTT, EDWARD GREGG, Gosport.
SPARKE, GEORGE WHITEFIELD, North-buildings, Finsbury.
WALKER, JOHN SWIFT, Sheerness.
YARWOOD, CHARLES, Birmingham.

At the same meeting of the Court, Mr. JOHN FELIX JOHNSON passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date July 14, 1848.

THE FELLOWSHIP.—The next professional examinations for this distinction will take place on Tuesday and Thursday, the 1st and 3rd of November next.

APPOINTMENTS.

NAVAL.—Surgeon Robert W. Clark (1844), to the Winchester, 50, flag-ship on the East Indies Station. Assistant-Surgeon Clark A. Ducket, serving in the Encounter, 14, screw steam-ship, since September, 1852, has been confirmed to that vessel.

ARMY.—Hospital Staff: A. A. Campbell, gent., to be Assistant-Surgeon to the Forces, vice Turner, appointed to the 75th Foot.

DEATHS.

BLAKE.—October 7th, at Park-place, Mile-end-road, aged 84, Robert Blake, Esq., Surgeon R.N.

CURIE.—Oct. 5, at 17, Hanover-square, of typhus fever, P. F. Curie, M.D. Paris, 1824; and Aberdeen, 1845. Dr. Curie was a notorious homœopathic practitioner.

HOWE.—Lately, at Horton, by a fall from his horse, Mr. William Howe, of Howdon, Assistant to A. Davidson, Esq., Seaton Delaval.

HUNTER.—Sept. 26, aged 55, John Lees Hunter, Esq., Surgeon, of Wetherby, Yorkshire. L.R.C.S. Edinburgh, 1817.

MATTHEW.—May 13th, by the upsetting of a boat off Auckland, New Zealand, Assistant Staff-Surgeon Matthew.

WHITTLE.—Oct. 6, at his residence, Lamberhurst, Sussex, after a few days' illness, Edward John Whittle, Esq., for thirty-nine years an eminent surgeon of that place, and formerly in the Army, and for six years House-Surgeon to Winchester County Hospital, in the 72nd year of his age.

MEDICAL BENEVOLENT COLLEGE.—The Council met for the first time on Wednesday last, in their new and spacious offices, 37, Soho-square, on which occasion it was decided that the Second Festival, which is to be under most distinguished patronage, should take place in April next.

YORK SCHOOL OF MEDICINE.—The Winter Session of this school commenced on Saturday week, when Dr. Simpson delivered the usual introductory address to the students.

M. ARAGO, THE ASTRONOMER.—M. Arago was born at Estagel, in the south of France, on the 26th of February, 1786. His determination of the diameters of the planets, afterwards adopted by Laplace, the discovery of coloured polarisation, and that of magnitude by rotation, which gained him the Copley medal of the Royal Society, are only a small portion of his contributions to scientific literature. At his death, M. Arago was Perpetual Secretary of the Academy of Science, a member of the Bureau des Longitude, and a grand officer of the Legion of Honour.

OZONE.—This remarkable substance, which is sometimes, but not universally, present in the atmosphere, and which has hitherto been regarded, when observed, to be an allotropic condition of oxygen, has been discovered, by a German chemist at Bonn, not to be so, but a distinct substance, existing as a teroxide of hydrogen, thus continuing the series of the compounds of oxygen with hydrogen. The details of the process by means of which the discovery was effected have not yet been given.

DEATH, SUPPOSED FROM CHLOROFORM.—The *Milford Journal* (U.S.) states that Mr. Howley of that place, while suffering from cramp in the stomach, inhaled chloroform. The sponge that had been used was afterwards placed near a bowl of milk, of which a child a year old soon after made a meal, and in two hours was a corpse. The case is imperfect, as no account is given of the symptoms prior to death.

NICKEL'S ELASTIC PLASTER.—We have made some trials of this plaster, and find, as its maker states, that, from its elasticity, while it may be used as a tight strapping, it is also particularly applicable to wounds on the face or hands, as it may be moulded to, or laid on, any prominence or depression. It is tinted to any colour, and spread on cotton, silk, or woollen, of any substance or strength desired, the plaster being of isinglass, lead, soap, or adhesive plaster, or any combination prescribed.

YELLOW FEVER.—Advices from Bermuda to the 13th of September, give a fearful account of the fatal progress of yellow fever in that island. It first made its appearance on board the convict-hulk Thames, stationed at St. George's, and soon went through the whole ship's company, there being no hospital ship to receive the sick. It very soon reached the troops in garrison and the townspeople. It is stated, that the Thames is beached at St. George's, under the Barrack-hill, where she has continued imbedded in her own filth for eight or nine years, without the slightest attempt at keeping her from the accumulation of filth. The immediate cause of the fever is ascribed to the fact, that six weeks previously a severe gale occurred, in the course of which the Thames shortened her heavy chain moorings; they were consequently permitted to work in the filth in which she was imbedded until the whole surrounding atmosphere was poisoned with the effluvia, and sickness was the consequent result. The Weymouth (another hulk) has been taken to St. George's, and the survivors removed into her from the Thames. The *Bermuda Royal Gazette* of the 13th of September gives a list of the deaths during the last five or six days of August. It amounts to 81 persons, 40 of whom were convicts. Among the fatal cases is that of Lieutenant A. G. Woodford, 56th regiment. Of this regiment, 106 were sick, and 9 men, 1 officer, 4 women, and 2 chilren had died. Of the 205 convicts, only 25 have escaped the fever, and 50 have died. The *Gazette* says, that the fever was less intense.

MORTALITY IN THE SOUTHERN STATES OF AMERICA.—At New Orleans the yellow fever was subsiding, but at other places of the south the accounts of its ravages are distressing. Mobile had been sorely visited, although at the state of the last accounts the malady was assuming a milder type. The telegraph at New Orleans was not working, the operators at Vicksburgh and Natchez being dead. The official report for the week which ended on the 11th of September showed 399 interments of persons who had died from fever within the city of New Orleans, and a total number of deaths from all causes, within the city, from May 22nd to September 13th, 11,254, of which 7,794 were from yellow fever. Several hundreds more were estimated to have taken place in the suburbs of Carralton, Algiers, Oretna, and Jefferson City. Along the coast of Lake Pontchartrain the malady is still severe; 17 deaths are reported in one family and 12 in another. The river coast is also very unhealthy. At Baton Rouge and Bayou Sara, the fever was raging, as also at Plagvemine, Woodville, and other settlements. Thibodauxville was severely afflicted, the proportion of deaths equalling the mortality at New Orleans. At Grand Guz one-half the residents had been attacked by the disease in its most malignant form. At Natchez, where the fever was particularly bad, it was impossible to procure attendance for the sick, all who could leave the town having fled, and the owners of negroes having prohibited them from going near the town. The fever reports of Mobile give 500 deaths in 25 days,—a frightful ratio, as the population left in the city is not more than 5000 to 7000. Notwithstanding this mortality, the city of Mobile was remarkably clean and the weather was delightful, showing that the fever was not altogether subject to such influences.

HEALTH OF LEEDS.—As yet nothing like cholera has made its appearance in Leeds, and the deaths in the several registrars districts are less than usual. For the quarter ending Sept. 30, the number of deaths registered in the North district, from all causes, was only 290; while, in the corresponding quarter last year, the number was 420. In the West district, the numbers this year are 248, as against 280 in 1852. The South district is equally favourable; the number of deaths being 202 this year against 280 last year. The population of the township forming these three districts, in 1851, was 101,333.

MORTALITY NOTABILIA.—1001 deaths were registered in London, in the week that ended on Saturday (505 males, and 496 females). In the ten corresponding weeks of the years 1843-52, the average number was 952, which, if raised according to increase of population, becomes 1047. The mortality from all causes, therefore, differs little from the usual amount at this season. Scarlatina was fatal last week to 57 children, and, in some instances, it appears to have been aggravated by local causes. Diarrhœa carried off 71 persons, which is nearly the same as in the previous week; all the cases, except 20, were among children.

Births.—The births registered in the week were 1375 (727 males and 648 females). The average of 8 previous years was 1276.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·514 inches. The mean temperature was 48·6°, which is 4° below the average of the same week in 38 years. The mean difference between the dew-point temperature and air temperature was 3·6°. No electricity was shown throughout the week. Wind, variable. Rain, 1·03 inches. Horizontal movement of the air, 355 miles.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending October 8:—

	Males.	Females.	Total.
Workhouses	30	39	69
Military and Naval Asylums.. ...	4	...	4
General Hospitals	21	15	36
Hospitals for Special Diseases ...	4	3	7
Lying-in Hospitals	...	...	...
Lunatic Asylums	1	8	9
Military and Naval Hospitals ...	5	...	5
Hospitals for Foreigners, &c. ...	1	...	1
Prisons	...	...	...
	66	65	131

DEATHS *in the Metropolis for the week ending Saturday, October* 8, 1853.

CAUSES OF DEATH.	OCT. 8. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	489	335	173	1001	9523
SPECIFIED CAUSES	486	334	173	993	9482
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	223	73	28	324	2697
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	27	23	51	474
3. Tubercular Diseases	49	104	2	155	1654
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	43	36	27	106	1029
5. Diseases of the Heart and Blood-vessels	2	17	12	31	330
6. Diseases of the Lungs and of the other Organs of Respiration ...	87	26	23	136	1138
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	20	26	9	55	612
8. Diseases of the Kidneys, etc. ...	1	12	7	20	119
9. Childbirth, Diseases of the Uterus	...	3	...	3	106
10. Rheumatism Diseases of the Bones, Joints, etc.	1	2	1	4	63
11. Diseases of the Skin, Cellular Tissue, etc.	1	...	...	1	11
12. Malformations	1	...	...	1	38
13. Premature Birth and Debility ...	16	...	...	16	247
14. Atrophy	37	2	7	46	229
15. Age	...	...	33	33	428
16. Sudden	...	2	...	2	72
17. Violence, Privation, Cold, and Intemperance	4	4	1	9	235
CAUSES NOT SPECIFIED	3	1	...	8	41

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In No. 169, for the 24th ult., at p. 338, is a letter on a "question of considerable importance, as it involves a principle of gentlemanly and upright dealing," and "shows the necessity for caution in transferring a practice, and the risk *one* runs in admitting any one to *your* confidence, as in Dr. L——'s case, where his confidence was betrayed, and advantage taken of the knowledge of his proposed retirement." We owe much to so intelligent and chivalrous "A Subscriber," for his defence of Dr. L.—evidently an artless, an unselfish, and inoffensive soul—against this horrible fellow, J. S. S., of S. H. J. Only think, Sir, J. S. S., of S. H. J., martyrises so guileless, generous, and harmless a character as Dr. L. clearly is, by not only refusing to be bled to the paltry extent of £600, in exchange for one of the most remarkable offers ever advertised; but, adding insult to such horrible injury, he dares to publish the fact of his having thus kept his £600, instead of paying it over to the innocent, and doubtless poverty-stricken, Dr. L. What a melancholy contrast does this vile J. S. S., of S. H. J., present to his amiable and *retiring* victim!

Dr. L. proposes to remain in—and to remain, too, in the same house (yet "looking out for a house" for his treacherous customer); to retain his "consulting practice," and even to be his own guide and judge in all cases of distinction, real or imaginary, between what is consulting and what is "general practice"—and send the lion's share of course to J. S. S., of S. H. J.; yet for this unparalleled offer, this "transference of a practice," this "retirement," so perfectly unique, does Dr. L., in the most childishly simple and unselfish manner, ask but £600! This scamp, J. S. S., of S. H. J., refuses to be bled, nay even publishes the case; and then "A Subscriber" shows "the risk one runs in admitting any one to your confidence!" Oh, Sir, that we knew more of this Dr. L.—holding the Hospital physicianship (how, is there only one?), the Surgeonship of the gaol (who can this universal genius be?), and that of the barracks too (wherever are the regimental surgeons and their assistants?). Can you, Sir, not tell us a little more of this pattern card,—so disinterested, so amiable, so thoroughly unselfish, yet so gifted, so energetic and active! If we can learn no more of him, we must all of us feel happy in the assurance, that there is such a man as Dr. L. in the profession somewhere—that at all events *he ain't no myth*; and this assurance we owe to "A Subscriber."

Carlisle, October 6, 1853. I am, &c. R. E.

Dr. Barclay's letter on "Cinchonism in Fever," shall appear very shortly.

Mr. Chalk's paper has been unavoidably delayed by the numerous communications on cholera.

Dr. Whittle's letter in favour of bleeding in cholera, shall be inserted nex t week.

Nemo.—You would have to *prove* that you were in practice when aged only 18, and this might be difficult.

Mr. Canney, Bishop Auckland.—We shall be happy to receive the other cases. That sent shall be inserted.

Mr. Barnes.—The matter shall be attended to.

Studens.—Dr. Churchill's work on the Diseases of Women. Dr. West's on the Diseases of Children.

Mr. Sullivan.—Certainly.

Mr. Bonham's paper on Puerperal Fever shall be published.

Mr. Leekie, of Bonhill, Dumbarton, informs us, that he treated twenty cases of cholera, some of which were collapsed. The results were eighteen recoveries and two deaths. He says,—"The medicine I gave was a draught composed of two scruples of carbonate of soda, one drachm of chloride of sodium, eight grains of chlorate of potass, repeated every half hour, or more or less frequently, according to the symptoms of the case, with a free allowance of cold water. Frictions with the hand, mustard poultices, and jars of hot water, were my external appliances. In two cases of extreme collapse, I had the bowels injected with the same salines, at a proper temperature, with the greatest benefit."

Mr. Wm. Moss, of Tunbridge Wells, recommends, that, "instead of disturbing cess-pools and other noxious matters, by removal or inundation with water, the first thing to be done should be to destroy or neutralize the poison in the air—to disinfect that in small houses and close courts, and prevent the escape of all offensive effluvia from bad drains, &c. For this purpose, then, as fire is the grand purifier of the elements, let fires be made in every house, and bonfires in every street, let tar-barrels and resinous combustibles blaze in court and alley night and day, until "the plague be stayed." Offensive places should be covered over with quick-lime, and the poor strictly enjoined to throw their ashes daily over the surface of their cess-pools, to prevent bad odour arising therefrom. Foul and stagnant pools should not be cleared out in hot weather."

Mr. Barron.—Vaccine lymph can always be obtained by writing to the National Vaccine Establishment, 10, Russell-place, Fitzroy-square.

A Lover of Justice will see that we have made use of his letter.

Mr. Curtis, of Maryport, speaks highly of opium in one grain doses, every half hour, in the treatment of cholera.

Sands Cox, Esq.—The report was inserted last week.

MILITIA MEDICAL OFFICERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you allow me to endeavour to answer your correspondent's queries with regard to the pay, &c., of militia medical officers.

The pay of a surgeon, while out with the regiment, is 11s. 4d. per diem. While not out, the medical officers receive no pay. The pay of an Assistant-Surgeon is 5s. per diem, but if he is an ensign or a lieutenant as well, his pay is 3s. 6d. per diem, in addition to the pay of an ensign or lieutenant—the former receives 5s. 3d., the latter 6s. 6d. per diem.

The Surgeon is allowed at head-quarters 2s. 6d. for each recruit, up to four; if he examines more in one day he gets his pay—viz., 11s. 4d. When he goes to examine volunteers away from head-quarters, he is allowed 16s. 4d. per diem, 2d. per mile per rail, and 9d. a mile if otherwise, for travelling expenses. The Surgeon is allowed 2d. per week for attendance and medicine, on the adjutant, non-commissioned officers, and drummers, and their families, while not called out for training and exercise. One guinea is allowed for every 100 men, to pay for the medicine, when the regiment is out for training; 2s. a day is also allowed the Surgeon, during the period of training, for forage for a horse, and he is allowed one horse free of tax.

With regard to dress. It depends on the commanding officer as to the uniform required. The medical officers require the same uniform as the other officers, with the exception, that they do not wear a shako nor the sash,—they wear a cocked hat. In rifle regiments, the medical officers wear a shako. The cost varies in different regiments. I am in a rifle regiment; mine cost me £50, and my commission, £5 5s. If your correspondent will only inquire of any of his brother officers, he will learn what uniform is necessary, the cost, and from whom to procure it. The military tailors know the regulations issued by the War Office as to the dress. I am, &c. A MILITIA SURGEON.

P.S. Every information may be found in the "Militia Regulations" made by the Secretary-at-War, last July.

Justitia will see his question answered by a decision in a London Police-court we have printed in this Number.

T. M. had better consult the work of Drs. Johnson and Martin on the Diseases of Tropical Climates.

COMMUNICATIONS have been received from—

Dr. ROBINSON, Newcastle; THOS. A. FURNESS, Esq.; Dr. LYONS Munich; B. W. RICHARDSON, Esq.; R. E.; Dr. BARCLAY; Mr. CHALK, of the New-road; Dr. WHITTLE; NEMO; Mr. CANNEY, Bishop Auckland; Mr. BARNES; STUDENS; Mr. SULLIVAN; Mr. BORHAM; Mr. LEEKIE, of Bonhill; Mr. MOSS, of Tunbridge Wells; Mr. BARRON; A LOVER OF JUSTICE; Mr. CURTIS, of Maryport; Mr. SANDS COX, of Birmingham; A MILITIA SURGEON; Dr. E. A. PARKES, of Harley-street; Mr. PAGET; S. WELLS, Esq., Assistant-Surgeon R.N., Bermuda, etc.

ORIGINAL LECTURES.

A COURSE OF SIX LECTURES

ON THE

RELATION BETWEEN THERAPEUTICS AND PATHOLOGY.

DELIVERED BEFORE

The Royal College of Physicians.

By GEORGE JOHNSON, M.D. Lond., F.R.C.P.
Assistant-Physician to King's College Hospital.

Lecture VI.

(Concluded from page 390.)

The observations which I am about to offer upon the subject of treatment have reference chiefly to the less serious forms of nervous disease, sleeplessness, or disturbed sleep, with its usual attendants, lassitude, loss of appetite, palpitation, and the other symptoms which were described in my fourth lecture.

The first point obviously is, to ascertain the cause of the symptoms, and to determine whether it be still in existence, or whether it have ceased to operate. When the apparent cause of the symptoms is over-work, the patient must be warned to abandon his work for a time, or to lessen the amount of his labour, whether it be mental or bodily, if he have the power to do so. He should be instructed that the sleeplessness or the disturbed sleep which results from over-fatigue has a tendency to become habitual, and to induce other serious consequences. We must, however, carefully avoid giving unnecessary alarm to a patient whose over-work is the result of necessity; to a poor needlewoman, for instance, who works sixteen or eighteen hours a day, and earns, perhaps, as many pence, or even fewer. There is one piece of advice which it is of much importance to enforce upon all nervous patients whose employments are sedentary, or who are disposed to mope within doors. It is, that they should consider it a part of their daily work and duty to take active exercise for at least an hour in the open air. To this it is often objected, that they cannot afford the time; and the reply is, that if they will perseveringly act upon the advice, they will save their time and their health. They will actually do more work, and they will be less fatigued and distressed by their labours. Advice of this kind I feel it my duty to give and to enforce very often upon the out-patients of the hospital, and in many instances I know that the result is very beneficial. I am convinced, too, that at least one half of these poor, exhausted, nervous patients might be quickly cured without one dose of medicine, by rest and by a nutritious diet. But the cures thus wrought by rest and food might be made to give wonderful statistical evidence as to the efficacy of any new globule or other method of treatment whose virtues it might be important to proclaim!

I have before referred to the importance of relieving the patient from any groundless fears as to the state of his bodily health. This is a point of such obvious importance, that it does not need to be further insisted upon. The anxious patient will often be half-cured by the assurance, that he has no disease which is not remediable; and to give this assurance is certainly one of the most agreeable duties which a physician can have to perform.

When all that is possible has been done for avoiding the causes of mental worry, and when all needful advice and encouragement have been given, we have next to direct our attention to the consequences, some of which will often continue long after their exciting cause has ceased to operate; while others are perpetuated by some persistent and unavoidable source of anxiety. Now, the first and the most frequent consequence of over-work or anxiety—the one, too, which, more than any other, is productive of further mischief—is restlessness, or some form of disturbed and unrefreshing sleep. And the chief cure for this, after the causes have been as much as possible avoided, is an opiate at bed-time. So far as I can see, it is of little importance what preparation of opium or of morphia is used. For hospital patients I generally order the compound soap pill; one advantage of which is, that its name does not indicate its opiate nature. The dose must vary according to circumstances. In ordinary cases, five grains of the pill, *i. e.*, one grain of opium, may be taken every night at bed-time. In a case of much excitement, with extreme restlessness or a threatening of delirium, the dose must be double or treble that which I have mentioned. In such cases, however, the opium would be best given in a liquid state,—in the form of tincture, or the solution of the muriate or acetate of morphia.

The time for the continued exhibition of the opiate must vary according to circumstances, and will be much influenced by the success of the treatment. The object is to break the habit of dreaming restlessness, and to procure sound and refreshing sleep. In many cases this object may be attained by the nightly repetition of the dose for one week. It is seldom necessary or desirable to continue the medicine for more than a month, though in some cases it may be expedient and beneficial to extend the period considerably. In many cases I have found that the beneficial effects of the medicine have been immediate; the patient has slept soundly, the distressing dreams have ceased, the appetite has returned, and all the symptoms which depended on loss of sleep and loss of appetite have quickly disappeared. After a few nights of sound sleep have been procured by the opiate, the dose should be discontinued, and in most cases the patient will continue to sleep as well without the medicine as with it. There is, probably, no one medicine which has the power of quickly removing such a multitude and a variety of distressing symptoms as opium, when its action is really favourable in the cases to which I refer. It is not, however, to any specific efficacy residing in the opium, but to the marvellous influence of sleep in refreshing both body and mind, that the benefit is really due. The value of the opiate consists in the fact, that, on the whole, it is the safest and most certain means of procuring sound sleep.

The use of opium as a medicine is sometimes attended with unpleasant consequences, and it does not always effect what is desired. I proceed now to indicate some of the unfavourable results of the opiate treatment, and the precautions which ought to be observed in the use of the medicine. One of the most frequent discomforts attending the use of opium is a feeling of nausea and faintness either with or without headache in the morning after awaking. The best cure for this is a cup of coffee or tea, with some solid food, followed by a walk in the open air. In many cases the opium, although at first it may disagree, yet produces no unpleasant effect after the second or third dose.

The nervous patients who require the method of treatment which I am advocating, almost invariably suffer from constipation,—a torpid condition of the bowels being, in fact, one of the natural consequences of the general debility which characterises the patients in question. Although the immediate effect of the opium is to increase the constipation, yet its ultimate tendency is to restore the regular action of the bowels by means of the invigorating influence derivable from sound refreshing sleep, and an increased appetite for food. The temporary constipation may readily be obviated by an occasional mild aperient—a seidlitz powder, or a compound rhubarb or colocynth pill. The inconvenience arising from the astringent effect of opium upon the bowels is so easily met and removed, that it would never deter me from giving the medicine in any case which appeared to require it.

One of the most serious objections to the use of opium, is its tendency, in some cases, to produce an effect the direct opposite of that which we require,—to produce wakefulness and excitement, instead of sleep and composure. It is only in a small proportion of cases that this difficulty arises. It may sometimes be overcome by changing the form of the medicine, or by increasing the dose of the opium or morphia, and, in other cases, by combining the opiate with a moderate dose of antimony—James's powder, or tartar-emetic—a combination which has been strongly recommended by Dr. Graves to procure sleep and check delirium in some cases of fever. It must, however, be admitted, that some patients cannot tolerate opium in any form or in any dose; and nothing can better show the value of this drug than the difficulty of finding a substitute for it. We may try henbane and hop, and these will sometimes effect our object; but their action is very uncertain in comparison with that of opium.(a)

(a) Since this lecture was delivered, I have found reason to believe that one of the best substitutes for opium in the cases referred to, is chloroform, in doses of from ♏x. to ♏xx., made into a draught with mucilage.

It is well to remember that an opiate enema will sometimes procure refreshing sleep when opium, in any form, administered by the mouth is either quite inoperative or productive only of distressing excitement or sickness.

But may not the frequent repetition of an opiate dose become a necessity for the patient? May we not be instrumental in making him an opium-eater? I admit that the danger of such an evil, if real, would be a very fearful one. There are few results of medical practice which I should regret more than the reflection, that I had in any way contributed to render a recourse to narcotics or stimulants habitual or necessary to a single patient. I believe, however, that a cautious use of opium is attended with little danger of leading to so terrible an abuse of the drug.

In giving opium to hospital-patients, I never tell them what they are taking; and one reason for preferring the compound soap pill, in such cases, is, as I have before intimated, that the nature of the medicine is not apparent from the prescription, if the patient should read it. The opium should be discontinued as soon as it can be dispensed with, —as soon, that is, as restlessness and frightful dreams have ceased to harass and exhaust the patient. The rapid convalescence, and the renewed health, and strength, and spirits, which are wonderfully promoted by securing sound and refreshing sleep, will generally enable the patient at once, and without difficulty, to dispense with the use of opiates. I should withhold opium from a patient who neglects any directions which I have given him as to exercise, diet, and the general management of himself, and whose restlessness and nervousness appear to result from such negligence. In other words, I would not encourage a patient to trust habitually to opium for the removal of discomforts which might be avoided by the exercise of self-control, and by obedience to natural laws.

I beg to make an earnest protest against the routine practice of giving opiates to every patient who complains of inability to sleep. Our first care must be to discover, and then to remove, the cause of the sleeplessness. We shall meet with some indolent patients, for whom the best soporific is regular employment and daily active exercise in the open air: for others, who are feeble, tonics and nutritious food will be the appropriate remedies; and again, in other cases, dyspeptic symptoms will cease, and refreshing sleep will return, under the influence of an occasional aperient and a carefully regulated diet. In most cases of this kind, the exhibition of opium would not only be unsuccessful, but positively hurtful.

I have the satisfaction of knowing, that, in several instances, by a temporary use of an opiate at bed-time, I have greatly assisted a patient to break through a habit of chronic intemperance. I will give some brief particulars of one case of this kind.

T. R., aged 40, a carpenter, came to the Dispensary on the 27th May, 1850. For some years he had been in the habit of drinking rather freely both beer and spirits; he had worked very hard, and had suffered much from anxiety consequent upon family misfortune and disagreements. For many months past he had suffered from frequent vertigo and headache; he had restless nights, frightful dreams, and spectral visions; his appetite was bad, digestion feeble, and he frequently suffered from sickness. He had been leeched about a dozen times for the vertigo, and he had continued to drink beer and spirits. Latterly he had been almost incapacitated for work. His countenance was expressive of much anxiety; his eyes were suffused, his tongue coated and tremulous, and his appetite bad. I ordered, on the 27th of May, pil. saponis c. gr. x. om. n.; a mixture of rhubarb and magnesia occasionally. To discontinue the use of beer and spirits.

On the 31st of May he was rather better, and the sleep was somewhat quieter.

On the 3rd of June, the dose of the compound soap pill was reduced to five grains, a mixture containing the sulphates of iron and quinine was substituted for the aperient mixture, and ten grains of compound aloes pill were to be taken occasionally.

On the 18th of June, the report is:—He has continued to take the medicine; he now sleeps well, without dreaming, awakes refreshed, and feels a pleasure in commencing his work at five or six o'clock in the morning, whereas before he had some difficulty in being up by nine o'clock. He feels much stronger, and less nervous; has lost the dizziness; his countenance is much improved, the tongue is clean and not tremulous; his appetite is good. He has taken neither beer nor spirits, and he has resolved to abstain entirely. The opiate was then omitted, but he continued to take the tonic.

There can be no question that, in this case, the vertigo and other symptoms had been rendered worse by the leeching and by the continued drinking of beer and spirits, while the appetite and digestive powers were impaired. He was quickly restored to health by sleep, and by the recovery of the power to eat and to digest his food. In cases similar to this, after a man has been for a long time habitually intemperate, it is often less difficult for him to abstain entirely from alcoholic drinks than to take them in moderate quantities. I am not sure that this man has continued his abstinence, but I believe that he would return to me if he suffered a relapse.

The cases in which the opiate treatment is most rapidly and completely successful are those in which the nervous symptoms are the result of some past grief, or anxiety, or fatigue, the impression of which remains, and is perpetuated by the patient's inability to obtain refreshing sleep. In such instances, a few nights of sound sleep, procured by means of the opium, rarely fails to effect a rapid cure, and this, too, after the nervous symptoms have continued for many months, or even for years. The first, third, and fifth cases, the particulars of which I gave in a former Lecture,(a) are good examples of the beneficial effects of the plan of treatment to which I refer.

Another class of cases in which equal benefit is often derived from a similar method of treatment, are those in which nervous restlessness has been induced by continued over-work, whether mental or bodily. In such instances, it is obviously desirable, as I have before intimated, that the patient should rest, or diminish his labours, if possible; but the patient may assure us, that he has no alternative but to go on with his work, or to lose his employment, and with it his means of living. In such a case, we may often prevent over-worked men and women from breaking down, and enable them to go on in comparative comfort by giving an opiate nightly for a week or two. Refreshing sleep will be induced, the appetite will return, and, as a consequence, the strength and spirits will revive. And the strength and spirits thus obtained are not false and artificial in the same pernicious way as the stimulus obtained from alcohol, by which too many are tempted in the circumstances to which I have referred. The temporary help which a languid body or mind derives from alcohol is generally followed by a corresponding amount of depression, and with this there comes a craving for a repetition of the stimulant. Another bad result of the too free use of alcohol is a loss of appetite and an impaired power of digestion. Now, the effects of the opiate plan of treatment, conducted with the precautions to which I have before alluded, are in most respects the opposite of those produced by alcoholic stimulants; for we seek, by means of opium, a natural remedy for fatigue, that remedy being sleep, which brings with it a desire for food, and the power to digest it. Alcohol is taken for the sake of the immediate stimulus; the subsequent depression is the drawback upon its utility as a means of keeping up the working powers. The object in giving opium is to obtain, not its stimulant effects, which are comparatively slight and transient, nor immediately its composing influence, but the refreshment which follows the latter, and which has nothing corresponding with it among the ordinary consequences of alcoholic stimulants.

My objections to the *abuse* of alcohol as a stimulant do not of course apply to the use of wholesome wine and beer as articles of diet by those who require them, and who appear to derive benefit from them. Moreover, there are certain cases of nervous disease in which some form of alcoholic stimulant may be given with great advantage, either alone or in conjunction with opium. I refer to cases of extreme restlessness, either with or without delirium, and whether resulting from intemperance or from grief, or watching or fatigue, when the bodily powers are very feeble, although under the mental influence there may be great excitement. In these cases, repeated large doses of opium sometimes fail to procure sleep, but appear rather to have a depressing influence: the patient's skin becomes cold and is bathed in perspiration, while the delirium and excitement continue. In such circumstances, the continued use of the

(a) Lecture III.

opium is not only useless, but injurious and dangerous, and the surest mode of arresting the collapse, and of procuring sleep, is to give freely either wine or brandy, or, in cases of intemperance, the stimulant to which the patient has been accustomed, with beef tea, or some other form of nourishment.

It is scarcely necessary to observe, that in all cases of nervous disease we must carefully watch the signs of functional disturbance or of structural change in any organ of the body, and that we must meet such symptoms by the appropriate remedies. And although, in most instances, a tonic plan of treatment is required, yet we must not hesitate to resort to measures of depletion if they are called for by the occurrence of such organic disease as appears to need this treatment.

The cases which are least favourable either for the opiate or for any other plan of treatment, are: 1st, cases of confirmed hypochondriasis or melancholy of very long duration, and especially when these have the character of religious despondency; 2ndly, cases in which extreme nervousness has resulted from great terror, or from a sudden shock which has left a deep and durable impression upon the mind and nervous system; and, lastly, cases in which the symptoms are perpetuated by some constant source of anxiety or sorrow.

These classes of cases, although very unfavourable, and often little benefited by any plan of treatment, whether medical or moral, are yet by no means hopeless nor always incurable. Their unfavourable and unmanageable character is, however, greatly confirmed when they are complicated with epilepsy; and this whether the epilepsy has been induced by a sudden shock of grief or terror, or whether it has supervened upon long-continued anxiety and nervousness.

It is beyond the limits of my present design to consider the treatment of confirmed epilepsy or of confirmed insanity. Those physicians who are best qualified, by their sound judgment and by their great experience, to speak on this subject, are the most ready to admit how unsatisfactory, in a large proportion of cases, is any attempt to cure these terrible diseases when they are chronic and confirmed, and how utterly hopeless it becomes when the two forms of disease co-exist, as they often do, in the same subject. Few scenes can be more sad or sickening than those presented by the epileptic wards of a lunatic asylum.

The great prevalence of insanity among us is sufficiently indicated by the number, the magnitude, and the crowded state of the asylums, both public and private, which are scattered throughout the country. I have extracted from a recent Number of the *Lancet* (February 5, 1853) the following paragraph, which is headed, *Insanity among the Working Classes*:—"An official report, just published by the parochial authorities of Marylebone, states, that insanity has lately increased to such an extent among the working classes, that none but those whose duties bring them into contact with the sufferers can form an idea of its fearful spread. There are no less than 494 chargeable to the parish. In St. Pancras, insanity also prevails to an unusual amount, especially among the humbler classes. It is to be hoped that this painful fact will be made the subject of official and medical inquiry, with a view to tracing its origin, and to retard, if possible, its progress."

It is gratifying to observe, that, under the influence of that humane and enlightened system of treatment which is now adopted in the hospitals and asylums for the insane, the number of cases of *recent* insanity in which a cure is effected forms a very large proportion of the total number admitted; and the proportion of cures appears, in fact, to be steadily increasing. In St. Luke's Hospital, the number of cures during the year 1851 was as high as 74 per cent.(a) Gratifying and encouraging as is this result, there is probably no one who will refuse assent to the proposition, that, as in all cases of disease, so especially, and, for many and obvious reasons, in cases of mental disease, *prevention is better than cure*. It is probable, too, that many cases of confirmed insanity, which resist the most skilful treatment, might never have passed into that incurable stage if preventive measures had been adopted before the full development of the disease. In describing the earlier symptoms, and the causes of those forms of nervous derangement which, in their extreme results, tend to fill our hospitals and asylums with the paralytic, the epileptic, and the insane, my object has been to direct attention to these cases at an early period of their progress, when they often admit of a speedy cure. I believe that any physician whose duty it is to prescribe for the numerous out-patients of a London hospital, may be the means of *preventing* as many cases of insanity and epilepsy in one year as can be cured during the same period in any hospital or asylum in the kingdom.

But we have not discharged the whole of our duty with reference to these terrible diseases until we have pointed out the fact, that, in a large proportion of cases, their cause lies deeply rooted in some of those social evils which are beyond the reach of the materia medica. There appears little reason to doubt, that the chief causes of insanity among the working-classes are these—1st. Their dwellings are in general, and for many obvious reasons, unfit for the habitation of human beings. 2nd. A large proportion of the occupants of these dwellings, though living in a Christian community, are in a state of almost heathenish ignorance. 3rd. The atmosphere of the greater number of the workshops is as injurious to health as is that of the private dwellings of the poor. 4th. The time of daily labour is often much too long, and this, in many cases, is rendered necessary by a very inadequate remuneration for the work done. 5th. Intemperance is a very prevalent vice; and, indeed, it appears to be almost a necessary consequence of the four first-mentioned conditions: for men, and, alas! women too, fly to the gin-shop to escape from their wretched homes, to drown in the oblivion of drunkenness the cares and troubles of which they have never been taught the origin or the end, and to seek a temporary relief from the physical exhaustion occasioned by excessive labour in an impure and overheated atmosphere. Insanity appears to be a natural product of such a soil as this.

As the pathology of insanity can never be fully comprehended by those who seek for it only in the morbid anatomy of the brain, so its prevention, to the greatest possible extent, cannot be accomplished by any of the agents which are included in the list of our materia medica. It scarcely need be added, that for *the right use of the materia medica*, as well as for the credit of ourselves and of our Profession, it is as important that we should know what is unattainable by medicines, as that we should be well instructed how to accomplish that which is possible by these means.

(a) See the *Physicians' Report and Statistical Tables* for 1851. In contrast with the favourable results of treatment in cases of recent insanity may be placed the painful records of those asylums which are destined for the reception of pauper lunatics after the disease has become chronic and confirmed. Out of the 963 patients in the Hanwell Asylum when the last *Report of the Committee of Visiters* was published, Dr. Begley states, that "the possibly curable do not exceed fifteen in number, and of these probably not more than ten will recover."

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. VIII.

EXTRACTS FROM THE ANNUAL REPORT OF SICK OF HER MAJESTY'S 86TH REGIMENT.

By ALEXANDER THOM, Esq.
Surgeon of the Regiment, now Staff-Surgeon at the Mauritius.

1. ON THE CLIMATE OF DEESA, BOMBAY PRESIDENCY.

As our information regarding different countries increases, and enables us to compare the healthiness of one climate with another, we are perplexed at finding manifest and direct contradictions between medical men as to the local causes of health and disease. In one region of the globe, the prevalent and fatal maladies are almost uniformly ascribed to some striking physical configuration or peculiarity of the place; yet, in another hemisphere, or often at no great distance, the very same circumstances are present, but without the alleged consequences in any degree sufficient to justify the relation of cause and effect being correct in the first instance.

By one writer, marshes, swamps, and low grounds are readily assumed to be the sole cause of fevers; yet, in

another place, all these exist without such an effect. Another will meet with extreme dryness, elevated ground, and bare rocks, as a locality of fever, and immediately draws a relation between them, or will even descend to the depths of the earth, to call for the volcanic agencies that have slept for ages to be accountable for the disease on the surface, which they upheaved when the world was young.

That there are fixed and permanent laws governing the production of disease as well as of health, no one can doubt; but that these laws are, under similar circumstances, common to the globe, must be equally apparent, so long as the great agents that influence life are universal, and merely differ in degree, according to latitude and the physical features of the surface. It behoves us to be cautious in receiving any doctrine of the causation of disease which has not some applicability to all parts of the world, when the facts on which it is based are alike, or nearly so. Indeed, so long as we confine our observation to the mere surface of the ground around a cantonment, it will hardly be possible to arrive at any satisfactory theory of the origin of the epidemics and endemics that sweep off thousands at a visitation. We must also well and carefully note the effects of the seasons as they revolve, and their varying conditions, as being important to be known, but too delicate to be detected by simply noticing temperature. Beyond this how little do we know of the climates of our different colonies! We know something of their prevalent sickness, but in very few cases can we compare their climates with that in which chance may place us.

Some day I hope to be able to show how little mere temperature has to do with disease, and how much humidity, in its varied and intricate relations to life, influences, under various conditions, our health for good or evil.....Invisible vapour, deleterious in a high degree when associated with heat, in undermining health, is overlooked until it becomes tangible to our senses as mist or dew, and suddenly rouses into activity an antecedent and obscurely morbid state of the system.

..... At Deesa we have an extraordinarily high temperature of the earth and atmosphere from April till July, yet at this period of the year the troops are very healthy,—quite as much as they would be in England. Another peculiarity is, that during the rains, and when the country is covered with vegetation, and the winds at south-west and west are humid, and blow over Cattywar and Guzerat, or the low swampy flats about the Kunn of Cutch, which is the case from July to September, febrile diseases are not peculiarly prevalent or severe, and rarely occur in the remittent or intermittent type. On the other hand, as soon as the dry and cold currents from the north-east begin to blow, and reach Deesa after passing over an arid and sandy desert of several hundred miles in width, intermittents and remittents become the prevalent diseases, and continue so till the cold weather is finally established, and the human system recovers from the debilitating effects of the summer, and is sufficiently vigorous to generate the due quantity of animal heat required in cold desiccating climates. I find, that at the time when our men were suffering from remittents that the inhabitants of the sandy desert to the north and north-east of Deesa (where not unfrequently a drop of rain does not fall during a year, and a light shower or two is considered as a "good monsoon") were also suffering from severe periodical fevers.

As I have said, the rain at Deesa is drunk up by the sandy soil in a few hours after it has fallen, and a pool or marsh is not to be met with except towards the Gulf of Cutch, some hundred miles distant. There was, therefore, nothing in the soil, or on the surface, to cause fever last October and November, when everything was dried up and almost resembled the desert; and the prevailing winds of the season being from a still more sandy and sterile surface, it was impossible to ascribe the endemic remittents to atmospheric or terrestrial humidity, or to miasms generated by decaying vegetation. Vegetables were dried up for a month or two before the worst cases of fever took place.

There can be no question that these fevers were connected with the cold, dry, and chilling currents of air from the desert; for whenever these ceased for a day or two, and were replaced by the mild and bland yet humid winds from the coast and moist lands of Cutch and Cattywar, a very remarkable diminution in the daily admissions took place, and on the wind veering back to the north-east, as certainly did the attacks become more common and severe.

After giving a number of meteorological tables and details, Mr. Thom goes on to remark:—

While the West Indian climate, and many of our tropical and insular stations, possess an extraordinary equability all the year round, seldom in temperature exceeding a range of ten or twelve degrees, that of Deesa, and indeed of Upper Scinde, varies from 114° to 32° in the course of the year,—a difference of 82°. Nor are the diurnal rise and fall of the thermomete, less contrasted. In the West Indies 6° or 8° are the daily change of the temperature, while at Deesa this amounts to 30° or 40° in the forenoon. In last May, the thermometer at sunrise was 83°, at noon 112°. In August, during the height of the south-west monsoon and rains, the climate of Deesa approaches to the equability of a coast or island station, being 78° and 80° at sunrise, and 86° to 88° at mid-day. This, however, lasts only for a few months, for in October, with the setting in of the north-east winds, the thermometer varied from 55° to 56° at sunrise to 94° or 95° at mid-day, and in January, it was from 40° to 44° up to 80°. This daily range may be calculated on for seven or eight months in the year, being connected with the land wind or north-east monsoon; in other words, the true north-east trade wind of this hemisphere.

The *dryness* of the atmosphere at Deesa is equally remarkable, and is directly connected with the atmospheric currents which give rise to the great annual and diurnal variations of heat. In April, May, and June, the mean difference between the temperature in the shade and of the wet bulb, both taken at sunrise and two p.m., amounts to 27°. Yet this is far from being an index to the *daily* degree of dryness, often experienced for days together in April and May, which amounted to 40° and 44° in the middle of the day. Of course, as in all countries, the dryness is much less in the nights and evenings than at noon, yet, at Deesa, in last April and May, it was from 10° to 12° about sunrise.

As the south-west, or sea-winds, become strong, and rain falls, the atmosphere of Deesa was more like that of Bombay than an inland station, and the air was charged with moisture to 3° in last August. Even the mean of the three rainy months is only 6·27°. In the autumn, the earth rapidly dries under the influence of the desiccating winds from the desert to the north-east of the camp; and by December and January the air has about 20° to 30° of dryness, and so on increasing with the solar influence till May, when it reaches the aforesaid acme.

The fall of rain was about 20 inches last year, chiefly in August and September, a few heavy showers only having taken place in June.

Heat of the Soil.—During the year I kept the temperature of the earth *at* 6 *inches deep*, for the purpose of ascertaining the quantity of heat which it acquires from solar radiation, and I find the mean is as high as 88·04°; having been 70° in January and 102° in May. The thermometer, lowered to this depth in the earth, stood as high as 126° at five p.m., and at 100° at six a.m., in May. This is a degree of heat, perhaps, rarely noticed except in sandy deserts, and the mean during the year at once explains the temperature of the wells, which is 86° all the year round at the depth of 90 feet, indicating a mean for the year about 10° above that which belongs to the latitude (24° N.) Even in September, after the earth has been drenched for two months by the monsoon, the temperature acquired in the hot months is still 87·50°, or rather more than that of the wells.

Dews are rarely observed at Deesa, and the cause is obvious, for, while the earth retains a degree of heat so much above that of the night-air, the necessary conditions for the deposition of dew hardly ever occur,—indeed, in September, just after the first rapid evaporation caused by the north-east, or dry winds, occasionally cuts down the vegetation below the air. Dew is now and then noticed as a curiosity rather than a common phenomenon.

Accidental destruction of instruments prevented the acquisition of barometrical observations.

By the following Table the extremes of heat and cold, dryness and humidity, can be compared with the prevalence of different classes of disease.

Average Strength of the Regiment, 1150,

	April, May, and June.	July, Aug., and Sept.	Oct., Nov., and Dec.	Jan., Feb., and March.
Prevailing winds ...	N.E. and S.W.	S.W.	S.W, N.W, and N.E.	N.E.
Maximum range ...	114	102	98	98
Minimum ditto ...	60	75	38	33
Variation	54	27	60	65
Thermometer in shade, mean of 24 hours	90·12	85·01	73·72	68·72
Dew-point, mean of 24 hours.....	73·15	78·74	63·47	57·37
Dryness of the air(a)	27	6·27	10·25	11·35
Fall of rain in inches and cents.	3in. 45c.	16in. 35c.	...	3c.
Admissions from fever—				
,, intermittent	3	5	93	45
,, remittent ...	13	55	133	5
,, continued...	37	39	13	12
Cerebral and nervous diseases	...	4	6	4
Abdominal ditto ...	84	179	109	84
Thoracic ditto	24	16	28	46
Rheumatic ditto ...	42	50	43	61
Scurvy	3	2	10	5
Scrofula.....	6	3	4	2
Syphilitic	58	96	73	56
Diseases of eye.....	9	19	17	6
,, ,, skin ...	2	1	1	...
All other diseases...	53	44	44	83
Total	334	513	574	409
		1830		
Died	4	8	12	3
		27		
Average daily sick	43·33	74·79	91·25	67·55

(a) We presume this to be the difference between the readings of dry and wet bulb thermometers.—Ed.

ON THE PERIDENTAL MEMBRANE, IN ITS RELATION TO THE DENTAL TISSUES.

By C. SPENCE BATE, Esq.

The tissue in a tooth which is usually called cementum or crusta petrosa, when it exists in the lower organised teeth, is evidently a lower character of calcification of an organ which, in the higher class of teeth, becomes developed into enamel; and, without doubt, the tissue as it stands upon the enamel in graminivorous animals, or exists in teeth where it is not normally present, but the result of an arrest of enamel development, still in the homologies represents the enamel.

On human teeth, except as the occasional result of a diseased action, arising from some injury done to the pulp, this corpusculated structure is never present on the coronal portion of the tooth; the cementum on the fang, though the homotype of that which exists on the crown, yet appears, from its position and character, to be worthy of a separate consideration.

In the opinion of all observers, the cement upon the fang is the result of a calcifying process, embracing the capsule of the undeveloped tooth, and which, instead of being, as upon the coronal surface, the last which undergoes that process, is ossified simultaneously with the peripheral layer of dentine.

It will be remembered, that the cementum in the lower type of mammals is extended over the whole external surface of the tooth.

In the order rodentia, the lowest class of mammalia with true enamel, (for the homologous structure among marsupials can scarcely be called enamel,) a layer of enamel covers the outer surface of dentine within a similar one of cementum; this is always the case when the tooth does not terminate in fangs or roots, over which no enamel ever extends; although it is often the case, that, in this tribe as well as in the pachydermata, the coronal portion of the tooth penetrates deeply into the jaws, the fangs become little more than obsolete processes. The enamel terminates with the crown; it is not so with the cementum, a thin layer of which, without an exception, is present over roots as well.

The corpusculated cementum upon the fangs is a continuation of the same corpusculated tissue, when present, which is exhibited upon the crown of the tooth; therefore, if the latter upon the crown be considered the homologue of enamel, then the former upon the fang must be considered the homotype of the same structure. But the lacunated structure, in neither position, is the calcified product of the capsule of dental pulp.

On the fangs of the human tooth, in its recently developed state, few, if any, lacunæ are to be found in the cementum, which is represented, in this early stage, by a thin transparent line of osseous tissue, which is generally supposed to be the original capsule of the pulp, having undergone the calcifying process.

It is a matter for close examination, whether the capsule does undergo this osseous change. Upon the development of the peripheral layer of dentine, a close union takes place between this membrane and the tooth; but that it actually passes into bone upon the fangs of a tooth, is, I think, to be doubted. It appears to remain a persistent membrane, capable of being excited to the development of osseous cells, of assuming a high degree of vascularity, and fulfilling especial functions. In fact, the original capsule of the incipient tooth, while itself is not converted into bone, retires before an organized tissue generated from itself, in a manner analogous to the ossific structure which is developed from the periosteum which lines the Haversian system in bone.

The presumption, that the external investing membrane of the dental pulps is not calcified with the corpusculated cementum, is capable of being strongly supported by several collateral points in the natural history of the teeth. When any local irritation is excited in the peridental membrane of the adult tooth, a very usual result is, the abnormal growth of the cement. It is but reasonable to suppose that, if the investing capsular membrane had become calcified with the other tissues, it would have been visible as a distinct line in section. The fact, that this same membrane becomes calcified upon the surface of the enamel, and, in those teeth where it exists, on the coronal cement, cannot be taken as opposed to this opinion, for, above the gum, it continues only persistent as the remains of a worn-out organ, and appears more in a state of atrophy than the result of a living change, by means of a true calcifying process. The ease, moreover, with which it can be removed as an entire membrane from the coronal portion of a tooth, but not from the fang, shows at least that it exists in relation to the tooth not alike upon the fang and crown. On the latter, when the tooth rises above the surface of the gum, the capsule is cut off from the source whence it derived its nourishment, and then remains upon the surface of the crown as a semi-ossified tissue. In the former, that is, upon the portion buried in the jaw, which sometimes includes a portion of the crown as well as the fang, it remains a living structure full of vital power, and is the medium by which the tooth is held in living connexion with the rest of the animal system. This, I think, can be clearly shown by comparative examination. In the elephant the gum attaches itself to the cement, which it can only do by the assistance of a uniting membrane, an inch or more above the alveolar process; and any one may easily demonstrate for himself that the gum is united to the tooth above the alveolar process in the human mouth. These facts strongly bear upon the idea, that the original capsule of the tooth is not calcified upon the surface of the fang, but remains persistently a vascular organ, the peridental membrane of the fully-developed tooth.

In the rodents, where there is no fang the pulp is persistent, and the capsule retains its constant character, while, at the same time, it fulfils the duties of the peridental membrane, to which it bears a close analogy in its connexion with the tooth upon that portion where the enamel is developed.

In the order *Reptilia* the teeth are repeatedly lost and reproduced through life. According to the received law, a tooth can only be developed from mucous membrane. The young tooth of a saurian is developed upon the external surface of the lingual wall of the tooth, and makes a passage

for itself through the dentine of the fang of the previously existing tooth, and enters the pulp cavity.

It is difficult to understand how a fold of the mucous membrane of the mouth can successively repeat itself in the development of adult teeth through a repetition of years, as has been suggested; but if it once be admitted that the peridental membrane is the original capsule of the tooth, the origin of which is in the mucous membrane of the mouth, it appears that a great difficulty is immediately solved. The papilla of the incipient tooth is the result of a gemmiparous process of the peridental membrane of the previously developed tooth, as the second and third molars are developed from the first permanent molar among mammalia.

I am aware that, in these observations, I have to contend with the highest (nay, every) authority; but sometimes conviction steals over one so forcibly, that the greatest reverence cannot thrust it down. What Professor Owen calls the cementum, or ossified capsule, the late Mr. Nasmyth called the persistent capsular investment, or crusta petrosa. But the real capsular investment lies over both, and is the membrane figured by Nasmyth as "the membrane external to the crusta petrosa" in the Bradypus tridactylus. This same membrane I have seen, and believe that it can readily be obtained upon the young incisor of an ox, in which tooth a corpusculated layer of cementum overlies the enamel; it is the membrane external to, and not the corpusculated tissue next upon the enamel, that was originally the capsular investment of the pulp, and is present on the human tooth, without the interposition of cement between it and the enamel for a limited period after development.(a) This membrane is easily capable of demonstration by the action of any dilute acid upon the surface of the newly-developed tooth; it is this membrane which Mr. Huxley calls "Nasmyth's membrane," but to which alone Nasmyth has not confined his meaning in the term "persistent capsular investment," and which must be considered as synonymous with Owen's "cementum," and the "bone-like substance which Perkinje observed to be "continued upon the enamel crown of a human incisor."

But the thin membrane, the result of a semi-ossification of the capsular investment, an organ that has fulfilled its office, and remains in connexion with the surface of the tooth, more as an atrophied organ than as a vital portion of the tooth,—that portion which exists upon the crown is the homotype of the peridental membrane on the fang. In the morphology of the permanent tissues, these two originated in different portions of the capsule of the dental pulp.

The distinctiveness of character between the peridental membrane of the tooth and the periosteum of the alveolus is strongly exhibited in the fact, that an ossific union cannot take place between the two membranes; that is, anchylosis between the teeth and jaw-bone does not (cannot) exist among mammals;(b) this which is true under normal conditions appears to hold good also under the aspect of disease. Thus we perceive, that if the peridenteum be excited to generate bony tissue on the surface of the fang, an opposite action is provoked in the periosteum, and absorption of the alveolar walls is the result, in an inverse ratio to the quantity of the hypertrophy of the fang, in the course of which progressive increase occasionally we find that two fangs will come into contact, and unite by a true and perfect osseous union. This appears to demonstrate an antagonistic principle existing in the two closely situated membranes, the periosteum and that which is extended over the fangs of the tooth,—a fact tending to corroborate the previous assertion, that they date their genesis widely apart; the latter originating from the capsule of the undeveloped tooth, and is still connected with the mucous membrane of the mouth as a delicate continuation of the gum. The peridenteum, therefore, must be viewed, not only in its development, but in its persistent character as a dermal tissue, while the periosteum belongs to the internal or osseous system.

The study of these tissues, and the true reading of their respective positions in relation to the other parts of the animal system, must lead to a more correct diagnosis of the nature of their respective diseases, and to their more efficient treatment when existing. One class of medicines we know act upon one set of organs, while another will only affect those distinctly separate. To produce an arrest of certain abnormal actions existing in the bones and their closely associated membranes, must require a different remedy from that which pertains to the peripheral system. However closely in juxta-position the two may approximate, they still hold their relative connexions widely apart. To this, probably, may be attributed occasional failure in the treatment of one of the most cruel pains to which the face is liable, and confounded with tic; since, in treatment, the peridental membrane and the periosteum of the alveoli have been always considered and treated as a continuation of the same internal membrane.

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(a) Repeated and careful observation has convinced me, that the so-called green tartar, or mucus, upon the front teeth of young persons is really caries of the persistent capsular investment. Professor Harris, in the third edition of his "Principles and Practice of Dental Surgery," remarks, that it is more like a stain than salivary calculus, and that it has the power of decomposing the enamel.

(b) Professor Owen writes, (Odon., p. 418,) "that Daubenton, in his excellent memoir on the small insectivores, affirms that the root of the teeth becomes anchylosed to the jaw-bone," in the shrew. This so-called anchylosis partakes more of the character which is seen sometimes to exist in strong, aged, healthy persons, where the tooth and the alveolar process are so closely united, that they cannot be separated; but this is by no means anchylosis in its true sense, as exhibited in reptiles, where the structure gradually passes from bone to dentine, without any distinct line of demarcation.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT
OF THE PRINCIPAL OPERATIONS PERFORMED DURING SEPTEMBER.

The appended report includes, as last month, all the more important operations performed during September at the following hospitals:—University College, King's College, St. George's, St. Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, and the Central London Ophthalmic.

Lithotomy.—The case reported as still under treatment last month has since recovered. Three operations have been performed during the month, the subject of one of which, a boy, under the care of Mr. Cock, in Guy's Hospital, is doing well; the other two are dead. One of the fatal cases was a male infant, aged twenty months, apparently in fair health, but who had been long accustomed to the administration of gin. The operation was very successfully performed under the influence of chloroform, and a small stone removed; the patient, however, never completely rallied afterwards. Although very little blood was lost at the time, and none subsequently, yet he remained in a state of great depression, pale, and faint. Forty-two hours after the operation, he suddenly became comatose, and died in the course of an hour. The urine had contained pus; at the autopsy, the pelvis of one kidney was found to be extremely diseased, and the secreting tissue of both organs was much degenerated. In the second fatal case, the patient was a man of 25, in extremely ill health, and who had suffered severely from the disease. Two large calculi, the size of pullet's eggs, were removed without unusual difficulty. The man gradually declined afterwards, and death took place on the tenth day. No *post-mortem* was permitted; but it is probable that the kidneys were not sound. The stones illustrated a point on which we insisted some months ago, viz., that the presence of two only is sufficient to account for a quadrangular form. They were of nearly similar shape, presenting a base, an apex, and three flat sides.

Herniotomy.—Number of cases, 5, all of which are recovering, and may be considered out of danger. The case mentioned last month as remaining under treatment, is doing well, but still in hospital. Of this month's cases, 4 were femoral herniæ in women, 2 of which had been strangulated for nearly three days each; the other 2 for twenty-four and twenty-five hours respectively. One of the latter, which occurred in the Middlesex Hospital, and was operated on by Mr. Moore, was interesting from the circumstance, that the operation had been performed in precisely the same spot six years previously by Mr. Shaw, for three years after which the bowel had never protruded. The fifth case was one of inguinal hernia in an old man, operated on by Mr. Tatum, in St. George's Hospital. A portion of omentum was cut away.

Trephining the Skull.—Mr. Poland's patient, mentioned last week as still under care, has since been discharged quite well.

Ligature of Arteries, &c.—The femoral has been tied in one case, on account of secondary hæmorrhage on the seventh day

after an amputation of the leg for diseased ankle-joint. The patient, a young man, had lost so much blood that he did not recover. At the *post-mortem* a small purulent deposit was found in the liver, and the cause of the bleeding was made evident in an incised wound of the posterior tibial, just above where the ligature had been placed. The radial and ulnar, by Mr. Critchett, in the London Hospital, on account of secondary hæmorrhage, seven days after the amputation of two fingers. The patient has since done well. In the London Hospital there have, also, occurred the following. Two cases in which it was necessary to tie both ends of the radial on account of wound. One in which the radial and ulnar (high division) were cut across, together with the median nerve, by a wound in the lower third of arm. The wound was enlarged, and both ends of both vessels immediately tied. A case in which the internal jugular vein was divided by a wound in the neck. The patient, a little child, had been brought the distance of a mile to the hospital, and was pulseless on admission. No time was lost in enlarging the wound and ligaturing both ends of the vessel, on which the bleeding at once ceased. In spite, however, of the assiduous application of warmth, etc., the boy did not rally, but died an hour after he was got to bed.

Four cases of aneurism are now under treatment by compression, two of them the cases mentioned last month, respectively under the charge of Mr. Hewett, in St. George's, and Mr. Hilton in Guy's, in neither of which is the tumour yet quite solid; one other of the popliteal, a large one, under the care of Mr. Erichsen, in University College; and one of the radial, under Mr. Holt, in the Westminster Hospital.

Amputations.—Of the 17 cases left under treatment by last report, 8 have been discharged, and 9, all progressing favourably, remain under care. Amputations have been performed during the month on 20 patients, of whom 2 have recovered, 6 have died, and 12 are under treatment. Of the three recoveries one is a primary amputation at the shoulder-joint, by Mr. Ure, in St. Mary's Hospital; the other of the thigh, for diseased knee-joint, by Mr. Spencer Smith, in the same hospital. Of the fatal cases one was a primary amputation of both legs; another a primary amputation of thigh, followed by mortification of stump; two, amputations of the thigh for diseased knee-joint; death in each case preceded by symptoms of phlebitis and pyæmia; the fifth a case of amputation of the leg, which we have already alluded to as dying from secondary hæmorrhage, and in which the femoral artery was ligatured. The sixth was a primary amputation of the leg in an old man of 64, who had lost much blood, and whose arteries proved to be much diseased. He died on the eleventh day in consequence of secondary hæmorrhage. Of the cases under care, one is a Syme's amputation at the ankle-joint for epithelial cancer of the foot in a woman aged 70, under the care of Mr. Marshall, in University College Hospital. One a primary amputation of the thigh. One of the thigh for diseased knee-joint. Three of the leg for diseased ankle-joint. One secondary of the leg, after compound dislocation of the astragalus. One primary of the arm. One secondary of the arm, on account of gangrene of the whole fore-arm, consequent on compound fracture of both bones, with a small rent in the ulnar artery. Three primary of the fore-arm. Besides the above, several amputations of large portions of the hand or foot have occurred, and are doing well.

Excision of Bones and Joints, etc.—Both the patients, mentioned last month, continue under care. In University College Hospital, Mr. Statham has performed during the month the operation of gouging a carious cuboid bone in a man aged 60, who is doing well.

Removal of Necrosed Bone.—Of the 14 cases reported under treatment last month, 9 still remain so. Operations have been performed on 9 other cases, 1 of which is recovered, and the rest continue under care.

Excision of Malignant Growths.—The 7 cases left by last month's report all remain under treatment. Four others have been operated on, and are all recovered. One of them was a chimney-sweep's cancer of the scrotum, excised by Mr. Marshall, in University College Hospital. The patient was a man of about 45, and had been operated on for the same disease by Mr. Liston twenty years ago. He has been discharged well, and now engages not to return to his perilous avocation. A second case was the excision of a carcinomatous breast, by Mr. Wormald, in St. Bartholomew's Hospital; the third the removal of the whole lower lip, on account of epithelial cancer, by Mr. Birkett in Guy's; and the fourth an amputation of the penis for the same disease.

Excision of Non-Malignant Growths.—Of the 13 cases reported last month as still under care, 5 have been discharged, and 8 remain under treatment. Number of cases, 15; cured, 7; under treatment, 8. Two of these were examples of exostosis, one under the charge of Mr. Tatum in St. George's, the other under that of Mr. South in St. Thomas's. One was an unusually large fatty tumour removed from the thigh by Mr. Coulson, in St. Mary's Hospital. It had been growing for nearly four years, and weighed eight pounds and a-half. All the patients are doing well.

Operations for Urethral Stricture.—The cases mentioned last month continue under care; no others have occurred.

Paracentesis Thoracis.—The cases mentioned last month are still in their respective hospitals. Dr. Bennett's case is nearly *in statu quo*, and the one under the care of Dr. Chambers, operated on for pneumo-thorax, is, as might be expected, in a very critical state.

Paracentesis.—For *ovarian dropsy* four times; after one of which the patient died. It was the thirty-fourth time she had been tapped. She was in the Middlesex Hospital, and under the care of Dr. Frere. For *ascites* four times. One patient is in a critical state; all the rest have recovered.

Ligature of Nævus, &c.—The case alluded to last month has been discharged well.—There have been performed seven operations during the month. Four of these were by means of the ligature, and all are recovered. In one other, under the care of Mr. Pollock, in St. George's Hospital, the galvanic cautery was first tried, but the bleeding being profuse, it was deemed safest to apply a ligature. It has recovered favourably. Injection of a few drops of the solution of perchloride of iron has been tried on one case by Mr. Cock, in Guy's Hospital. The nævus was to a great extent subcutaneous, and was situate on one side the bridge of the nose of a child. The injection produced no suppuration or undue irritation, and the tumour has since become solid; it is not, however, as yet much decreased in size.

Operations for the Cure of Varicose Veins.—A successful case has occurred under the care of Mr. Simon, in St. Thomas's Hospital, in which the obliteration of the enlarged veins in the leg of a middle-aged man was effected by the introduction of needles (three) behind the trunks, and making compression over them by the twisted suture.

Radical Treatment of Hydrocele.—Number of cases 6, all successful, and all by the injection of the compound tincture of iodine.

Tracheotomy.—Two cases left by last month's report are still under care, and in neither of them is the patient yet able to breathe well without the canula. The operation has been performed during the month, on a child suffering from croup, by Mr. Fletcher, one of the House-Surgeons to St. Bartholomew's Hospital. The patient was *in extremis*, and the case terminated fatally about four hours afterwards, the dyspnœa, at first relieved, having subsequently increased gradually.

Tenotomy.—Division of the tendo-achillis has been performed four times, in all with success.

Fistula in Ano.—The case reported under treatment last month still remains so.

Puncture of the Bladder.—Once after extravasation of urine. The patient died on the ninth day, with extensive disease of both kidneys, probably tubercular. The case reported last month remains under care.

Operation for Cure of Ununited Fracture.—The reported case remains under treatment. No others have occurred.

Plastic Operations.—Harelip.—The case reported last month, and three others operated on during the month, have all recovered. *Vesico-Vaginal Fistula.*—The cases reported last month are progressing favourably, but still under treatment. Mr. Erichsen's operation of transplanting skin for the closure of an opening into one nostril has succeeded, and the patient has been discharged. When the parts are quite consolidated, and the œdema subsided, it is hoped the deformity which remains will not be great. Two cases of operation for the relief of contracted cicatrices of burns, reported last month, still remain under treatment in their respective hospitals. Transplanting operations for the relief of severe ectropium have been performed with success in three cases,—one under the care of Mr. Partridge, in King's College Hospital, another under that of Mr. Paget, in St. Bartholomew's, and a third under that of Mr. Haynes Walton, in the Central London Ophthalmic. To another important plastic operation by Mr. Paget we must devote a few lines. The patient, a man, in rather delicate health, aged 34, had had, in consequence of sloughing from urinary infiltration, the floor of the penile portion of his urethra completely destroyed to the extent of about an inch and a-half. The catheter, when introduced, was visible from the anterior verge of the scrotum to within a short distance of the commencement of the glans. Many months having elapsed since the occurrence of the first disease, and the parts having got into a perfectly quiet and stationary condition, Mr. Paget determined to attempt an operation for the closure of this opening. This was done nearly in the manner adopted by Mr. Le Gros Clarke in a successful case published in the "Medico-Chirurgical

Transactions." A gum-elastic catheter having been introduced, the edges of the aperture were pared and then dissected up from the sides of the penis to a sufficient extent to allow of the under surfaces (not the edges) of the flaps being made to meet over the catheter, the raw surfaces thus placed in apposition having a breadth of about a third of an inch. To retain them there, an ingenious plan, which we have not before seen tried, was resorted to. Sutures of ordinary stout silk were introduced through both flaps at short distances from each other, each of them having fixed at one end a moderate-sized shot-corn; another shot, with a hole through its middle, was then threaded on to the opposite end of each suture, and passed down low enough to hold the parts tightly together, and then immovably fixed by being compressed with forceps. After the operation everything looked promising; the parts were in most accurate apposition, without there being exerted any undue tension or pressure. The gum catheter was of course retained, and on the third day the flaps appeared to be uniting favourably. In the night of the fourth, however, the catheter having been accidentally stopped, the man made some paroxysmal efforts to pass his water, in one of which the urine was forced by the side of the instrument, and broke open the line of union in many parts. None of the sutures had previously been removed, but after this untoward accident the parts became swollen and unhealthy, the sutures were of necessity taken out, the whole ultimately gave way, and the condition of the parts is now much what it was before the operation.

Employment of Cautery, etc.—In a case of perineal fistula in University College Hospital, Mr. Statham has resorted to the actual cautery, a heated iron, and under its use the aperture is much diminished. In St. George's, Mr. Pollock has in two cases made use of the galvanic cautery, in one a case of vesico-vaginal fistula, with much benefit, in the other for the destruction of a vascular growth within the meatus of the female urethra; in the latter it has not been completely successful. All the patients remain under care.

Operations for Cataract.—Extraction, two cases successful, one a failure. The successful cases were both under the care of Mr. Haynes Walton, in the Central London Ophthalmic Hospital. *Depression* one, successful. *Absorption* two, both progressing favourably.

Operations for Artificial Pupil.—Mr. C. G. Guthrie's case, recorded last week, has recovered, with much improved vision. Two others have been successfully operated on by Mr. Walton.

UNIVERSITY COLLEGE HOSPITAL.

DEATH FROM CHLOROFORM DURING ITS ADMINISTRATION PREVIOUS TO AN OPERATION FOR HERNIA.

[Under the care of Mr. QUAIN.]

Mr. Hillier, the resident medical officer, has favoured us with the following particulars of a case of death from chloroform which occurred recently. The administration of the drug was, as usual, under the care of Mr. Hillier, according to his appointment at the hospital. It will be seen, that the patient had been of intemperate habits; and, as the autopsy revealed, the subject of extensive fatty degeneration of the muscular structure of the heart, and that, previous to the administration, she had been nearly three day's ill, fasting, exhausted, and suffering ultimately from acute peritonitis. These considerations make the fatal result quite comprehensible.

Particulars, etc.—E. R., aged 40, a woman of moderate height, rather thin. Her general health has been pretty good; she had not been liable to palpitation or dyspnœa. Had been in the habit of drinking pretty freely. Admitted on October 5, at 11 p.m. She was suffering from the symptoms of strangulated femoral hernia, which had existed two days and a-half. Efforts were made to reduce the hernia, both without and with a warm bath, in which she was for upwards of half an hour, without getting very faint. These efforts being unsuccessful, an operation was at once determined on. Her pulse was at this time regular, and of tolerable strength.

Chloroform was administered in the usual way, on a piece of lint, which was held at first three or four inches from the patient's face, and then brought to within an inch and a-half of her nose and mouth, leaving space around for the admission of air.

For three or four minutes nothing unusual presented itself; the pulse and respirations proceeded normally. There was put on the lint, at first, one fluid drachm of chloroform; and, at the end of three or four minutes, 40 minims more were added. This was the whole quantity of chloroform employed. Within a minute after the second quantity of chloroform was added; the patient struggled violently both with her arms and legs. During these struggles I was holding her right hand, and was unable to feel the pulse, in consequence of her constant motions. The struggling lasted about a minute, and, on its ceasing, the patient commenced to breathe with loud, rough stertor. I at once removed the lint from before the face, and felt for the pulse, which I could not find. Immediately cold water was dashed on to her face. She breathed with this stertor for two or three short inspirations, and then two or three long ones, and then breathing ceased. Immediately artificial respiration was resorted to, and within a minute galvanism was applied to the back of her neck and the diaphragm. Under the influence of these agencies, the patient gasped about three times at intervals; after this no further signs of life were exhibited.

Tracheotomy was resorted to at the end of a few minutes, and the artificial respiration continued through this opening for about three-quarters of an hour.

At the time when the stertor commenced and the pulse failed, the pupils were dilated, and the face of the patient was only slightly altered. Her tongue was not retracted, for one of the bystanders at once put his fingers into her mouth to ascertain this.

Chloroform from the same bottle had been administered by me on the same day to five patients, in the same manner, without any unpleasant results.

Autopsy made by Dr. Garrod, Thirteen Hours After Death.—Rigor mortis well-marked in all the limbs. The blood very fluid in all parts of the body.

Abdomen very tympanitic; diaphragm extends up to opposite the fourth rib on the left side, and to third interspace on the right. About an ounce of colourless fluid in the pericardium. The heart quite collapsed and empty,—this may have been due in some measure to the fluidity of the blood.

Anterior aspect of heart covered with fat, muscular substance being visible at one or two points only.

Weight of heart, 7¾ oz.; valves healthy. Walls of right ventricle flabby and pale; mean thickness, one-eighth of an inch. At some parts, the muscular substance is in a very thin layer, being much encroached on by fat. In several places, there is scarcely any muscular fibre visible. This is chiefly the case near the apex. Examined by the microscope, much fatty degeneration of the muscular fibres of the right ventricle generally was discovered.

Wall of left ventricle flabby, dry in appearance and pale; very friable.

Old adhesions on both pleuræ. No appearance of atheroma in thoracic aorta. Both lungs cripetant throughout; not much engorged. Brain not congested. The arachnoid exhibited marks of chronic thickening and opacity.

The intestines, above the strangulation, were much distended with flatus, and inflamed. The strangulated portion was of a very dark colour, and had blood effused into its coats.

Liver, kidneys, and spleen normal.

[*Note.*—We are sorry to have to state, that another death from chloroform has occurred since the above was written. The patient, a woman, aged 19, suffering from rodent ulcer of the vagina, under the care of Mr. Paget, in St. Bartholomew's Hospital, died on Thursday afternoon. The intended operation was the application of the actual cautery. We shall give further particulars next week.]

THE LONDON HOSPITAL.

DISLOCATION OF THE FEMUR INTO THE THYROID FORAMEN — SPONTANEOUS REDUCTION — DEATH — EXAMINATION OF THE JOINT.

[Under the care of Mr. CURLING.]

DURING the last month no fewer than four dislocations of the hip-joint, all resulting from recent accidents, have been treated at this hospital. Of these, three presented nothing unusual in respect to symptoms, and were reduced by the ordinary methods. They need not, therefore, claim our attention, further than just to state, that in one of them the head of the femur was displaced into the ischiatic notch, and in the other two into the dorsum ilii. The fourth case, however, involves points of too great interest to be thus dismissed. The patient, William Anderson, a very muscular man, 38 years of age, was admitted on September 13, having just previously been knocked sideways down, with great violence, by a beam of timber (the precise details of the accident were not obtainable.) In addition to severe injuries of the abdomen and thorax, he had the usual symptoms of a displacement of the right femur into the thyroid hole. The right limb was two inches and a-half

longer than the other; the prominence of the trochanter major was lost, the foot and knee widely separated from those of the opposite limb, and carried forwards. The man was in a condition of such extreme collapse, that it was not deemed safe to attempt any movements of the displaced parts, and he was accordingly undressed and placed in a warm bed. Here, in a short time, he began to rally, and during an effort at turning him a little made by the attendants, the dislocated bone slipped back into its place, and the symmetry of the two limbs was at once restored. After this, the man lived three days, death being then occasioned by the injuries to the abdomen and chest. Mr. Allcard, one of the House-Surgeons, kindly procured for us an opportunity of inspecting the condition of the injured parts after they had been preserved in solution some days. We extract the following from the notes taken by the dresser of the patient, Mr. F. Poulden, at the time of the *post-mortem*. The right thigh presented slight marks of contusion at its back part, and on dissection blood was found extravasated between the muscles on the outer and posterior aspects of the joint, and in the cellular tissue about the sheath of the sciatic nerve. The substance of the upper part of the adductor magnus, and of the lower border of the obturator externus were much ecchymosed. There was a large rent in the front aspect of the capsular ligament, which passed from above downwards in a direct line from the ilio-pectineal eminence to the upper border of the obturator externus, the ligament being for this extent torn from its pelvic attachment. The articular head of the femur occupied its natural position, but might with the greatest ease be turned out of the acetabulum, through the rent in the capsular ligament and on to the outer border of the thyroid foramen. When occupying the latter position it pushed the belly of the obturator externus muscle before it, rendering it tense and bulging. The ligamentum teres, torn quite close from its femoral attachment, was hanging loose in the acetablum, having much blood extravasated beneath its reflected synovial membrane. When the bone was displaced, the pyriformis and glutei muscles were put on the stretch. Independently of this lesion, the man had sustained the fracture of three ribs, the extravasation of a large quantity of blood into the peritoneal sac, (apparently from contusion, for no rupture of any viscus could be found,) and an extensive laceration of the perinæum, to the combined influence of which the fatal result had been due.

It is very rare to have opportunities of examining recent dislocations of the hip, more especially of the less frequent form, of which the above is an example. It will be seen that the case quite supports the conclusion of Sir Astley Cooper in contradiction to that of former surgeons, and shows, that the ligamentum teres is really torn across in this accident, and not merely stretched. Practically, the ease with which the all but spontaneous reduction was accomplished, teaches the importance of taking advantage of the stage of collapse, when not so extreme as to render such a measure dangerous, in order to effect replacement. In that state, the grand impediments to reduction are almost absent, and, by the after employment of neither chloroform, tartar emetic, the hot-bath, or venesection, is it possible to again reduce the muscular system to such a condition of utter inaction.

ROYAL LONDON OPHTHALMIC HOSPITAL.

CASES OF LACHRYMAL CALCULUS.

As in the case of the saliva the dissolved earthy salts are liable to be thrown down in the concrete form in various parts of the secretory apparatus, so it is with the tears. As, however, might be expected, from the very minute proportion of its solid ingredients, (1 in 1000,) depositions from the lachrymal secretion are of extreme comparative rarity; and while every surgeon of observation has met with examples of salivary concretions within the gland ducts, and every day shows its specimens of tartar formations around the teeth, two of our best authors on ophthalmic medicine state, that they have never met with the like in any part of the lachrymal apparatus. A few illustrations of its occasional occurrence, to which we now propose to add, are, however, recorded, both as it regards the conjunctival sulci, and the lachrymal canals and sac, there being, as far as we are aware, no recorded instance in which it affected the gland ducts themselves.

Case 1.—*Removal of a Calculus from the Upper Lachrymal Duct.*—In August last, a healthy-looking woman, of middle age, applied to Mr. Critchett, at this hospital, on account of a little hard swelling in the inner corner of the left upper lid, which had been more than a year in forming. It was visibly prominent, and to the touch was very hard and roundish; it had frequently set up irritation in the part, occasioning a slight discharge of pus. Suspecting the existence of a lachrymal calculus, Mr. Critchett at once laid open the upper duct, and then easily removed with a scoop a small oval concretion, of the consistence of chalk or dried mortar, and about half the size of a common pea. The wound afterwards readily healed, and the disease was cured. At Mr. Critchett's request, Dr. Letheby was afterwards kind enough to examine the chemical composition of the little stone, and found it to consist of carbonate of lime, with some inspissated animal matter.

Case 2.—*Removal of a Calculus from the Upper Lachrymal Canal.*—The following case occurred in Mr. Critchett's private practice, but, from its interest in relation to the preceding, we here insert it:—The patient was a lady of middle age and gouty habit, residing at a sea-coast town; she had known of the little swelling for two years before Mr. Critchett's aid was requested for its removal. Exactly the same steps were gone through as in the case just detailed, and with the same result. The stone was, however, rather larger, and yet more chalk like.

Case 3.—*Removal of a Semi concrete Mass from the Lower Lachrymal Duct.*—This case probably illustrates the manner in which these concretions are formed. The patient, again a woman in middle life, applied at the Ophthalmic Hospital in the middle of last September. The lower lachrymal duct of her right eye was tumid and slightly inflamed, and projecting out of its distended punctum was a small white substance. With the aid of a fine-pointed pair of forceps, Mr. Critchett succeeded in laying hold of this, and dragged out after it a softish mass of inspissated mucus, in which were numerous little gritty concretions. Had this been allowed to remain long, in all probability, the more fluid parts would have been absorbed, the calcareous element would have been increased by further depositions, and a solid calculus would have been gradually formed.

Case 4.—*Chronic Inflammation of the Lachrymal Canal.—Removal of Several Calculi—Recovery.*—This case has great practical value; the subject of it was a private patient, under the care of Mr. Bowman, to whose kindness we are indebted for the following particulars:—Mrs. C., aged 50, applied for advice respecting a long-standing inflammation of the inner part of her left lower eyelid. In spite of very various treatment, it had troubled her for two years, and for some months past, in fact, ever since a puncture had been made into it, there had been a constant discharge of pus. Suspecting the true nature of the case, Mr. Bowman introduced a probe through the aperture, and slit up the whole length of the canal, which was found dilated into a cavity capable of containing a horse-bean, and contained several distinct calculi, quite loose, like little balls. Two or three of them were of a greenish colour, and only of a mortar-like consistence, one of them, however, was hard and quite earthy. Mr. Bowman carefully cleared the cavity of all fragments, by means of a small probe scoop. The lachrymal sac itself was perfectly healthy. The patient very shortly afterwards recovered completely, and there is not known to have been any tendency to a relapse of the diseased formations.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

CASE OF LACHRYMAL CALCULUS.

In none of the preceding cases had the cavity of the affected canal been entirely filled by the concretion, and in part, probably, from this circumstance, and in part from the efficiency of the other canal, the troublesome symptom of epiphora, or overflow of tears, had not been observed. In the following, however, we have the lower canal the one affected, and it, too, completely stopped up.

Case 5.—*Impaction of a Calculus in the Lower Lachrymal Canal—Troublesome Epiphora—Removal of the Calculus—Recovery.*—Elizabeth H., aged 27, had been troubled with the overflow of tears on to her left cheek for more than a year, and for some months with purulent secretion from the lower punctum, and general tumefaction of the lid. In addition to these symptoms, a little hard tumour had been gradually forming in the inner corner of the lid, and projecting inwards, had everted that part of the lid, and exposed the palpebral conjunctiva. On her admission, Mr. Haynes Walton at once proceeded to lay open the canal from within, avoiding carefully the punctum. This done, a calcareous mass of considerable size was discovered so tightly impacted, that it was necessary to pick it out piecemeal. For this purpose, Mr. Walton bent the end of a punctum probe into a small blunt hook, with which the outer layers of the mass were readily removed, and the concretion itself, thus loosened, at length came away. It was very firm, white, and chalk-like, about the size of a No. 4 shot-corn. On chemical analysis, it proved to consist mainly of phosphate of lime. To all appearance, a perfect recovery ensued; the eyelid resumed its natural position, the inflammation entirely subsided, and the secretion of

tears ceased to overflow the cheek, having probably again betaken themselves to their natural channel.

Comments.—It must be noted as a singular circumstance, that the whole series of cases which we have just recorded, as well as all the very few similar ones which we can find in books, have occurred in women—a fact the explanation of which may, perhaps, in a measure be referred to the very immoderate duties which, in some members of the female sex, the lachrymal apparatus has to perform. The minute analysis of a lachrymal calculus, by M. Bouchardat, published in the *Annales d'Oculistique*, for July, 1842, supports the conclusion indicated by the preceding cases, that they are generally composed of the salts of lime, either carbonate, or phosphate, or both. Now, according to the best analyses we have (confessedly imperfect), neither of these salts enter into the composition of healthy tears. The use of tobacco, of mercury, or of stimulant masticatories, is well known to excite first a profuse, then a diseased, secretion of saliva, and to end in coating the teeth with tartar. Is it not, therefore, fair analogical reasoning to assume, that the irregular and intemperate employment of the lachrymal organs may tend to produce a like effect. Possibly the "*salt* tears" of violent mental emotion, though doubtless indebted mainly to the chloride of sodium for their poetic celebrity, may also be more rich in other saline ingredients than those specimens which our chemists have as yet been able to catch for their crucibles. We admit that we are quite unable to prove that any one of the patients whose cases have just been told had been notedly lachrymose; but then no questions were asked on the subject. It is one well worthy the attention of future observers, as, should the correctness of the supposition be established, one would then be in a position to prescribe for—what is better than the cure—the *prevention* of lachrymal calculi and their consequent troubles.

Another very interesting question which may be put respecting the above cases is, were the concretions in any way connected with gout? It has been observed by practical physicians, that women seem more liable than men to have gout manifest itself in erratic and unusual modes. Are these examples of the elimination by a mucous membrane of gouty materials from the blood? In reply, it may be alleged, that in but one case (No. 2) was the gouty diathesis of the patient noted, and that in no analysis of the calculi yet made has any trace of the salts most common in gout (lithates) been found.

KING'S COLLEGE, ST. BARTHOLOMEW'S, GUY'S, & ST. THOMAS'S HOSPITALS.

CASES OF EPIDEMIC CHOLERA.

King's College Hospital.—One case of cholera has occurred during the week.

St. Bartholomew's Hospital.—There has been a case of cholera in this hospital among the nurses. A man died of cholera in Radcliffe Ward, on the 4th of this month. The nurse or "sister" of the ward suffered from diarrhœa on Sunday and Monday last, and neglected it. On Monday night she was seized with cramps, etc. On Thursday night she was in a most precarious state. Another patient, the wife of a man reported to have died of cholera, was admitted a few days ago, suffering from diarrhœa and collapse, which soon afterwards passed into the well characterised form of the epidemic disease. She has partially rallied, but is still in a very dangerous condition. A third case, an Irishwoman, was admitted pulseless and collapsed on Thursday afternoon. Mr. Wood, the Resident Medical Officer, informs us that considerably more than the usual number of patients suffering from diarrhœa have recently applied for advice. Mr. Wood has largely tried the sulphuric acid treatment for the choleraic forms, and has been well satisfied with its results.

Guy's Hospital.—Mr. Stocker, the Resident Medical Officer, inform us, that cases of diarrhœa are not at all unusually prevalent among the patients who came under his notice. An Irish girl, aged 19, admitted last Sunday, under the care of Dr. Barlow, died on Thursday morning, having meanwhile suffered from well-marked symptoms of cholera. There was no history of contagion obtainable. The treatment adopted consisted chiefly of the sulphuric acid. No opium was used.

St. Thomas's Hospital.—During the past week a foreign sailor has died in this hospital (five hours after admission) of epidemic cholera, from the premonitory symptoms of which he had suffered during the previous day. He had sailed from Rotterdam, but had been on shore in town for a week before the seizure. A case of severe diarrhœa is under care, but it has not assumed the choleraic form. Mr. Whitfield, the Resident Medical Officer, informs us, that there has lately fallen under his observation a smaller number of cases of diarrhœa than is usual at this season of the year.

At University College, King's College, St. George's, the Middlesex, and St. Mary's Hospitals, no cases have occurred during the past week. Diarrhœa is not, we believe, usually prevalent at any of these hospitals.

Medical Times & Gazette.

SATURDAY, OCTOBER 22, 1853.

MEDICAL OFFICERS OF HEALTH.

The following extracts from the Report of Mr. M. T. Sadler, the officer of health to the Local Board of Health at Barnsley, are far better than some of the directions issued by the Central Board. The importance of ordinary sanitary measures is very strongly insisted on, quite as strongly as by those who look to dirt and stench as the sole causes of disease; but in addition Mr. Sadler shows the necessity of effecting some separation between the sick and the healthy. Had some such precaution been taken at Newcastle, even if the importation of disease from Hamburgh had not been prevented, we feel persuaded that the mortality would have been considerably less than it has been under the proceedings adopted in harmony with the false theory of the General Board of Health.

"The cholera having again made its appearance in England, I deem it my duty thus early to bring under your consideration some precautionary measures, which, if adopted, would have a tendency to guard against its introduction, or, should it unhappily appear among us, would tend to the prevention of its spreading. The ample opportunities I have had of forming an opinion whether malignant cholera is infectious or not, have not left the slightest doubt on my mind that it is an infectious disease. Whatever other causes may be in operation for the production of cholera, I have no hesitation in giving it as my opinion, that one cause of its spreading is infection. This being my conviction, I think it my duty to recommend the following measures to be adopted:—

"First.—As this disease has been so often conveyed from one place to another by persons frequenting common lodging-houses, I beg to urge upon you the necessity of placing these establishments under a system of strict and constant inspection, especially as many of those places in Barnsley are crowded, dirty, and ill-ventilated. I think it important that all vagrants, labouring under premonitory symptoms of cholera, should not be admitted into any of the lodging-houses. I also think it highly desirable, as far as it can be accomplished, that all vagrants, even though they may be apparently free from all present symptoms of this disease, provided they come from an infected town or district, shall be prevented from mixing with the inmates of lodging-houses, but that proper places should be provided for the reception of such vagrants, who are likely to produce the disease among the inhabitants. Should the malignant cholera appear among us, I would strongly urge the necessity of having some place provided of easy access, and in a healthy locality, to which persons affected with this disease may be conveyed, and kept separate from the community until perfectly recovered. The adoption of this measure would not only tend to prevent the spread of this formidable disease, but would conduce to the recovery of the sufferers, and give my medical brethren an opportunity of treating their patients with the greatest advantage.

"As it is very common for cholera to appear in crowded habitations, and as experience has shown that the removal of a portion of the inmates is attended with the most beneficial result, I should strongly recommend that, in the event of the cholera appearing among us, some suitable place should be provided to which children, old persons, and those who are in a low state of health, may be removed and placed in a healthy locality."

It is much better thus openly to face a real danger, and provide against it, than to affect a false security, and, with the hope of preventing unnecessary and injurious alarm, to neglect measures which experience and common sense teach us must act powerfully as preventives of disease. It is quite time that some such preparations were made in London. The general hospitals have made arrangements to receive and relieve cholera patients; but, if the disease is to prevail as it did in 1849, their arrangements will be quite inadequate. We have already proved this, and shown the impropriety of filling the workhouses with cholera patients. Proper houses of refuge should be instantly established in different districts, with a sufficient staff of properly remunerated Medical officers, so that when the disease begins to extend, it may find us prepared to meet it, and not leave us hurriedly to seek places for the reception and removal of the sick in the midst of the fear and distress of so fatal an epidemic.

Among the other topics of Mr. Sadler's Report, we select the following sensible remarks on drainage and ventilation:—

"The drainage of the town has engaged your attention, and I think, from the situation of the town, this may be effectually accomplished without any serious expense. This department, I believe, is in good hands, and I am sure care will be taken that the drains are secure from any outlets of noxious effluvia; for, if this be not attended to, drains, in some cases, may be worse than no drains at all, as they become generators of noxious agents in such cases; while, if the matter which produces such agents had been freely exposed to the air, it would have been dissipated and rendered comparatively harmless by dilution.

"Another subject to which I particularly wish to call the attention of the Board is a proper ventilation of the dwellings of the labouring class. A damp house or shop is doubtless bad for the health, and the removal of all nuisances conducive to health; but a house may be properly drained and cleared of all nuisances, yet, if there be not a sufficient inlet for pure air, and an outlet for impure air, the health of the inmates must more or less necessarily suffer. We must never forget, that the air is not only the pabulum of life, but the great purifier of nature as well; for materials which necessarily generate noxious effluvia, if they are freely exposed to its influences, are swept away, or become innoxious by diffusion in the atmosphere. Free ventilation not only prevents disease, but is the most powerful agent in preventing the spread of any infectious disease among the inmates of a house where it may already exist. I am aware that the situation and structure of some dwellings present impediment to a free ventilation to the extent that may be desirable, but still much can be done to mitigate the evils arising from the want of pure air."

We should be glad to see more attention paid by our Metropolitan Boards to the trapping of drains, and to the ventilation and cleanliness of the houses of the poor. It is not until these Boards are reconstructed, and every district has its medical officer of health, that the sanitary condition of the Metropolis can be reasonably expected to improve. When we have a Central Committee of Medical men constituting the General Board of Health,—which must sooner or later be the case in this practical country,—and this Committee in correspondence with local medical officers of health in every district in the kingdom, co-operating cordially with the Central Committee of their medical brethren, we may hope to see all the causes which operate injuriously upon the health of the population brought before the notice of the Executive, and promptly remedied by the adoption of effectual measures. Until that is the case, and the health of Great Britain no longer entrusted to lawyers (as at present), we may expect to see a repetition of the ridiculous blunders which have led to the disgrace and approaching dissolution of the present Board, and the lamentable consequences of their mistakes in a mortality like that of Croydon and Newcastle.

MEDICAL REFORM A PUBLIC QUESTION.

At the beginning of a late Article, we laid down as an axiom, that the public weal ought to be the first object to the statesman in legislating on the subject of Medical Reform. If Medical Reform signified only such a modification of our corporations as would give the members of those corporations a voice in the management of their own affairs, a Minister *might* say, without being guilty of a dereliction of duty, "Agree, gentlemen, among yourselves, and then I will do what you unanimously desire." But Medical Reform has no such limited signification.

The questions with us at the present moment, and which it is of the highest importance to the public should be answered correctly, are,—Do the existing Medical Corporations *secure*, to the public, Medical attendants qualified, as far as their qualification can be secured, to be entrusted with the care of the public in times of sickness?—and do they prevent the practice of unlicensed or unqualified men?

We have answered these questions in the negative, and have proved the truth of our answer, in reference to that Corporation which holds the highest rank in the Profession. But although nominally the Royal College of Physicians occupies the highest position among our Medical Corporations, in practical importance it ranks much lower than the Society of Apothecaries. The Licentiates of the Royal College of Physicians prescribe for the few; it is to the Licentiates of the Society of Apothecaries that the care of the health of the community at large is committed.

The Worshipful Society of Apothecaries has virtually to determine what shall be the scientific and professional acquirements of nine-tenths of the Medical men resident in England and Wales; and for this reason—any one may style himself Surgeon, any one may style himself Physician; but let him call himself what he may, if he practice in the country he must conform to custom, and supply his patients with medicines; by so doing he practises as an Apothecary, and if he have not the licence of the Society, may be proceeded against by an action at law. No one is allowed by law to practice as an Apothecary who has not the licence of the Society of Apothecaries. An Apothecary in the eye of the law, *i.e.*, for the purposes of the Society's Act of 1815, is one who visits and prescribes for a sick man, and then supplies him with the medicine he has himself prescribed.

In the Society of Apothecaries we have then a body possessing real powers. Why, then, should the statesman interfere with those powers? We answer, for the public good. The Act of the Legislature, which confers on the Society its extensive powers, binds the Society in regard of the conditions on which it shall grant licences; and however important some of those restrictions might have been at the time the Act was passed, they now weigh most injuriously on Medical education, and, consequently, impair materially the value of our Profession to the public. Again, the Society possesses real powers; it can prosecute those who practise as Apothecaries without its licence; but, in public estimation, the Royal College of Surgeons ranks higher than the Worshipful Society; the result is, that some of those who obtain the diploma of the latter body do not present themselves to the former, and public feeling being with them, the Society declines to prosecute. This being now pretty well known, the number of those who decline to

submit to the examination of the Society is yearly increasing; and, fearful of still further increasing the number of defaulters, the Society hesitates to render its examinations as stringent even as the law would permit it. Leaving aside, however, all attempts to explain the cause of the present position of the Society of Apothecaries in its relation to the Profession, we will state how it works so far as concerns the public; how it fulfils the object for which it obtained the Act of 1815, viz., the securing to the public a supply of efficient Practitioners of Medicine, and then ask the statesman how he can refuse to interfere n this matter,—how he can longer regard the question of Medical reform as a class question.

The candidates for the licence of the Society are required to follow a certain curriculum of study, and then to present themselves before the Court of Examiners of the Society.

We have, then, to pass in brief review the curriculum and the examination of the Society.

The curriculum is an extensive one; at least, the student is compelled to exhibit at the Hall tickets of admission to many courses of lectures, on many subjects. He must spend the greater part of two years and six months at some school of medicine recognised by the Court of Examiners, and attend certain lectures in the order laid down for him by the same body. During the first and second year of residence, the student's time is fully occupied in listening to the lectures he is thus compelled by the Society's regulations to attend; nominally, his third winter, *i.e.*, six months, may be given up to the practical study of disease in the wards of the hospital; but, in reality, this last six months, or the greater part of it is, and to a certain extent *must* be, passed in relearning for the examination he is to undergo before the Court,—the materia medica, chemistry, botany, anatomy, and physiology, the minutiæ of which he has by this time well-nigh forgotten.

The student comes to London ignorant of chemistry, botany, and materia medica; he devotes a considerable portion of his first year to their study; during his second year, other subjects require all his time,—chemistry, botany, and materia medica are laid aside. At the expiration of his third winter, the student must submit to an examination in those subjects, and the result is, that his third winter is spent in his closet and the grinder's room, instead of the wards of the hospital. Our position is, that, even though a student of average intelligence, and diligent in his studies, desire to acquire the information only to be gained by close hospital attendance, he has no time for such attendance, in consequence of the regulations of the Society of Apothecaries.

We maintain, then, that the regulations of the Apothecaries' Society *tend rather to impede than facilitate the acquirement by the student of a* PRACTICAL *knowledge of his profession.*

What is the character of the examination to which the man about to be entrusted with the lives of his fellow-men is submitted?

The subjects in which he is examined are,—botany, chemistry, materia medica, anatomy, physiology, midwifery, and practice of medicine. For testing the student's knowledge in these seven distinct branches of science, one hour and a-half is considered sufficient time. The Society has to send forth *Practitioners* of Medicine, and the only subjects on which they oblige the students to exhibit a *practical* knowledge are botany and materia medica. He must prove to the Court that he knows elder flowers, dandelion, and sorrel when he sees them; but in regard of diseases, he has only, parrot-like, to repeat their symptoms. Ask of any teacher in London if he could not point to students who have "passed the Hall" whom he knows to be unable to distinguish practically the most unmistakable case of apoplexy from the most characteristic case of epilepsy, the best marked example of delirium tremens from the most striking illustration of cerebral inflammation.

We ask not the statesman to interfere because these things lower the status of our Profession; but what we urge on him is, that the Society of Apothecaries neither secures to the public fully qualified Practitioners of Medicine, nor represses unlicensed Practitioners. Nay, that the very law itself stands in the way; that the Legislature has not left Medicine unshackled, but bound us by an Act which is potent for little more than evil. Can a Home Secretary, once cognizant of these notorious facts, refuse to legislate on Medical subjects on his own responsibility? Can he disregard the public good so much as to bid self-interested Medical Corporations to agree among themselves before he touches the subject?

DRUGS,

THEIR

IMPURITIES AND ADULTERATIONS.

MYRRH.

THIS valuable stimulant and antispasmodic, gum-resin—or, at least, certain gum resins known by this name—was celebrated among the ancients as a perfume, was employed as incense in the temples of the gods of antiquity, in the process of embalming, and was esteemed one of the most valuable presents that could be made to princes. There is reason to believe, however, that the ancient term *μὺρον* was not applied to our officinal myrrh.

Myrrh exudes from the tree in the same manner as cherry-tree gum, being at first pale-yellow, soft, and oily, becoming more coloured and red by exposure to the air.

Myrrh was formerly imported into Europe from Arabia, by way of Egypt, and was, for this reason, designated "Turkey myrrh," to distinguish it from an inferior quality formerly imported from the East Indies. Now, however, nearly the whole of the myrrh imported into England comes from the East Indies. According to Pereira, all the different qualities of myrrh are sometimes found in the same chest, when it is termed "myrrh in sorts;" but more generally it arrives sorted. He distinguishes three varieties of myrrh as finding their way to the English market.

That of the best quality consists of masses of an irregular form and size, composed of distinct or aggregated tears, covered with a fine dust, and varying in colour from pale reddish-yellow, through red to reddish-brown. It is semi-transparent, fragile, breaking with a dull splintery fracture. In the largest masses whitish or yellow striæ or veins are seen as a consequence of imperfect drying. It has an aromatic and balsamic odour, and a bitter acrid aromatic flavour.

The second variety, according to the same author, is composed of distinct tears, or grains, rounded or irregular in figure, with a polished surface, and more or less transparent. These grains are either pale, nearly white, yellow, or reddish brown, and are intermixed with fragments of gum-arabic, and a resin nearly resembling mastic or juniper-resin.

The third, or worst variety, formerly known as East Indian, is in pieces of much darker colour than those of the first quality, averaging in size a walnut, and often mixed with Bdellium, and a substance very like dark red Senegal gum.

Myrrh, consisting, as it does, of a mixture of resin, volatile oil, and gum, is only partially soluble in water, alcohol, or ether. The gum is dissolved by water, the resin and oil by alcohol, and the volatile oil and a portion of the resin by ether. The whole, with the exception of impurities, is dissolved by alkalies. It partially melts on the application of heat, and burns with a strong flame.

The essential constituents of myrrh are a peculiar volatile oil, two varieties of resin, or, perhaps, a sort of compound of the volatile oil with resin and gum; the active principles are the volatile oil and resins. Myrrh has been analysed by Braconnot,(a) by Pelletier,(b) and by Brandes(c).

Braconnot describes the specimen of myrrh he analysed, as consisting of more or less transparent tears of a yellowish red colour, aromatic, slightly acrid, and bitter. These, when broken, showed a white, more or less opaque nucleus, which burned with much flame; whereas the transparent tears burned like a gum. Among the tears were other smaller, almost colourless pieces, which, although soluble in water, were not gum arabic, but resembled, in every respect, the gum contained in true myrrh. This description clearly refers the specimen subjected to analysis to the second variety of Pereira.

By distillation with water, a small quantity of volatile oil was obtained, but the quantity is not specified. The residue being washed, and the liquids evaporated to dryness, yielded 46 per cent. of a red transparent gum, possessing a bitter taste. The gum reddened litmus, and was only partially redissolved in water; the insoluble residue resisting both boiling water and weak acids. The soluble gum was precipitated from its solution by many metallic salts.

The portion of the myrrh insoluble in water was treated with alcohol, which took up all but 12 per cent. of gum, which had been protected from the action of water by the adhering resin. He concludes from this analysis, which is very imperfect, that myrrh contains 23 per cent. of resin, and 58 of gum.

The analysis of this among other gum resins by Pelletier, published in the *Annales de Chimie*, is much more perfect than that of Braconnot. He describes the myrrh analysed as consisting of masses of a reddish-brown colour, veined with white, translucent at the edges, having a bitter and aromatic taste, a peculiar odour, increased by heat and friction, and as burning without undergoing complete fusion. The analysis was conducted by exhausting 50 grammes (about 765 grains), by repeated digestion with boiling alcohol, until all matter soluble in that menstruum was taken up. The alcoholic solution deposited nothing on cooling which demonstrated the absence of wax. When evaporated to dryness this solution yielded seventeen parts of brownish-red resin. The undissolved portion weighed 33·5 grammes. On incineration the myrrh yielded 3·6 per cent. of ash, of which, 3·0 were insoluble, and composed of carbonate, with traces of phosphate of lime, and silica; the soluble portion amounting to 0·17, contained 0·08 of sulphate of lime, with some sulphate and phosphate of potass, and traces of chlorides of potassium ands odium. The results of Pelletier's analysis stand thus:—

Resin	34·0
Gum	62·4
Ashes—consisting of carbonate, phosphate and sulphate of lime, silica, sulphate and phosphate, of potass, and chlorides of potassium and sodium	3·6
	100·0

Brandes(d) analysed the myrrh collected by Ehrenberg from the Balsamodendron myrrha, with the following results:—

Resin soluble in alcohol and ether	22·24
Resin soluble in alcohol, but insoluble in ether	5·56
Volatile oil	2·60
Soluble gum, with traces of benzoates, neulates, phosphates, sulphates, and calcareous salts (Arabin) ..	54·38
Insoluble gum (bassorin)	9·36
Nitrogenized matter (traces)	
Sulphates and malates of potass and lime	0·60
Malic, benzoic, and acetic acids, chiefly combined with potass and lime, with traces of sulphates ..	0·60
Bimalate of lime and benzoate of potass, with traces of resin, soluble in ether	0·15
Extraneous matters and impurities	3·40
Loss	1·11

This analysis was originally published in Brandes' "Taschenbuch für Scheidekunstler und Apotheker," 1819, probably with detailed descriptions of the method of analysis and the educts; but we have not been able to obtain an examination of the original work.

Bonastre,(a) in a very instructive essay, questions whether there are not two kinds of myrrh yielded by Forskal's and Ehrenberg's plants, but considers it still uncertain which of them yields the true myrrh. What is sold as myrrh he considers to be a mixture of several gum-resins, of which the true myrrh forms only a small proportion. He describes two kinds of false myrrh, as constituting the greater part of the myrrh "in sorts," which answer to the second and third varieties of Pereira.

The first species of false myrrh is described as being in irregular orbicular masses, the largest not exceeding ʒiiss. in weight, of a brown colour, soft within, and adhering strongly to the fingers. Some of the masses have a deep, others a whitish, semi-opaque appearance. The terebinthaceous odour, at first weak, is much increased by friction or gentle heat. In flavour, it is more bitter than true myrrh, and resembling balm of Mecca, or a turpentine. So strong is the flavour, that it might be taken for a true resin; but it is really a gum-resin, nearly approaching true myrrh in its characters.

The second species, or variety, is in masses of nearly the same size and aspect as the preceding, but it has a dull, scarcely semi-vitreous fracture, is sometimes opaque and deeper brown, both externally and internally, than the first variety. Its bitter flavour is more disagreeable and persistent in the throat, and its odour somewhat different, as if it had been longer exuded from the tree, and had undergone some changes by exposure.

Bonastre states, that he found in a sample of commercial myrrh:—

False myrrh (1st variety)	ʒij.
Ditto (2nd variety)	ʒiijss.
True myrrh	ʒiv.
Stones of some size covered with myrrh ..	ʒii.

In analysing what Bonastre calls false myrrh, he followed the method of analysis of Braconnot, by acting first with water and afterwards with alcohol, with somewhat similar results as regards the gum. It is singular, that when myrrh is extracted first by boiling water, the gummy solution decanted from the resin deposits the insoluble gum, (bassorin,) resembling coagulated albumen in appearance, which resists the action of boiling water, cold weak acids, and alkalies. But if, on the other hand, the resin and volatile oil be first extracted by alcohol from the myrrh, the gum is almost wholly dissolved by water; and the insoluble gum can only be separated by repeated concentration and repose.

The analysis of what Bonastre views as false myrrh, yielded:—

Soluble and insoluble gum	50·0
Resins	38·0
Volatile oil	3·0
Bitter extract (not resinous)	4·0
An undetermined acid, with salts of potass, and lime, and silica	5·0
	100·0

The gum of false myrrh did not present any distinctive characters from that of true myrrh. The resin was of soft consistence, completely soluble in alcohol, ether, and acetic acid; yellowish white, bitter; did not combine with the alkalies in the cold; did not yield oxalic acid when acted on by nitric acid, but by distillation with water yielded a small quantity of volatile oil; but its specific characters were insufficient to afford a distinction from the resins of true myrrh.

The volatile oil was colourless, or took a slight amber tint, lighter than water, dissolved in two to three parts of alcohol 0·837, or acetic acid; it readily dissolved in ether, had an acrid taste, and an odour like that of myrrh; became saffron-coloured with concentrated sulphuric acid, and with an equal bulk of strong nitric acid, yielded a rose tint, followed by the red of wine-lees, or even violet.

But Bonastre imagined further, that he had obtained in this re-action of the three kinds of myrrh with nitric acid, —a means of distinguishing the true from the false myrrh; and he states, that when nitric acid is dropped into concentrated alcoholic tincture of even a morsel of the true

(a) Braconnot. *Annales de Chimie*, lxviii. 53. 1808.
(b) Pelletier. *Annales de Chimie*, lxxx. 38. 1811.
(c) Brandes. *Berliner Jahrsbericht.*
(d) Berliner Jahrbuch, XXII., 275. 1821.

(a) Journal de Pharmacie, XV., 281. 1829.

myrrh, a succession of rose-coloured, red and violent tints, is produced; while the re-action with the tinctures or fragments of the false myrrhs produces only a yellow tint. Bonastre states, that on examining eighteen samples of the old or Turkey myrrh, sixteen gave the rose-red tint, while one gave uncertain indications, and another was ascertained to be bdellium.

Pereira describes the volatile oil as colourless, becoming yellowish by keeping; fluid, heavier than water, possessing the odour and flavour of myrrh; soluble in alcohol, ether, and the fixed oils; partially evaporating by exposure and oxidation, and leaving a varnish-like residue; capable of distillation with water, but not with spirit, and forming red solutions with sulphuric, nitric, and hydrochloric acids.

Myrrh, according to the same authority, contains two resins, both soluble in alcohol. The one is soft at ordinary temperatures, odorous and soluble in ether. This is probably a combination or mixture of resin and volatile oil. The other resin, which is also called myrrhic acid, is hard, inodorous, insoluble in ether, soluble in the alkalies, forming with them resinates. The resinate (myrrhate?) of baryta is, as Pelletier remarks, soluble in water, but not in alcohol.

We cannot admit the opinion emitted by Bonastre, that what he calls false myrrh, is not really true and very good myrrh. The results of his analysis so closely coincide with those of Pelletier and Brandes, and with our own analysis of real myrrh, that it is impossible to agree with him. In the inferier kinds of gum-resin, the resin and oil are deficient to a consideroble extent, and, in general, the resin is much harder than that obtained from the higher qualities of myrrh.

The gum is also of two kinds; the one soluble in water, forming precipitates, with alcohol, salts of lead, silver, mercury, and the protochloride of tin. The other is insoluble in water.

Landerer (a) found in a long kept sample of tincture of myrrh a large number of crystals which were six-sided prisms, covered with a golden yellow powder, and soluble in spirit, but which could not be crystallised again by evaporation of the solution. They melted, and gave out a balsamic odour when heated, and were insoluble in dilute acids. Landerer reconsidered the crystals as a resinous acid of myrrh.

The analysis of myrrh, for all practical purposes, consists in the separation of the gum and resin, and the estimation of the latter. For this purpose, it suffices to reduce the gum-resin to a fine powder, and to digest a given weight with repeated quantities of alcohol, until that menstruum ceases to take up any resin. The alcoholic solutions are mixed, and evaporated to perfect dryness by a gentle heat; and the weight of the residue indicates the amount of resin. Another weighed portion of myrrh is heated to redness until all the charcoal is burned off, and the ashes weighed. Deducting the conjoined weight of the resin and the ash, the remainder is estimated as gum. With regard to the gum, it is extremely doubtful whether bassorin is present; but, if so, it forms but a small part of the entire proportion of gum.

Analysis 1.

True Turkey myrrh, agreeing in every particular with the first quality of Dr. Pereira:—

Resin	38·4
Gum	58·2
Ash	3·4
	100·0

Analysis 2.

Whole Turkey myrrh of the first quality.—Bought of Pritchard, Charing-cross.—

Resin	32·8
Gum	63·6
Ash	3·6
	100·0

Analysis 3.

Powdered myrrh.—Bought of Davey, Dudley-terrace, Clapham-road:—

Resin	30·2
Gum	65·6
Ash	4·2
	100·0

(a) Buchner's *Repertorium*, lxviii, 362. 1839.

Analysis 4.

Powdered myrrh.—Bought of Thompson, Kennington-lane:—

Resin	22·2
Gum	73·2
Ash	4·6
	100·0

Analysis 5.

Powdered myrrh.—Bought of Davenport, Great Russell-street, Bloomsbury:—

Resin	29·8
Gum	63·8
Ash	6·4
	100·0

Analysis 6.

Powdered myrrh.—Bought of Burden, 6, Store-street, Bedford-square:—

Resin	31·4
Gum	62·4
Ash	6·2
	100 0

Analysis 7.

Powdered myrrh.—Bought of Waylat and Ellis, Finsbury-pavement:—

Resin	36·4
Gum	56·8
Ash	6·8
	100·0

Analysis 8.

Powdered myrrh.—Bought of Harman:—

Resin	24·0
Gum	69·4
Ash	6·6
	100·0

Analysis 9.

Powdered myrrh.—Bought of Saltiel, Walworth-road:—

Resin	28·5
Gum	65·9
Ash	5·6
	100 0

Analysis 10.

Powdered myrrh.—Bought of Colk, 29, Fleet-street:—

Resin	38·0
Gum	57·2
Ash	4·8
	100·0

Analysis 11.

Powdered myrrh.—Bought of J. Elliott, Finsbury-place-South:—

Resin	11·0
Gum	82·0
Ash	7·0
	100·0

This sample was evidently the refuse of myrrh from which the tincture had been prepared, reduced to powder. The powder was coarse, without odour, and almost without flavour. More than two-thirds of the resin, and the whole of the volatile oil, had been removed.

Analysis 12.

Powdered myrrh.—Bought of Bicknell, 38, Ebury-street, Pimlico:—

Resin	32 6
Gum	62·8
Ash	4·6
	100·0

Analysis 13.

Powdered myrrh.—Bought of Gigner, 1, Sydney-place, King's-road, Chelsea:—

Resin	34·8
Gum	61·2
Ash	4·0
	100·0

Analysis 14.

Powdered myrrh.—Bought of Brown, 47, Cadogan-place, Chelsea:—

Resin	23·2
Gum	71·4
Ash	5·4
	100·0

Analysis 15.

Powdered myrrh.—Bought of Haycock, City-road:—

Resin	29·2
Gum	65·2
Ash	5·6
	100 0

Analysis 16.

Powdered myrrh.—Bought of Shirtliff, Chiswell-street, Finsbury:—

Resin	38·4
Gum	57·6
Ash	4·0
	100·0

Analysis 17.

Powdered myrrh.—Bought of Snell, City-road:—

Resin	32·8
Gum	61·2
Ash	6·0
	100·0

Analysis 18.

Powdered myrrh.—Bought of Kenrick, Gibson-street, Finsbury:—

Resin	20·8
Gum	70·6
Ash	8·6
	100·0

Analysis 19.

Powdered myrrh.—Bought of Whiting, 58, Upper Ebury-street, Poplar:—

Resin	38·0
Gum	57·2
Ash	4·8
	100·0

Analysis 20.

Powdered myrrh.—Bought of

Resin	38·2
Gum	57·6
Ash	4·2
	100.0

The activity of myrrh depends undoubtedly, as Dr. Christison remarks, on the proportion of resin and volatile oil, the gum being wholly inactive. It follows, that the sample of myrrh will be better in proportion as these proximate principles predominate, and that a deficiency of them indicates an inferior kind of myrrh. It is impossible, unless very large quantities of myrrh be operated on, to determine the proportion of volatile oil, as it amounts to less than 3 per cent., and is difficult to separate completely from the water with which the myrrh is distilled for the extraction of the oil. But a portion only of this volatile oil evaporates when exposed to the air, and even in the evaporation of the alcoholic liquids a part of the volatile oil is retained in the resulting resin.

In reviewing the above analyses, it will be seen, that the first two analyses of unpowdered myrrh contain respectively 32·8 and 30·2 per cent. of resin. The analysis of Pelietier gives 38·0, and of Bonastre 38·0. Braconnot, on the contrary, found 23·0 of resin, and Brandes 27·8, in the specimens they subjected to analysis. From our own researches, combined with those already mentioned, we conclude that a sample of myrrh, of good quality, should yield not less than 30 per cent. of resin. The largest quantity of resin yielded by the twenty samples of myrrh we have analysed, was 38·4, from a specimen in our own collection (Analysis 1). The smallest, with one exception, was 20·8, from a sample (Analysis 18), bought of Kenrick, of Gibson-street, Finsbury. The exceptional sample (Analysis 11), which yielded only 11 parts of almost inodorous resin, and which was nothing more than the refuse of myrrh employed in making the tincture, reduced to a somewhat coarse powder, was bought of J. Elliot, of Finsbury-place South. Of the remaining samples all those containing less than 30 per cent. of resin may be esteemed as inferior specimens of the gum-resin.

THE CHOLERA.

THE LAWS OF CHOLERA.

THE Thames and its tributaries furnish all the illustrations it will be necessary to present for the purpose of showing the inseparable connexion between polluted waters and the plentiful diffusion of choleraic poison. It is scarcely necessary to dwell on the distinction between the element in its vaporous and its fluid states, as in either condition, if it be only duly charged with morbific matter, it will prove the diligent familiar of cholera, ready to fly or swim.

The Thames collects the waters of 6,160 square miles of country, and the great body of this water flows and reflows through London in tides. How changed its character since the days when Sir John Denham wrote of it as,

"Though deep, yet clear!"

It is now the receptacle of all the sewage of more than two millions and a quarter of people, and the vile and poisonous refuse of the works in which they are engaged, besides a not very easily estimated supply of all the putridity which the animal and vegetable decomposition of the Metropolis can furnish! With London proper for the centre of oscillation, this material is swung backwards and forwards as the tide rushes up and down, with results which all patrons of halfpenny, penny, and twopenny boats must be prepared to anticipate. The "simmering waters" of this ill-used river are constantly giving off their foul and pestilential gases in quantities which, in popular parlance, might be called immense, but which are not immense, for they have been measured, and it may, perhaps, serve a good purpose if their dimensions are given.

Mr. Glaisher, of the Royal Observatory, Greenwich, was requested to make an estimate of the amount of vapour raised by evaporation from the Thames in London, and gave the Registrar-General a statement, of which the following is an epitome:—In one year, 678,505 gallons evaporate from an acre of water, which is at the rate of 1857·6 gallons daily. The bed of the Thames in London is estimated approximately at 2,245 acres; consequently, 4,170,000 gallons are raised from the Thames on an average daily through the year. The quantity evaporated at low water is perhaps much less than this; on the other hand, the evaporation in summer is more active than in winter, and the proportion of decomposing organic matter in the water and on the bank exposed to evaporation is greater at low than at high water. Hence it is probable, that in summer 4,000,000 gallons, or about 18,000 tons of water, are raised from the polluted Thames daily, and discharged into the atmosphere which is breathed by the inhabitants of London.

When the temperature of the river rises above 60°, as it does from the end of May until the middle of September, the poisonous gases are discharged freely, and, in a choleraic season, they are the effective aids of "the pestilence that walketh in darkness." Near the river, and especially in the lower districts of the town, where the poison is not much diluted, the mortality from cholera is intense. In Wandsworth it was (in 1849) 100 in every 10,000 inhabitants; in Lambeth, 120; St. Saviour's, 153; St. Olave, 181; Bermondsey, 161; Rotherhithe, 265. In the three sub-districts of Stepney adjoining the Thames the mortality from cholera was twice as great as in any two districts away from the river.

The nearly stagnant canals connected with the Thames furnish their quota of evidence to the admonitory truth under consideration. The waters of the Regent's Canal round London are in a state of most disgusting filth, and Cumberland Basin has been described as no better than a stagnant putrid ditch, and, accordingly, in the last invasion, "a great deal of choleraic disease prevailed among the men who were employed in the barges, and most of the families living in the houses on the wharfs were more or less affected."

If cholera is produced by inhaling the deadly emanations which are furnished by the river, and the great sewers which supply it, and which contribute a part of their treasures on their way, we have

a still larger measure of the morbific matter introduced when such water is employed as a drink. Water is, perhaps, the principal vehicle into which the deadly element is received, and by which it is carried into the human system. The awful prevalence of the epidemic in Paris in 1832 was attributed to the circumstance, that at that time four-fifths of the water of that city were taken from the Canal de l'Ourque, which was appropriated to the navigation of boats and barges. If this country had been suffering from excessive population, and a plan had been desired for giving free scope to the operations of the epidemic, it would not have been easy to make more effective arrangements than those on which we have fallen, though not by design. Only suppose the infection to have seized on a few individuals, and remember that the sewers run into the Thames and the Lea, and then that the Lea supplies the New River. We are assured, in some cases, that the water is taken from so pure a part of the Thames, and then is so well filtered, that there is no danger whatever to the public health from the supplies with which we are furnished. Still people die of cholera from the water supplied to them in London. This water has different degrees of impurity, and, apart from the deterioration it receives from bad cisterns and worse butts, and the infiltration fram the soil, it is conveyed from its original sources in a state most dangerous to the public health. During the last cholera season, in the six districts supplied with water taken from the Thames above Battersea, there were 15 deaths in 10,000; in those districts supplied from the New River, the Lea, and the Ravensbourne, there were 48 deaths in 10,000; and in the districts supplied from the Thames between Battersea and Waterloo-bridges the deaths were 123 in 10,000.—*Times.*

ROYAL COLLEGE OF PHYSICIANS.

The following instructions have just been issued by the College of Physicians:—

"Royal College of Physicians, October 15, 1853.

"The Cholera Committee of the Royal College of Physicians have received from various quarters applications for some plain directions calculated to be of service to the public during the prevalence of epidemic cholera, when medical advice may not be immediately at hand, and before such advice can possibly be obtained.

"For this reason the Committee deem it right to offer to the public some instructions, which, on account of an extended 'Notification' having been issued by the General Board of Health, on the 20th of September, 1853, may be brief; and are in no case intended either to supersede the necessity of having recourse, as speedily as possible, to further medical assistance, or to impose any authoritative restriction on medical Practitioners.

"During the prevalence of cholera,—

"1. No degree of looseness of the bowels should be neglected for a single hour. Medical advice should be at once sought when the looseness begins; and, previous to the arrival of a medical attendant, some of the medicines, at other times used for checking diarrhœa, should be taken; for example, the chalk mixture, the compound cinnamon powder, or the compound chalk powder with opium, in doses of from 20 to 40 grains for an adult.

"2. No saline aperients or drastic purgatives should be taken without the advice of a Medical man.

"3. Intemperance in eating or drinking is highly dangerous. But the moderate use of vegetable as well as animal food may be recommended; and, in general, such a plan of diet as each individual has found by experience to be most conducive to his health. For any considerable change in the diet to which a person has been accustomed, is seldom advisable during the prevalence of an epidemic.

"4. Debility, exhaustion, and exposure to damp, render the poor especially subject to the violence of the disease. The Committee urge upon the rich, the necessity of supplying those in need with food, fuel, and clothing.

"5. The extreme importance of removing or counteracting all impurities, whether in the air, water, or soil, as by ventilation, cleanliness, and the free use of the chloride of lime or chloride of zinc, cannot be too strongly insisted upon.

"Lastly, since the Reports made to the College of Physicians show that of the persons who were engaged about the sick in the last epidemic, the number of those who were attacked by the disease was, in proportion, exceedingly small, the fear of infection may be practically disregarded.

"The Committee forbear to dwell upon the extreme importance of providing Medical attendants at dispensaries for the treatment of the diarrhœa among the poor; of organising in every district affected by cholera what is called the system of house-to-house visitation, and of establishing temporary hospitals for the reception of patients who cannot be properly treated at their own homes; because these measures have been strongly and properly enforced in the 'notification' published by the General Board of Health."

METROPOLIS.

Cholera, which has made its presence felt in various parts of the Metropolis, and, during the four weeks that followed Sept. 10, showed a small but continuous increase, does not appear latterly to have gained ground. The deaths from this disease were 66 in the first week of October; last week they declined to 45. It is a somewhat remarkable coincidence that 45 was the number registered in the corresponding week (viz., the 42nd,) of 1848; for many weeks thereafter the deaths rose and fell, dropping so low as 1 and 2 in the spring of 1849, till the epidemic broke out with violence in summer. The fluctuations which mark its previous history, may attend its course again; but experience affords sufficient warning that a temporary abatement should not lull into security those whose business it is to prepare for the attack. The 45 deaths of last week (21 of which occurred to males, 24 to females—28 at the age of from 0 to 15, 16 from 15 to 60, and 1 at 60 or upwards)—were thus distributed over London:—In the West Districts 6, in the North 3, in the Central 2, in the East 6, and on the South side of the Thames 28.

The Board of Health says:—

"Forewarning of the necessity of measures of prevention is the best means of obviating panic.

"On referring to the former visitations of cholera, as far as regards the metropolis, it appears that in 1832 the attacks were 14,144 and the deaths 6,729, the population of London then being 1,681,641. In 1848-9 the attacks were about 30,000 and the deaths 14,601, the population at that time being 2,206,076; so that in the epidemic of 1832 one person died in every 250 of the inhabitants, or ·4 per cent., whereas in 1848·9 one person died in every 151 of the inhabitants, or ·66 per cent.; the mortality, therefore, in 1832-33 was about two-fifths less than in 1849—that is, about 5,800 more perished of this epidemic in London in 1849 than in 1832.

"The epidemic of 1832 commenced in London on February 16, and ended September 7, 1833, including a period of about seventeen calendar months. But it appears that during this period there was a cessation of deaths for eight months; so that there were in fact two epidemics, the first commencing in February and lasting to November, and the second commencing in August and lasting to September, 1833. The epidemic came to its height in the week ending July 27, when the deaths were 445, the greatest weekly mortality recorded during that visitation.

In the epidemic of 1848 the attack commenced in September, and the last death recorded in the return of the Registrar-General was in December, 1849; so that the whole progress of this epidemic occupied a period of 15 calendar months.

"During the first six months, namely, from the end of September, 1848, to the end of March, 1849, the disease advanced progressively, but irregularly, numbering in the whole of this period 988 deaths. During the following months of April and May there was a lull in the disease, the deaths sinking to one in some weeks, and never in any week exceeding five; but there was never, as in 1832, a complete cessation of the disease, for there was never a single week without at least one death.

"In the month of May, the total number of deaths did not exceed 13; but in the first week of June they suddenly rose to 9, increasing in the last week of the month to 124. From that period the epidemic went on rapidly and uninterruptedly, increasing till it came to its height in the week ending September 8, 1849, when the deaths together from cholera and diarrhœa amounted to 2298. From this time the disease declined, and ultimately ceased, as has been stated, in December, 1849. There was thus one epidemic with two well-marked periods, the first extending from September to March, and the second from June to December.

"In the first of these periods, the highest weekly mortality was 94, namely, in the week ending January 13, 1849, affording during that period a hope of a comparatively slight visitation; but in the second period, this hope was grievously disappointed, for the weekly mortality then rose as high as 2298 in the week ending September 8.

"The following table shows a considerable parallelism between the early progress of cholera in the metropolis in 1848 and now in 1853; that progress is, however, in almost every week, more rapid now than it was in 1848, and, comparing the total number of deaths during the whole of the eleven weeks with the number of deaths in the corresponding weeks in 1848, it will be seen that the recent deaths have exceeded the former by nearly one-third.

"Deaths from Cholera during a Period of 11 Weeks in 1853. Week ending:—		"Deaths from Cholera during a like Period in 1848.	
August 6	4	Corresponding week, 1848	19
„ 13	19	„ „ „	17
„ 20	10	„ „ „	7
„ 27	18	„ „ „	7
Sept. 3	16	„ „ „	7
„ 10	7	„ „ „	6
„ 17	16	„ „ „	7
„ 24	29	„ „ „	4
October 1	48	„ „ „	13
„ 8	66	„ „ „	30
„ 15	45	„ „ „	45
Total....	278	Total....	162

"It will be thus further seen that the progress of the epidemic has been much more rapid during the whole of the present month than during the corresponding period in 1848.

"It is remarkable that, gradual and slow as the progress of the disease has been in the Metropolis in both visitations, there have been in both sudden and violent outbreaks in particular districts and localities. In 1848 it had scarcely appeared in the Metropolis, when in the very beginning of October it attacked Edinburgh with great violence, and spread, in the course of a few days, to the neighbouring towns of Newhaven, Portobello, Lunhead, and numerous other places in the vicinity. In the beginning of November it attacked Glasgow, and subsequently a large number of manufacturing towns and villages in Lanarkshire, Ayrshire, Dumfries-shire, and other counties in the south and west of Scotland. Now it has attacked, with the like suddenness and with increased violence, the northern English towns."

The returns from the Metropolitan Commissioners of Police give 18 cases of cholera and 8 deaths.

In the Millbank Penitentiary, where cholera was so peculiarly fatal in 1848-9, as compared with the mortality from the same cause in other Metropolitan prisons, there have been since the 24th of August last 9 cases of cholera and 3 deaths, 2 of which occurred on the 14th inst.

In the Notting-hill portion of Kensington parish there still exists that slough of abominations known as "the Potteries." Things are even worse now than in 1848-9, when loud complaints were made by all the respectable inhabitants of the neighbourhood of the horrible condition of the locality, and when the Medical Officer of the district proved that the ratio of mortality among the residents exceeded that of almost any part of England. No one who has visited the spot, where swine and human beings are suffered to remain immersed together in filth, can wonder at such a result.

German Emigrants' Lodging-house, Glasshouse-yard, Whitechapel.—During the last few days, several cases of cholera have occurred at this depôt for the Germans emigrating from Germany to America; three have been removed to the German Hospital, three to St. Thomas's, and one to the London Hospital.

Six cases of cholera have been received into the Metropolitan hospitals since the Registrar-General's Return was made up.

THE PROVINCES.

October 14.—Glasgow, 1; Edinburgh, 1; Brentford, 1; Gateshead, 3.

October 15.—Newcastle, 2; Gateshead, 1; Dundee, 1; Darlington, 1; Heworth district, 3.

October 16.—Newcastle, 2; Coldingham, 2; Heworth district, 5; Howden, 2.

October 17.—Newcastle, 2; Gateshead, 2; Luton, 1; Heworth district, 3; Gateshead Union, 5; Hemel Hempstead, 1.

October 18.—Newcastle, 6; Heworth district, 3.

The total number of deaths from cholera and diarrhœa in Newcastle during the present outbreak has been 1,514. In the same period (viz., the first 48 days,) during the prevalence of epidemic cholera in 1831-2, the number of deaths was 291.

Dantsic.—The recent visitation of cholera in this city and neighbourhood has been of milder character than on former occasions. The entire number of cases from its commencement, the 13th of July, to the 8th of October, 1853, are represented to have been,—

	Number Attacked.	Deaths.	Recovered.
Civilians	760	495	195
Military	140	60	69

There were still under medical care, at the date of the latest despatches, 81 persons.

Russia.—The cholera is said to have subsided.

Hamburg.—The present visitation of cholera at Hamburg appears to have been comparatively slight. There is ground for hope that the epidemic there is at an end, as only 15 fresh cases have occurred since the 26th of September, and no new case was notified to the authorities on the 6th of October, nor on the three preceding days. Up to the 2nd of October, the total number of persons attacked is stated to have been 537, of whom 279 died, and 201 recovered, 51 remained at that date under treatment. The unmitigated force of the disease, however, in the developed cases, is shown by the high mortality, upwards of one-hlaf of those who passed into cholera having perished.

REVIEWS.

The Principles of Surgery. By James Miller, F.R.S.E., etc. Third Edition. Illustrated by 240 Engravings on Wood. Edinburgh. 1853. 8vo. Pp. 760.

Though we have long thought this the best student's book on the principles of surgery, we have also thought that the attempted separation, by Mr. Miller, of the practice from the principles of surgery, and treating each subject in a separate volume, was a mistake. Surgery especially requires its principles to be illustrated by practice, and Mr. Miller is continually obliged to do this in the work before us. Indeed, we had marked some passages for extract, but on looking them over found that every one was on a practical detail, rather than a principle. The separation has led to an unnatural division, and to references and repetitions, which might have been avoided by a union of Mr. Miller's two admirable volumes into a single treatise on the Principles and Practice of Surgery. We shall hope to see him effect this union before very long.

The chief difference between this and the second edition appears to be, the substitution of a condensed statement of the results of the application of chloroform in surgery, to the former long and admirable chapter on this subject. We do not think the alteration is an improvement.

Valentin's Text-Book of Physiology. Translated by W. Brinton, M.D. Part II. London. 1853.

A perusal of the second part of this work confirms the favourable opinion we expressed of the first. The information is conveyed in a style at once concise and clear, the work being thus adapted not only for the student of physiology, but for the portion of the intelligent public who take an interest in the subject. Dr. Brinton has fulfilled his task of translation admirably, and his own short notes add materially to the value of the work.

Sandgate as a Residence for Invalids. By George Moseley, Surgeon to the Sandgate Dispensary. Pp. 136. London: 1853.

This book presents us with an enthusiastic account of the natural beauties of the village of Sandgate, and of its claims to notice as a sea-side residence for invalids. It contains a number of tables, compiled apparently with great care, of the mean temperature of the air at Sandgate; the mean annual pressure of the barometer; the average number of rainy days; the nature of the prevailing diseases at this part of the coast; and many other particulars worthy of observation. Mr. Moseley proves that Sandgate is a place of great salubrity, being sheltered from the cold winds, free from sea fogs, and not exposed to the influence of malaria.

If this work had been of half its present size we should be able to speak of it with unmingled satisfaction, as a very interesting and useful *brochure;* but the Author has exhibited too much of the spirit of book-making to deserve much praise at our hands. The whole chapter on "Medical Treatment," which extends to very nearly forty pages, might just as well be expunged, as it is full of quotations which have no reference to the subject, and the first extract from Shakspere is so full of mistakes that we almost doubt whether the great dramatist himself would be able to recognise it if he could rise from the tomb. We have also a long account of the effect of the Separate System of Con-

finement upon the Health of Prisoners, and many other matters which are quite as much *àpropos* to any other question as to one relating to the natural history and the hygienic claims of the village of Sandgate; and the very few remarks made by the Author upon medical treatment are excessively meagre and unsatisfactory.

A Practical Treatise on Sea-Bathing and Sea-Air. By Geo. Hartwig, M.D. Pp. 148. London. 1853.

The little work before us is the first of a popular medical series now in course of publication by Mr. Highley. It is avowedly intended for the perusal of the general public, and is undoubtedly very well adapted to attain the purpose for which it is intended. It is written in an unpretending manner. The scientific language employed is quite on a level with the capacity of ordinary readers; and the hygienic rules laid down are sensible and plain. Though evidently written by a foreigner, the style is generally good, with some few exceptions, and a little revision would have rendered the whole into unexceptionable idiomatic English. We have been much pleased by the perusal of this treatise, and can safely recommend it to the attention of bathers of all descriptions.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

TREATMENT OF TYPHUS BY BLEEDING AT THE COMMENCEMENT OF THE DISEASE, AND BY THE USE OF COLD WATER, BOTH EXTERNALLY AND INTERNALLY, COMPARED WITH THE TREATMENT BY EMETICS AND EVACUANTS.

By VALLEIX.

Although Soutetten, Schedel, and others have treated typhus with cold water,—and although bleeding has been often employed at the commencement of the disease,—yet Leroy was the first to combine both methods, and to use cold water continuously both externally and internally. The bleeding, he said, diminished congestion. The patient was wrapped in wet cloths, repeatedly moistened with cold water; he drank cold water, and had two or three enemata of the same fluid thrown into the rectum during the day. Valleix followed nearly the same course. He abstracted 350-400 grmm. of blood (℥xii.—xiv.) Once he applied leeches to the abdomen, and once leeches and cupping-glasses to the chest. The patients were washed five or six times daily over the whole body with cold water. The blood was examined in eleven cases; three times it was strongly buffed; in eight cases the clot was of medium consistence; in one case it was fluid; in all it separated completely from the serum. Out of twenty-five cases the nervous symptoms were increased by this treatment nine times; they were diminished five times; the remaining cases gave no result. Tympanitis was increased in one-half the cases; diarrhœa was increased in 14; diminished in 2; stationary in 4; other cases did not present this symptom. The pulse was usually 106 before, and 103 afterwards. In 11 cases only could the treatment be prosecuted to the end; 1 of these died. In 14 cases was it given up; 5 times in consequence of coldness and threatening asphyxia; once on account of diarrhœa; 8 times in consequence of general aggravation of symptoms. Upon the cold water treatment being suspended the patients improved. The duration of the disease in the fatal cases was 27 days; in those which recovered 32 days. Of the 25 cases, 16 suffered from severe complications; 1 erysipelas; 1 secondary gastritis; 5 abscesses, etc. etc.

The treatment by emetics and evacuants consisted in the administration of ipecacuanha and tartar emetic the first day, and then of purgatives (castor-oil) and enemata. The nervous symptoms were increased, with fatal termination, in 1 case; increased and then diminished in 3; diminished in 15; diminished and then increased once, stationary and then diminished in 4. The nervous symptoms by this treatment generally took a favourable turn, contrary to what ensued in the former plan. Tympanitis was always diminished; diarrhœa diminished gradually 3 times; increased 4 times; unchanged, but subsequently diminished, 14 times; (wanting in 3 cases); the pulse sank about 12 beats; duration of the complaint in the fatal cases, 31 days; in those which recovered, 22 days. As an after-consequence gangrene of the leg was noticed once; all the evidence, therefore, appears in favour of this latter mode of treatment.—*L'Union*, 1853.

BELLADONNA IN SALIVATION.

By Dr. ERPENBECK.

A woman suffering from enteritis serosa became profusely salivated by both the external and internal administration of mercury. The author ordered gr. iiss. of the ext. belladonnæ in an emulsion, to be taken during the course of the day. On the following day, the salivation had disappeared, and dryness of the mouth had supervened. But the salivation returned as the effects of the medicine wore off, and again vanished upon the re-administration of the extract. The author considers this medicine, after repeated trials and experience as a prophylactic, and directly acting curative agent against salivation.—*Hann. Corr.-Bl.*, 1853.

THLASPI BURSA PASTORES IN HÆMORRHAGE.

By Dr. HANNON.

The cruciferæ arrange themselves, according to their therapeutical constituents, into two groups: — 1st. Those which contain a sharp essential oil, and are, on that account, used as an irritant to the skin, such as mustard, etc. 2ndly. Into those which contain less essential oil, but, on the other hand, much astringent and bitter matter, and which are, therefore, useful in assisting digestion and improving the state of the blood. The number of the latter is very great. The whole coast of Northern Europe bears the cochlearia officinalis, a most useful antiscorbutic. The whole surface of Europe produces the nasturtium officinale, cardamine pratensis and amara, and lepidum sativum (garden-cress). On the coast of America and the Antilles is found kakile Americana,— another antiscorbutic of great value; the Laplanders, the Kamtschadalen, and the Greenlanders possess their nasturtium palustre and sylvestre.

All these plants possess an essential oil, containing sulphur, a bitter resin, tannic acid, salts of soda, potash, lime, and iron, with a nitrogenous substance, which, in decomposition, causes the evolution of ammonia.

The thlaspi bursa pastoris was used in the earliest periods, according to Dioscorides, as a remedy in hæmoptisis; in later times, it was recommended by Simon Pauli, and recently it has been approved by Lejèune, Mérat, and Delens, for the same disease, and by Dubois for hæmaturia and hæmoptisis. Réné Van Oye and Rademacher confirm its utility.

The author found it useful in many diseases, and especially in those hæmorrhages in which the fibrin of the blood is diminished. In certain subjects, the flow of blood constitutes the only disease; it occurs spontaneously, and without fever. The patients have, during the first attack, the aspect of good health, a fine rosy skin, and are well nourished; but upon closer inspection there is remarked a want of energy in the organic functions, laboured and slow movements, and general apathy. By frequent recurrence of the hæmorrhages, there ensues pallor of the tissues, well pronounced anæmia; the nervous system seems over excited. Hence follow pains in the joints; the least pressure is followed by ecchymosis, in the form either of petechiæ or purpura; the least wound bleeds obstinately, and requires the repeated application of astringents; coagulation of the blood ensues with difficulty. In women the catamenia are frequent, profuse, and exhausting. The blood appears serous and pale,—the clot is soft, small, and never buffed. The skin perspires easily and abundantly; every breath of air calls forth neuralgia. The urine is pale and copious; the evacuation from the rectum, fluid; and hydropic effusions, such as œdema of the foot, occur readily. The thlaspi bursa pastoris, administered for a considerable time, works in these cases a change in the constitution of the blood, especially when aided by the influence of good air and properly regulated diet. The best formulæ are the succus thlaspi, prepared cold, and of bitter taste, three to six drams a-day. The extractum thlaspi, the fresh expressed juice, reduced by evaporation to the consistence of an extract, one to two drams a day.—*Presse Med.*, 1853.

GENERAL CORRESPONDENCE

SIR JAMES CLARK AND THE STATEMENTS OF THE *ZOIST*.

[To the Editor of the Medical Times and Gazette.]

SIR,—As perhaps you do not read the *Zoist*, I send you a quotation from the last Number. The following is from Dr. Elliotson, and I think your readers should be made acquainted with it:—

"It is most gratifying to mention, that all do not follow their bad example. Sir James Clark lately was willing that I should meet him in consultation upon the propriety of my trying Mesmerism in one of his cases, and consented to its use; and Dr. Locock has frequently acted in the same way, so that the Queen and her Consort have those about them who set a good example."

I am, &c. ?

In reply to a letter from the Editor of this Journal, Sir James Clark has favoured us with the following note:—

"Brook-street, Oct. 20, 1853.

"My dear Sir,—It is quite true that I did meet Dr. Elliotson at the urgent entreaty of the wife of a friend and patient of mine who had long been suffering from organic disease of the brain. I refused to meet Dr. Elliotson in consultation on the subject of Mesmerism, but agreed to be present when he saw the patient with the ordinary medical attendant, that I might ascertain from him whether there was any risk in the manipulations injuring the patient. This was the sole and only object of our meeting, and we never met again. "Yours very truly,

"JAMES CLARK."

ST. BARTHOLOMEW'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the Leading Article of a recent Number of the Journal, entitled, "Clinical Medicine and Surgery at the London Schools," it is asserted, that at St. Bartholomew's Hospital "the Clinical Lectures upon 90,000 cases annually under treatment, are each delivered *once a week*, by different lecturers, and without any system at all, as far as we can understand."

Permit me to observe, that during both the Winter and the Summer Sessions, *three or four* Clinical Lectures are delivered by the Physicians and Surgeons of the Hospital every week, when the attention of the students is directed to the remarkable cases, either single or in groups, at that time in the Wards. The Medical and Surgical Officers lecture in rotation, but no system is preserved as regards the subject of discourse, inasmuch as clinical instruction demands for the lecturer the most perfect freedom of selection. Whatever is most interesting or striking is brought before the attention of the class. I am, &c,

St. Bartholomew's Hospital. HOLMES COOTE.

[We are glad to receive the above statement from Mr. Coote.]

BLEEDING IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—Observing your emphatic condemnation of the practice of bleeding for the cure of cholera, I feel that I should be wanting in duty to the public if I did not recall attention to the authorities by whom it has been so forcibly recommended.

Withheld by the same prejudice in 1849, I unfortunately did not adopt the practice so early in the visitation of the epidemic, or so early in the treatment of individual cases, as I should now do. As an example of the success of bleeding, I will only refer to one brief case of those which I published after the subsidence of the epidemic.

Case 16.—Sept. 8—Jane Peers, aged 37, vomiting and purging of rice-water fluid continual. She suffered very much from spasms, and symptoms of collapse were appearing in her countenance, voice, and hue. She was bled to four and a-half ounces; she was immediately relieved. This woman lay in a wretched garret, and had no one to attend on her but an infirm old man. Scarcely anything else was done for her, and she recovered in a few days without a bad symptom.

Rather than dwell upon the results of my own practice, which I found most satisfactory, I refer you to the authority of Dr. James Johnson, and to the report of the Bombay Government in 1817, from which we learn that the practice was confirmed by the official reports of forty medical officers. Wishing to make this communication as brief as possible, I conclude, expressing my conviction, that every Medical man who has the courage to use the lancet moderately and judiciously in the treatment of cholera will be doubly repaid, in the recovery of his patients, and in great saving of labour to himself by the rapidity of that recovery.

I am, &c. E. WHITTLE, M.D., M.R.I.A.

Toxteth Park, Liverpool, Oct. 10, 1853.

HOT-WATER CUSHIONS IN CHOLERA.

[To the Editor of the Medical Times and Gazettee.]

SIR,—Since I introduced the elastic water-cushions and mattresses for bedsores, etc., I have also manufactured an India-rubber cloth cushion, that resists the action of heat, to any degree, up to 212° Farh., and which (when applied as hot as can be borne) in lumbago, cramp, and rheumatism, pain in the loins, stomach, and bowels, generally gives almost immediate relief, and affords the greatest comfort.

In obstinate cases of fever, that resist diaphoretics, perspiration may be quickly produced by placing one over the stomach and abdomen

For ordinary application of heat, it is said to be the best means known, while all wetting the bedding, etc., is prevented.

My present object in drawing the attention of the Profession to the subject of temperatnre, is with the view of trying the value of heat in cholera.

It is well known that sudden lowering of the temperature to a certain degree results in death; and it is known, that in cases of cholera, as well as poisoning in general, there is a remarkable lowering of the temperature.

I shall, therefore, be happy to send one of these hot-water cushions, free of expense, to any hospital, for the medical officers to report upon. I am, Sir, your obedient servant,

WILLIAM HOOPER.

Pall-Mall East, October 17, 1853.

TREATMENT OF CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—As the Asiatic cholera has again made its appearance in this country, I am induced to call the attention of the Profession to a plan of treating that disease in the stage of collapse, which, in my hands, has been quite successful in the few cases that I have attended since I began the practice.

The peculiarity of the treatment consists in the entire abstinence from the use of internal stimulants during that stage, either as diet or medicine, the patient being only allowed the free use of cold water as a drink, combined with the administration of calomel in large doses.

On visiting a patient in the collapsed stage of cholera, I immediately give twenty grains of calomel with forty drops of laudanum, and should there be no amendment in two or three hours, I should not hesitate to repeat the dose (although I have not found it necessary to do so in any case), and then continue the medicine at intervals, in five-grain doses, with ten drops of laudanum, and afterwards in less doses, until the stage of collapse is passed.

I attach some importance to the mode of administering the medicine. The calomel is put into a teaspoon, with a little brown sugar, to which I add the laudanum, and the whole is sucked off the spoon by the patient. In this way, there is less chance of rejection than by giving it in the form of a pill. I prefer giving a large dose at first, to that of repeating smaller doses at intervals, as more impression is likely to be made at once on the system.

All internal stimulants are forbidden, the patient being restricted to cold water, of which he is allowed to drink as much as he pleases,—in doing this, we are, happily, consulting the feelings of our patients, as, without an exception, they preferred water to anything else; and although they frequently, at first, were sick, and vomited it, they were still anxious to drink more.

I have occasionally found great benefit from the use of external stimulants, especially the application of hot turpentine to the extremities.

The first case treated in this way (and reported in the *Lancet*, for October 13, 1832), was at the close of the epidemic in that year, when I had the charge of a large district, and had nearly 200 cases under my care; the second was in 1838, and another in 1846. Not having had the charge of a district during the epidemic in 1849, I had only three cases in private practice; one of these last was fully reported in the *Lancet* of November 19 for that year.

I have only six cases to present to the Profession, but as they

were of a well-marked character, and one even pulseless when first seen, the fact of all of them terminating favourably makes me desirous that the plan I have recommended should have a fair trial. I am, Sir, your obedient servant,

WILLIAM WOODMAN.

Exeter, September 24, 1853.

DR. W. KRAMER, OF BERLIN, AGAINST MR. WILDE, OF DUBLIN.

[To the Editor of the Medical Times and Gazette.]

SIR,—Encouraged by your well-proved kindness and impartiality, I ask for the adjoined Paper a small room in the next number of your valuable Journal, the *London Medical Times and Gazette*. I trust you will not cut off this best way for acquainting the English Profession most largely with my self defence.

I am, Sir, most sincerely yours,

W. KRAMER.

Berlin, October 6, 1853.

There is no subject of higher professional interest, and, at the same time, of a more discouraging character, than to witness two contemporary authors, engaged in the same practical studies, supplied with a large amount of observation and experience, who, nevertheless, maintain the most opposite scientific doctrines and principles!

Such is the case with Mr. Wilde ("Aural Surgery," 1853) and myself ("The Nature and Treatment of Diseases of the Ear," 1836—1849).

Guided by a twenty years' practice, I could not help disproving Mr. Wilde's opinions and practical rules of guidance, published in the *Dublin Journal of Medical Science*, 1844-47-48 (of my above-quoted work, 2nd edition, 1849, pp. 224, 342-45, 425-29, 435, 452, 457), Mr. Wilde, in his turn, did the same (of "Aural Surgery," in many places) with regard to the views and practical principles contained in both editions of my "Diseases of the Ear." Would it now serve my turn to vindicate once more my system, my theory, and practice, of the affections of the auditory organ? I think it would not. It is not in my power to afford more convincing proofs of the correctness and trustworthiness of my statements, published in 1849; there is nothing to be added to, nor to be deducted from, the whole of the doctrines contained in this second edition of my work. But would it be of any use to examine and to disprove Mr. Wilde's "Aural Surgery"? Again, I think it would not: for there is no reasoning, no coming to a satisfactory explanation with an author, who, for instance, has never observed ("Aural Surgery," p. 138) polypus growing from the external surface of the membrana tympani, etc.; whereas, I not only observed, but completely destroyed, 143 polypous excresences, grown out from the external surface of the membrana tympani. It is impossible to come to an understanding with Mr. Wilde, who attaches great importance to Mr. Toynbee's dissections of ears, unknown to have been deaf, and not examined during life.

These lines, therefore, are equally far from advocating my "Diseases of the Ear," as from refuting Mr. Wilde's "Aural Surgery." What, then, can be my object in writing them? Simply because I do not wish to see my doctrine judged by Mr. Wilde's exposition, who does not even scruple to alter my words, and to distort their meaning, as often as he refers to my work. I shall, therefore, confine myself to an energetical protestation against such unfair proceedings, and to the quotations of the passages which have been mutilated by Mr. Wilde.

("Aural Surgery," page 28.)—"Kramer says he has cured cases of nervous deafness by the introduction of etherous vapour and other gaseous substances, by means of an air-pump into the middle ear." Nowhere, and never, did I recommend, or make use of, an air-pump for introducing etherous vapour, or gaseous substances, into the middle ear. (Of my "Diseases of the Ear," English translation, p. 272; 2nd edition, p. 753, foll.)

("Aural Surgery," page 105.)—"Kramer says, the catheter is the only means by blowing, or by the introduction of a catgut-string, or a small whalebone or ivory probe, to learn the condition of the Eustachian tube, and the cavity of the tympanum, and thereby in the cases in question, to judge of the condition of the auditory nerve." And page 391.—"The proposition of Dr. Kramer, to judge of the state of the auditory nerve by the introduction of a catgut-string, an ivory, or a whalebone bougie, into the cavity of the tympanum," etc.

Again, I never recommended or made use of a whalebone or ivory probe or bougie to be introduced into the Eustachian tube, still less into the cavity of the tympanum. (Of my works, English Translation, pp. 201, 226; Second Edition, page 499.)

("Aural Surgery," page 213.)—"It will appear almost incredible, that Dr. Kramer should believe that even a forcible stream of air from the air-press cannot alter the concave form of the membrana tympani."

Page 316 of the second edition of my work, I expressly pointed to the roll-shaped elevation of the membrana tympani on both sides of the handle of the malleus, taking rise from forcing a stream of air into the cavitas tympani, by holding the nose, and making a forced expiration.

("Aural Surgery," page 224.)—"Kramer, in his first work, gave a section on acute inflammation of the membrana tympani; but we find about four pages devoted to the description of this disease, while the remainder is occupied with the consideration of polypus, etc."

Is it not very strange to deny my alleged description, on account of its being limited to four pages? Indeed, it fills up six pages, (from 147 to 152); and, in the second edition, twenty-one pages, (from 321 to 342.)

("Aural Surgery," page 288.)—"Kramer, in his criticism of Willis, adduces as insupportable, the assertion of some forms of deafness being improved by loud noises occurring in the vicinity." We have here a remarkable instance of Mr. Wilde's deception, as I clearly stated the amelioration of deafness noticed by patients when riding in a carriage, or being in the vicinity of loud noises. (Of English Translation of my work, pp. 259, 264; Second Edition, page 720.)

("Aural Surgery," page 352.)—"Neither in his description of chronic inflammation of the middle ear, nor in the details of cases, has Dr. Kramer given an accurate account of the state of the membrana tympani in this disease; and several of the cases related by him afford no note of the state of this structure whatever."

The fact is, that I stated this membrane to be, in many of the cases in question, shining, smooth, transparent, (first edition of my work, page 204,) and, almost without any exception, shining, transparent, and very seldom of a dead white colour.—(Second Edition, page 532.)

("Aural Surgery," page 383.)—"The existence or the non-existence of tinnitus aurium led Dr. Kramer to divide nervous deafness into the erethitic and the torpid form; the former being incurable, the latter curable."

The truth is, I expressed my opinion on this subject in these words:—"If the erethitic and the torpid forms of nervous deafness be compared in a prognostic point of view, the former is the less favourable for medical treatment." (See the English Translation of my work, page 267.) Mr. Wilde's disfiguration of the alleged sentence is there obvious to all.

("Aural Surgery," page 385.)—"Dr. Kramer writes, in his new edition, page 725, 'In by far the greater number of our cases, the ear-catheter shows the auditory tubes dry,'" etc.

What a pity Mr. Wilde should have missed this excellent opportunity of showing off his sagacity by discovering that there is a misprint in the passage; viz., ear-catheter instead of ear-speculum!

("Aural Surgery," page 384.)—"Kramer gives in 1851 an account of 2000 additional cases in which the former proportions are considerably modified, for only 1875 cases were attributed to nervous deafness." A simple glance at the statistical table of 4000 cases of affections of the ear, of my own, published in the *London Medical Times and Gazette*, 1852, October 16, shows very similarly modified proportions of all affections of the ear, but in no way of the nervous deafness alone. (*Ibid.*, p. 307.) In the last edition of his work, Dr. Kramer says, the English aurist must be denied any opinion on the subject. Mr. Wilde's not quoting the page containing this my reproach, cannot be refuted directly; but I willingly confess, that my very unfavourable opinion on the state of English aural surgery is not in the least changed by his last publication. Page 782, second edition of my work, I expressed my opinion on this subject in the following words:—"When Swan, Wright, Saunders, Buchanan, Curtis, and others,—especially English physicians,—dare to treat cases of nervous deafness by means of calomel, magnesia, sulphuria, jalappa, aloe, rheum, senna, and leeches,—perhaps subsequently or additionally by the use of the bark,—one is warranted in maintaining, that these writers are destitute of all knowledge of the peculiar genuine character of nervous deafness."

(*Ibid.*, p. 388.)—"To remedy the nervous deafness it has been recommended by Dr. Kramer to cure it by introducing the vapour of acetous ether into the cavitas tympani."

Here Mr. Wilde endeavours to lead his readers into a gross error. He cannot have been ignorant of my recommending (see second edition of my work, pp. 753, 759, 765) to begin the treatment of nervous deafness by vapours of pure lukewarm water, or

of a thin mucilaginous fluid, combined with $\frac{1}{8}$ to $\frac{1}{2}$ gr. of extract' hyosc., very seldom to be followed by a single drop of acetous ether, the irritating effect of which, on this occasion, is much to be feared.

(*Ibid.*, p. 390.)—"Dr. Kramer says, it must always be kept in view, that when the vapour passes through the cavitas tympani into the labyrinth by means of the foramen ovale," etc.

It seems, once more, Mr. Wilde intentionally omitted taking any notice of the alteration of this passage in the second edition, p. 753, running in this way:—"At all events, these vapours are to pass only the thin membranes of the round and oval foramino," etc.

In all the quotations, constituting the whole of Mr. Wilde's references to my work, there cannot be the least doubt as to his having been conscious of the true meaning of the alleged and occasionally amended passages. He is familiar with the German tongue, and in possession of a copy of the second edition of my work. What, then, can Mr. Wilde's intention be in acting so unfairly? I am not sure that I know, but thus much I am sure of, that I shall never enter into any discussion with, nor return any answer to, an author who did not scruple to attack my writings in so malevolent and unjustifiable a way.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, OCTOBER 18.

Dr. BABINGTON in the Chair.

DR. BABINGTON, on taking the chair, congratulated the Society on the position in which it now stood. Its "Transactions,"—for the last volume of which, surpassing all previous ones in excellence and completeness, they were much indebted to the exertions of Dr. Quain, their Secretary—were constantly referred to by foreign and English writers as an authority. He suggested the propriety of forming special Committees for the investigation of particular subjects. This had been found advantageous in other Societies, and might lead to important results, and clear up many disputed points.

Mr. Gay read the particulars of

A CASE OF CONSTIPATION, OF REMARKABLE OBSTINACY, IN A BOY 7 YEARS OF AGE,

who had an attack of typhus fever, about four years ago, after which his bowels became remarkably torpid. For two years they were not acted on more than once a-month, and when he was brought to the Royal Free Hospital, had not been moved for three months. On examination, the abdomen was found much distended, being four feet in circumference, and hard, except at the sides; the recti muscles were rigid, and on the left side might be felt, as it were, a sac filled with hard substances. An umbilical hernia had formed, apparently on account of the linea alba giving way from over-distension. The urine, as might be expected, was of high specific gravity, throwing down an abundant deposit of lithates. The child's general health did not appear to suffer from the state of his bowels. He remained in the hospital for a month, without the bowels yielding to the usual remedies, aperients, enemata, etc.; they seemed, indeed, to be as it were paralysed. At length (in July) a speculum was introduced into the rectum, and a stream of warm water injected, with the effect of bringing away a quantity of hardened fæces. This has been repeated several times since with good results, the bowels not having been brought to act in any other way. The size of his abdomen is now much reduced, and he is apparently in good general health. The child was brought into the room, and except in the distension of his abdomen, which is still more than natural, did not present any particular appearance.

Mr. Shaw exhibited

A CAST OF A WRIST DISLOCATED BY SPASM, AFTER CONCUSSION OF THE BRAIN.

The patient was a carpenter, who fell from a scaffolding twenty-six feet in height. This happened eight years ago. He fell on his head, and was insensible for some time, but does not appear to have required any active measures for his recovery. He also injured his right wrist slightly, and, after his recovery, perceived a tendency in his hand to bend forward, which gradually increased until it became quite flexed upon the fore-arm, in which position it has remained ever since. The hand lay nearly flat, and quite close upon the lower part of the inside of the forearm. The displacement was greatest between the first row of carpal bones, and the articular surface of the radius and ulna; but the second carpal row was also displaced upon the first. The girth around the hand and forearm measured, over the metacarpo-phalangeal joints, was only nine inches. Attempts have been made to restore it to its natural position by means of pads introduced between the hand and arm; but, as these gave great pain, without effecting any permanent change, they were discontinued, the man being left-handed, and not requiring to make much use of his right. He was admitted into the hospital on account of a nervous affection, which was at first feared to be owing to some cerebral lesion, after a fall from a scaffold, but afterwards appeared to be merely functional in its origin, presenting, indeed, some of the characters of hysteria. A tonic plan of treatment was adopted, with a favourable result, but the condition of the wrist did not appear to be at all affected. By bandaging the hand securely to the arm, he is able to use the extremity in his work as a carpenter.

Mr. Shaw also exhibited another cast of a case somewhat similar, the particulars of which he had not been able to meet with.

Mr. William Adams mentioned a case where both the foot and hand were similarly affected, in a boy who had sustained an extensive fracture of the temporal bone from a fall. The foot has been operated on with success, but Mr. Adams did not think it advisable to attempt an operation on the hand.

[It was afterwards mentioned in the room that Mr. Shaw's patient had been under Dr. Wilson's care in St. George's Hospital, and had been discharged as an impostor, he having brought on the "dislocation" by tying his hand down on the fore-arm, and keeping it in that position for a great length of time.—Rep. *Medical Times and Gazette.*]

Dr. Peacock exhibited

TWO SPECIMENS OF MALFORMATION OF THE HEART.

The first case occurred in his own practice at the City of London Hospital for Diseases of the Chest. The subject of the malformation was an infant about four months old. It had been liable to paroxysms of dyspnœa and palpitation, during which it became very livid, but it was not permanently cyanosed. It died convulsed during an attack of hooping-cough, and there was found, on examination after death, some contraction of the right auriculo-ventricular aperture, with thickening and adhesion of the valves, and an effusion of recent fibrin on their auricular surface. There were also two small apertures of communication between the ventricles. The second preparation was one which had been forwarded to him by Mr. Marshall, of Mitcham. In this instance there was great contraction of the orifice of the pulmonary artery, owing to the adhesion of its valves. A large opening existed in the septum ventriculorum, by which the aorta freely communicated with the right ventricle, and the foramen ovale was so largely open as to admit the forefinger to be passed from the right into the left auricle. The heart was large, and the parietes of the right ventricle especially firm and thick. The preparation was removed from a boy who had been during the latter period of his life a patient of Mr. Marshall, and had presented marked and permanent cyanosis. He died when $6\frac{1}{2}$ years of age, of cerebral disease supervening during measles.

Dr. Crisp exhibited

A SPECIMEN OF SCIRRHOUS KIDNEY FROM A CAPIBARRA (THE LARGEST OF THE RODENTS).

With the exception of a few nodules of the same nature here and there, the remainder of the body was healthy. The blood, however, presented an immense number of diamond-shaped crystals diffused throughout it.

Dr. Crisp also exhibited

THE HEART OF A PEREGRIN FALCON, CONTAINING FILARIÆ,

the pericardium of which was covered with tubercles. These were at first taken for coiled-up filariæ, several of which were found at the base of the heart in its substance, but, on microscopic examination, presented all the appearances of tubercle. Lymph had been effused in the abdomen, on which a mould had formed. There were also tubercles in the spleen and liver.

Dr. Handfield Jones had seen filaments in the human liver presenting every appearance of mould. It was not confined to the surface of the liver, but diffused through its substance, and was not seen in other parts of the body. These cases were uncommon; and he believed it to be a *post-mortem* appearance.

Dr. Handfield Jones showed

TWO SPECIMENS OF DISEASED STOMACH.

In the first case, the chief feature had been death by anæmia, without sufficient apparent cause to account for it. The mucous

coat of the stomach was completely atrophied, including its glandular apparatus. In the other, a man, aged 85, who had been a drunkard, the mucous membrane was of a very dark colour, and somewhat mammilated. Dr. Jones gave a detailed description of, and contrasted the morbid appearances in both cases.

Dr. Brinton mentioned cases where some of the appearances described had been produced by arsenic, even when taken medicinally.

Mr. Trotter explained that, in the present instance, arsenic could not have been the cause of the appearances, as the man declared, when he came into the hospital, that he had never taken any medicine whatever.

Dr. Brinton exhibited

TWO CASES OF DISEASED AORTIC VALVES;

The first from a young woman, aged 24, who had apparently laboured under diseased heart from infancy. When admitted into the hospital, she presented the yellowish-white, ill-nourished appearance characteristic of these cases. The second sound of the heart was inaudible. She suffered from dyspnœa and from epigastric uneasiness. Pulse 140; œdema came on; the pulse increased in rapidity. Relief was given by acupuncture; but she was too weak to admit of active measures to relieve the œdema, and she gradually sank. On examination, the aortic valves were found very thin and small. There were no vestiges of the corpora aurantii, and no resistance could have been afforded to the reflux of the blood.

In the second case, a man, aged 35, the chief symptoms were, great pain, and inability to breathe, except in an erect position. The second sound was muffled, and a loud systolic bellows-sound was heard along the course of the aorta. Here the aortic valves were different in size, apparently from disease, and not as a congenital malformation. There was atheroma of the aorta, and disease of the coronary arteries.

Dr. Hare detailed

A CASE OF CANCER OF THE OMENTUM IN A MAN AGED SIXTY-SIX,

When first admitted into the hospital, he was suffering under ascites. None of the abdominal viscera could be found to be enlarged, but a tumour, apparently of the omentum, was felt, which was extremely painful, so painful, in fact, that the patient attempted to destroy himself by cutting his throat after leaving the hospital. He was brought back, and died from the effects of the wound. On opening the body, a large cancerous tumour of the omentum was found, divided into sacs, from one of which twelve pints of fluid escaped. The tumour was adherent to the walls of the abdomen, from which, however, it could be separated without much difficulty.

Mr. Hacon gave the particulars of a case of

SUPPURATIVE INFLAMMATION OF THE PECTORAL MUSCLE EXTENDING TO THE DIAPHRAGM.

It came on without apparent cause. The patient complained of great pain, and difficulty in breathing; and, at first, an abscess of the liver was suspected. An extensive crucial incision was made, but no matter escaped. On examination after death, the intermuscular cellular tissue of the pectoral, intercostals, and diaphragm, was found in a state of suppurative inflammation, bearing great resemblance to what is seen in a carbuncle or boil. This state was traced through the wall of the chest, and deposits of a solid consistency, and whitish colour, were found pervading the adjoining portions of the diaphragm.

MEDICAL SOCIETY OF LONDON.

October 15, 1853.

Dr. Forbes Winslow, President, in the Chair.

Several gentlemen were proposed or elected as ordinary Fellows of the Society.

TAPPING FOR ASCITES IN AN INFANT AGED NINE WEEKS.

Dr. Wynn related the particulars of a case in which he had performed the operation of paracentesis abdominis, for the relief of ascites, in an infant only nine weeks of age. The operation was repeated in the following month, when another quart of fluid was removed, but a small vessel was wounded, and ultimately the patient sank from exhaustion. A *post-mortem* examination revealed the presence of a friable condition of the liver, which Dr. Wynn believed to be congenital.

Dr. Routh presented to the notice of the Fellows a specimen of the huile de cade, the pyroligneous oil of juniper, and also the juniper tar ointment, as local remedies for eczema rubrum. He had used them during twelve months with great advantage.

IMPERFORATE ANUS, WITH FISTULOUS OPENING BETWEEN THE BLADDER AND RECTUM.

Mr. Henry Smith then presented an interesting preparation of the parts in imperforate anus, having also a fistulous opening between the bladder and the rectum. The infant lived thirteen days, and passed some portions of fæcal matter through the urethra. The parents objected to the performance of an operation. On a *post-mortem* examination, it was found that the rectum terminated within about one inch of the anus, was dilated, and bulging with fæcal matter. There was also a well-marked external sphincter. The opening between the bladder and the rectum was not larger than a pin's head. The right kidney and the ureter were both greatly enlarged, the latter being probably imperforate. A similar case had been related by Mr. Fergusson, and an operation having been performed, the patient lived six years, but Mr. Smith was not aware as to the precise amount of benefit which had followed the operation.

Mr. Canton considered the presence of the external sphincter in connexion with the imperforate anus, as the most interesting part of the case. He believed this circumstance to be unusual, and was of opinion that the ordinary operation should have been performed.

Mr. Coulson then read a Paper

ON SUPPURATION OF THE JOINTS FROM INFECTION OF THE BLOOD.

In this Paper, Mr. Coulson discussed the symptoms, nature, and treatment, of a peculiar affection of the joints, which comes on after amputation, puerperal fever, operations on the genito-urinary organs, etc. This disease consists of suppuration within the joints, probably of an inflammatory nature, and generally ending in death. Not long ago, it was divided into nearly as many diseases as it had exciting causes; but the author remarked, that whether of puerperal, traumatic, or other origin, the disease is one and the same, or to speak more correctly, it makes part of one and the same constitutional affection. After having related some cases which illustrated the manner in which the disease may follow the introduction of a bougie for stricture, lithotrity, parturition, and glanders, the author proceeded to describe it, and commenced with one of the most interesting and important forms, namely, that accompanying parturition. Mr. Coulson first, however, observed, that the origin, the course, the symptoms, and the morbid anatomy of articular disease, produced by purulent infection of the blood, are of a peculiar kind, different in many essential particulars from what are observed in any other form of disease of the joints. If we are to regard the disease as mere local affections, it is impossible to understand the general symptoms which accompany the disease, its cause, or its rapidly fatal result, for these are quite different from what is observed in the most violent cases of articular inflammation, developed under ordinary circumstances. Everything on the contrary in the history of the disease points to a special origin; its main features are always the same, and although many cases may be attended by symptoms which would seem to indicate a variety of origins, and justify a distinction into several forms, yet these symptoms will be found to depend on accidental circumstances, and not to vary more in individual cases than we find occurring in examples of other diseases, which depend, as this one does, on contamination of the blood. The pathology of the disease was briefly, but clearly, given. The joints affected during life, almost always contain more or less pus, and it bears no evident relation to the intensity of the local complaint, or to its duration. In many cases, purulent effusion takes place within a few hours after the first appearance of the local symptoms; and in many other cases, with so little pain, or tumefaction of the joint, as hardly to attract attention during life. The synovial membrane, however, generally presents traces of recent inflammation, though not of a severe degree; it is more or less injected, yet the false membranes of ordinary synovial inflammation are never found; one of the characters being the production of pus, in a rapid manner, with little or no inflammatory congestion of the tissues. In some cases, the synovial membrane has been found quite free from all trace of vascularity, or other lesion. This has been regarded as a proof of the non-inflammatory nature of the disease; but it seems to Mr. Coulson more rational to conclude, that the injection of the vessels had disappeared after the secretion of pus; and it is known that purulent inflammation, under certain circumstances, is of a very evanescent character. In one case, the synovial membrane round the head of the thigh bone, was evidently injected before any effusion of pus had taken place, and

it is easy to understand that this injection might have disappeared in a day or two, if the extremities of the capillary vessels had become modified by the changes which ensue on suppuration. The cartilages, ligaments, and other tissues composing the joint, are usually in a healthy state, for the disease is essentially a purulent inflammation of the synovial membrane. In many cases, the cartilaginous coverings of the bones are found to have been more or less eroded or absorbed, and in a very few examples the ulceration has involved the substance of the bone itself. The patient, however, is generally cut off before the disease proceeds so far. The peri-articular tissues are often the seat of sero-purulent infiltration, or of circumscribed abcesses, which are also found in the muscles of the limb, and sometimes with very extensive disorganisation of the parts. Having thus pointed out the general morbid anatomy of the disease, Mr. Coulson proceeded to show that, when it occurs in puerperal females, it has generally been confounded, by accoucheurs, with puerperal fever, or described as a distinct complaint. This is an error. Puerperal women are often attacked by purulent inflammation of the joints, without any of the symptoms which really indicate puerperal fever; but the constitutional symptoms of the purulent infection on which the articular disease depends, have been mistaken for those of anomalous puerperal fever, which they resemble to a certain degree. On the other hand, puerperal fever, as is well known, is frequently complicated with purulent inflammation of the veins of the uterus, pelvis, etc., and in such cases there may be secondary articular disease, excited, not by the fever, but by the inflammatory condition of the venous tissues which accompanies it as a complication. Here there is purulent infection of the blood superadded to puerperal fever; the disease is a complicated one, the symptoms peculiar to each element become masked, and they may be readily confounded. Yet, by remembering the course and symptoms of uncomplicated purulent infection, we generally arrive at the truth. That purulent inflammation of the joints does not essentially depend on puerperal fever, but on some other condition, is shown by the fact that it occurs after abortion, in the early months of pregnancy, when improper means have been employed to evacuate the uterus, and when nothing resembling puerperal fever occurs. Here, there are all the essential symptoms of purulent infection followed by articular disease; and, although these unfortunate cases, from obvious reasons, are seldom investigated after death, yet the symptoms during life leave no doubt of their identity with purulent infection of the blood. Having noticed the peculiar symptoms which distinguish this form of purulent inflammation of the joints, the author insists on the necessity of not confining our *post-mortem* examination to the affected joint, but extending it to other parts of the body. The true nature of the disease is then revealed, for circumscribed abscesses or purulent infiltrations are almost always found in the lungs, liver, kidneys, or brain, in the heart, in the cellular tissue or muscles, in the uterus or some of its appendages, and, finally, in the minute veins of the spongy tissue of the bones. It should also be taken into account, that this and other forms of secondary purulent inflammation of joints occur under circumstances quite different from those attending other forms of articular disease. General states of the constitution, such as those arising from gout, rheumatism, syphilis, scrofula, etc., have no influence here; nor can it be traced to any of the immediate causes of ordinary synovial inflammation, as external violence, cold, moisture, etc. It often attacks the healthiest individuals in the prime of life, after amputation of a limb, for example. Unlike other articular diseases of constitutional origin, it is never chronic, but always of a most acute character; and when connected with the puerperal state, it may appear to be epidemic. In describing the symptoms, Mr. Coulson alluded to the shiverings which are one of the earliest symptoms of the disease. These are so severe, and recur in such a manner from day to day as successive depositions of pus take place, that experienced practitioners have mistaken the disease for intermittent fever. The rigors continue sometimes for half-an-hour, and are followed by slight perspiration; they may recur at determined intervals, but generally cease on the second or third day; after which they appear at very uncertain periods, or are noticed no longer. The fever also may be mistaken for typhoid fever; but, as the author observes, no medical man accustomed to watch the slow development and gradual progress of true typhoid fever, could be deceived by the points of resemblance. In a great number of cases, the respiratory organs are involved; the breathing becomes irregular and accelerated in paroxysms; there is a dry, hacking cough, with subcrepitating râle, and, in some few cases, with the exhalation of a purulent odour from the breath. These paroxysms of oppressed and hurried breathing, with short, dry cough, are extremely characteristic; they are very often preceded at each return by rigors; and the author considers them as indicative of successive depositions of pus in the substance of the lungs. It is easy to understand that the symptoms may be modified, according to the peculiar circumstances under which the disease may have been developed in the first instance. It may arise, for example, after injuries of the brain, when the early symptoms will be complicated with, and masked by, those of cerebral irritation, or of actual inflammation of the meninges. In cases of this kind, the secondary deposit often occupies the substance of the liver to a great extent, and, if the cerebral symptoms be absent or slight, the disease may be mistaken for an acute affection of the liver. As for the puerperal form, Mr. Coulson drew a distinction which seems important for understanding the true nature of the disease. In many cases it appears as a complication of puerperal fever, especially in that form depending on uterine phlebitis, and then all the early symptoms are masked by those of the puerperal fever, from which it is almost impossible to separate them. But, in other cases, although the woman has been recently delivered, she does not present the ordinary symptoms of the fever just mentioned; she appears to be doing well for several days; there is no tenderness or tumefaction about the lower part of the belly; but after a few paroxysms of shivering, with anxiety of countenance and acceleration of the pulse, the joints suddenly become painful, the tongue gets dry, and the symptoms of purulent infection follow the course already described. In this uncomplicated state, the disease receives no peculiar stamp from the puerperal state, but presents exactly the same symptoms and runs the same course as it does when affecting males after injuries to, or operations on, the genito-urinary organs. There is, however, this difference in the results, that the disease is of a much more fatal character in puerperal females than in males,—a fact admitting of explanation from the circumstance of its being so frequently complicated in the female with puerperal fever; whereas, in the male, it arises from laceration of the urethra, irritation of that canal or of the bladder, and from other injuries which are not in themselves of a dangerous character. Puerperal synovitis in females recently delivered is a very fatal disease. Dr. Merriman, Professor Cruveilhier, and other writers state, that they never saw a patient recover. The author, however, quotes a case of recovery related by Mr. M'Whinnie. The nature of the disease was next discussed; and on this point, Mr. Coulson, after repeating the opinion which he gave many years ago, in his work on Diseases of the Hip-joint, observes: "I would add from further experience, that I now believe the contamination of the blood to depend on the admixture of pus, as such, circulating with the vital fluid. The pus is not absorbed, but admitted directly into the circulation through some breach of surface." The following reasons may be adduced in support of this view:—In the great majority of cases the formation of pus in some tissue primarily affected can be proved by dissection. A few cases are on record where no trace of pus could be discovered in those tissues supposed to be the primary seat of disease, and hence it has been argued that these cases are sufficient to justify us in removing the disease from purulent infection of the blood. To this it may be answered, that the identity of course, symptoms and results in various cases, naturally leads to the inference of an identity of immediate causes; and that as our knowledge extends under the influence of more careful and accurate *post-mortem* examinations, numerous cases are now shown to belong to this class of purulent infection; whereas, formerly, they were either inexplicable, or referred to causes from which no rational explanation of their phenomena could be obtained; thus Dr. Marshall Hall was unable to understand why the eye should become inflamed after parturition, and still less why inflammation of the globe should prove rapidly fatal. These points are now satisfactorily explained by showing, that such inflammation of the eye is not peculiar to puerperal females, but that it occurs in other cases of purulent infection. Again, the typhoid symptoms under which many patients sink after amputation, after trephining, etc.; and the abscesses discovered after death in their lungs, livers, etc., did not admit of explanation, until it was shown that suppurative inflammation existed in all these cases in the cancellous structure of the bones. The same remark applies to the few cases in which puerperal disease of the joints existed without any morbid alteration in the structure of the uterine veins. This exemption of the uterine veins has been considered sufficient by accoucheurs to reject the theory of purulent infection; but the surgeon not accustomed to confine his investigations to the uterus alone would not have remained satisfied unless every other organ in the pelvis and the whole genito-urinary system had been carefully examined. Inflammation of the mammary veins or of those of the rectum is just as capable of exciting purulent infection as inflammation of the vessels of the uterus or its appendages. If these views be correct, it is evident that the treatment of purulent synovitis from infection of the blood becomes a secondary consideration. The

surgeon's chief efforts should be directed towards counteracting the poisonous condition of the blood which has given rise to the constitutional disease. The local malady is merely one of the effects of the constitutional one. Various modes of treatment, both general and local, have been tried by the author and by other practitioners, but it is to be regretted that none have been attended with any benefit.

Dr. Copland, in a very excellent and instructive speech, concurred with the author in his views of the pathology and treatment of these cases of "consecutive abscess." Since he wrote the article on consecutive abscess, he had had the opportunity of seeing many such cases, at an Institution with which he had been for many years connected. In private practice, also, he had repeatedly met with it, and related the particulars of a case which occurred in the wife of a wealthy publican. This patient had been afflicted with a sanious form of leucorrhœa, accompanied, or caused, by ulceration of the os uteri. After some time, inflammation of the eye set in, which was followed by deposition of pus between the layers of the cornea, then within the eye-ball, and, at length, by complete destruction of the organ. Subsequently, she had purulent effusions into both knee-joints, and finally sank. A *post-mortem* examination established the truth of the above statements. He had also, thirty years ago, attended a case of small-pox, with Mr. Dendy, in which purulent deposits into the elbow-joint occurred. The deposited matter may not be pus alone, but sanious fluids, such as pass off from a broken surface, and their absorption is materially facilitated by an enfeebled condition of system. He then mentioned three indications as to treatment. First, to support the system to the utmost extent; second, to neutralise or counteract the action of the contaminating matter; and third, to ameliorate the local symptoms. He believed that the last-mentioned indication is best fulfilled by the local application of cold turpentine, although it should induce vesiccation. The two former indications are applicable to almost every case, and are met by the free administration of the various forms of cinchona with alkalies and antiseptics. He particularly referred to the propriety of exhibiting serpentaria and capsicum with the tincture of cinchona, or of conjoining the chlorate or carbonate of potass with decoction of bark. He also commended every attempt to depurate the system by a free action of the liver, kidney, and bowels; and believed, that if this disease were recognised in its earliest manifestations, a decided plan of treatment might cure it.

Dr. Wynn believed, that the induction of any animal poison into the blood might produce this disease; and referred to a midwifery case, to which he considered that he had carried it, by having examined the placenta and uterus of another patient, although the latter had not be afflicted with the disease.

Mr. Harrison was unable to detect the source of the materies morbi in some of the cases referred to by the author, and particularly in that of M. Velpeau. He recognised it in the consecutive abscess following gonnorrhœal rheumatism, and also in that following small-pox, as mentioned by Dr. Copland; and asked Mr. Coulson to state his opinion on that point in reference to other cases.

Dr. Hare called in question the validity of the statement made by Messrs. Gulliver and Dalrymple, that they had demonstrated the existence of pus globules in the blood in cases of pyæmia. He knew of no test whereby a pus globule and a white blood corpuscle could be distinguished, and called upon the author to give the proofs of his statement. He also particularly referred to the difficulty which, in the absence of the history of the case, attends the diagnosis of this disease from typhoid fever, notwithstanding that the former is sometimes accompanied by the sweet odour of the breath, and the latter by the characteristic rose-coloured spots. In inflammation of the pericardium following this disease, it would be distinguished from that induced by rheumatism by the deposit of pus and not of lymph upon the inflamed surface. In other cases, the occurrence of an accident would lead to a correct diagnosis, as in one which he had successfully treated by stimulants, succeeding to a rupture of the urethra by the introduction of a bougie.

Mr. Henry Lee also objected to the possibility of distinguishing a pus from a white blood cell floating in the blood. He discussed the question as to the mode by which the contaminating matter entered the blood; and stated his belief, that the matter itself is formed within the veins. These structures are first plugged up with fibrin, solid at the outside, and semi-fluid in the centre; the whole of which, becoming eventually fluid, is carried into the circulation. The cells to which reference had been made were found in this semi-fluid substance, but he did not believe them to be pus cells, whether examined in the clot, or after their entrance into the blood. He considered, in reference to their nature, that the presence of an intervening membrane in the walls of the capillaries was merely an accidental, and not an essential circumstance. The disease is not essentially one of inflammation, and does not call for antiphlogistic treatment. He believed opium in full doses to be our best remedy.

Dr. Bird desired the author to state if he believed this poisoned condition of the blood to attend all cases of gonorrhœal rheumatism. He (Dr. Bird) had attended fifty cases, in which no such serious complication existed. He referred to two distinct classes of such cases, only one of which usually ended in suppuration of the joints, as has been pointed out by the French physicians, and particularly by Fleury and Andral; but he denied the statement, that in all cases of suppuration of the joints there was any contamination of the blood. He, in common with all the speakers, approved of the exhibition of bark in decoction, or quinine.

Mr. Coulson, in reply, stated that his object had been less to show how the purulent infection had occurred as to prove that the symptoms do depend upon the purulent infection; yet he had no doubt that the infection arose from a breach of surface, and that all cases of gonorrhœal rheumatism should be referred to the same classes of diseases.

After an animated and interesting discussion, and a general approval of the Paper, the Society adjourned.

MEDICAL NEWS.

Oxford University.—The Regius Professor of Physic commences a course of lectures on Anatomy and Physiology on Monday, the 31st inst. Gentlemen desiring to attend these lectures are to call on the Professor, at his residence, on or before Saturday, the 29th inst. The Clinical Professor of Medicine commences his next course of instruction at the Radcliffe Infirmary, at one o'clock, on Tuesday, Nov. 1. Those students of medicine (non-academics) who desire to attend these lectures will be required to exhibit the written consent of the parties to whom their services, as pupils, are legally due.

Cambridge University.—The following Grace passed the Senate:—To appoint Dr. Paget, Caius College, Examiner for Medical Degrees during the ensuing year. The Woodwardian Professor will commence his course of Geological Lectures on Friday, October 28, at twelve o'clock. The lectures will be given five days a-week, *i.e.*, Monday, Tuesday, Wednesday, Friday, and Saturday, at the same hour, in the Geological Museum, till the end of the course.

Fellowship of the College.—The following members of the Royal College of Surgeons were elected "Fellows" at a meeting of the Council on the 13th inst., viz. :—

Name. Residence.	Date of Diploma.
Bennett, Francis, Gateshead	Feb. 3, 1832
Bickersteth, H., Cape Town, South Africa	Jan. 5, 1838
Brown, Samuel William, Lewisham	June 1, 1827
Brown, William Henry, Lewisham	Aug. 26, 1836
Burlton, Thomas, Leominster	Nov. 20, 1835
Chapman, John Strange, Army	Dec. 9, 1825
Clayton, Oscar Moore Passey, Percy-street	May 11, 1838
Coe, Thomas, Bury St. Edmunds	July 4, 1838
Crouch, John, Bruton, Somerset	Nov. 15, 1833
Daglish, George, Wigan, Lancashire	Apr. 20, 1827
Dickenson, John, Wrexham	Mar. 20, 1835
Dulley, Benjamin, Wellingborough	Jan. 28, 1829
Edwards, Charles, Cheltenham	Aug. 24, 1838
Evans, Edward, Cardiff	Mar. 21, 1834
Fry, Frederic, Maidstone	July 2, 1830
Hands, Benjamin, Hornsey, Middlesex	Sept. 3, 1819
Haslehurst, Thomas, Claverley, Salop	Aug. 18, 1826
Hayward, Henry, Aylesbury	May 8, 1835
Howitt, Thomas, Lancaster	Apr. 29, 1831
Howitt, William, Preston	Apr. 3, 1833
Jackson, Mark Wilson, Stamford-Baron	May 26, 1826
Jackson, William, Penrith	Dec. 2, 1814
Jones, Robert, Long Melford	Dec. 1, 1820
Lewis, Thomas, Gosport	Aug. 20, 1813
Major, William, Camberwell	Oct. 4, 1833
Piper, Stephen Edward, Darlington	June 22, 1838
Rogers, Arnold, Hanover-square	Apr. 16, 1830
Siddeley, Thomas, Leigh, Lancashire	Dec. 15, 1820
Sopwith, Henry Lindsell, Tunbridge Wells	Apr. 28, 1835
Southam, George, Salford, Manchester	July 20, 1838
Wells, Warrick Walter, Bengal Army	May 8, 1835
Winchester, W. H. B, Westbourn-terrace-road	Feb. 16, 1838

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma, were

admitted members of the College, at the meeting of the Court of Examiners on the 14th inst. :—

Fulcher, George Augustus, Finchley, Middlesex.
Hadaway, James, St. Nicholas, Isle of Thanet.
Kearney, James, Calcutta.
Powell, Frank, Chichester, Sussex.
Smale, George Edmund, Plymouth.
Stanley, St. John, Shifnal, Shropshire.
Sturges, Charles, Sidney-square, Mile-end.
Thomas, Richard Henry, Ibstock, Leicestershire.

Licentiates in Midwifery.—At a meeting of the Board of Examiners in Midwifery of the Royal College of Surgeons of England, on the 12th inst., the following gentlemen having undergone the necessary examinations, were admitted Licentiates :—

Beale, John Samuel, Harrow-road, diploma of membership dated December 11, 1846.
Duka, Theodore, India, October 7, 1853.
Hester, James, Oxford, October 7, 1853.
Kerr, Benjamin, Cowes, Isle of Wight, November 5, 1852.
Knaggs, Robert, Swindon, July 19, 1852.
Marley, Henry Frederick, Padstowe, April 29, 1853.
Peete, Thomas, Cannon-street-road, July 17, 1851.
Sparke, George Whitefield, Finsbury, October 7, 1853.
Tomlinson, Thomas, Maldon, July 11, 1853.
Wiglesworth, Thomas, Coleford, June 18, 1852.

The College of Surgeons.—The improvements at the Royal College of Surgeons are nearly completed. In the last session, as appears by a recently-issued Parliamentary paper, 15,000*l.* was paid for enlarging the theatre.

APPOINTMENTS.

German Hospital, Dalston.—Mr. de Meric was elected Surgeon to this Institution on Saturday last.

Military.—47th Foot: William Alexander White, M.D., to be Assistant-Surgeon, vice Mackenzie, who resigns. 93rd Foot: Assistant-Surgeon William Sinclair, from the Staff, to be Assistant-Surgeon, vice O'Neill, who resigns.

Naval.—Surgeon: Hugh Jameson (1830), formerly serving in the Rodney, 90, to the Neptune, 120, guardship of ordinary at Portsmouth.

DEATHS.

Thompson.—Sept. 25, at Bengal, Sir James Thompson, K.C.B., suddenly, of apoplexy, having been struck down by this disease while at his duty in the Medical Board Office. Sir James was Physician-General, and had seen service in Java, Affghanistan, Assam, China, and in the first Burmese war. He was universally beloved, and his sudden death had cast a deep gloom over society at large. His death brings Superintending-Surgeon Clapperton into the Board, and gives Senior-Surgeon Forsyth a superintending surgeoncy.

Loy.—Oct. 9, John Glover Loy, M.D., aged 23, eldest son of George Merryweather, Esq., M.D., of Whitby, and grandson of John Glover Loy, Esq., M.D., after two years of lingering illness.

Goold.—By the wreck of the Annie Jane, Francis Goold, Esq., surgeon.

King's College.—The Introductory Address of the King's College Medical Society was delivered in the Library, on Wednesday last, by Dr. Griffith, Vice-President. As it is probable that Dr. Griffith's Address will be published (as we understand), in compliance with the request of those present, we refrain from giving any abstract.

East Surrey Cholera Society.—The first meeting of this Society was held at Richmond, Oct. 18; Dr. Willis, of Barnes, in the chair. An able address was read by Mr. Richardson, of Mortlake, who originated the Society. Dr. Willis was elected President, and a Council and other officers appointed. We should be glad to see Societies of this kind, for the collection of information on cholera in each district, established in all parts of the country.

Yellow Fever.—West Indies.—At Trinidad the fever was said to be abating. The *Trinidadian* says, that the extraordinary state of the atmosphere was favourable to vegetation, but dangerous to animal life and health. The labouring population had suffered from malignant fevers. In the San Fernando district the epidemic had disappeared, but intermittent fevers were remarkably prevalent. St. Lucia was free from epidemic. At Grenada the weather was warm, but the colony free from epidemic disease. In St. Thomas the weather was very hot, but the yellow fever had disappeared. The ravages of the yellow fever were ceasing in Montserrat.

Health of the Russian Troops.—At this moment, it is said, the Russian army has more than 15,000 sick; not from cholera, but dysentery. About 7,000 troops are in the Wallachian hospitals.

Naval.—Malta, Oct. 10.—The British squadron is far healthier than it was a month ago, but sickness still prevails. On board the Vengeance two fatal cases had occurred, and she had been sent to Tenedos to recruit the health of her crew.

The *Gazette des Hôpitaux*, one of the oldest medical journals in France, has just received a donation of 10,000f. a year, from a physician attached to one of the Hospitals in Paris, on condition, 1st, That the donor's name shall remain inviolably secret; 2nd, That 3000f. of the sum shall be employed in encouraging the authors of useful and practical papers published in the *Gazette*; and, 3rd, That the remaining 7000f. shall be employed in distributing copies of the *Gazette* to physicians or students who are too poor to pay the whole or any part of the subscription, the simple declaration of the applicants to that effect being all that is to be required.

Verdict of Manslaughter against an Unqualified Practitioner.—A person calling himself Dr. Thom, lately practising as a surgeon at Ellon, was charged with culpable homicide, for having given a drachm of vinum opii to a child six months and a-half old, the child having died a few hours afterwards. The druggist who made up the prescription went to the house of Dr. Thorn, to satisfy himself that the Doctor meant what he had written, and Dr. Thom assured him that he did. Dr. Watson, of Ellon, Mr. S. Smith, of Leeds, and Dr. Jamieson, of Aberden, all concurred in their evidence, that the opium was the cause of death. Two declarations of the prisoner were read, in which he stated, that he had administered about fifteen drops of the wine of opium, which he considered not an over-dose. He also stated, that he had at home a diploma of Master of Surgery from the Medical School at Glasgow. Mr. Cosens, prisoner's counsel, addressed the Jury, dwelling on 'he fact, that no culpable design was proved, and hence the prisoner could not be held guilty of culpable homicide. Lord Ivory summed up. There was no evidence of the prisoner being a physician entitled to practise; and if he had, as stated in the declaration, a diploma from Glasgow, it should have been produced. The plea of the prisoner's counsel, that there was no culpable design on the part of the prisoner, was of no avail; that was not charged; if a culpable design existed the charge would have been that of murder. But if any one assumed functions, such as the prisoner had done, and, either from ignorance or negligence, death followed, such person was guilty of culpable homicide. His Lordship then went over the evidence in a lucid address. The Jury, after a very brief consultation, returned a unanimous verdict of "Guilty as libelled." Lord Ivory gave a suitable admonition to the prisoner, and pronounced sentence of twelve months' imprisonment.

Mortality Notabilia.—The number of deaths registered in the metropolitan districts in the week that ended on Saturday was 1039. In the ten corresponding weeks of the years 1843-52, the average number was 949, which, if raised in proportion to increase of population, will give 1044. A comparison of the actual and estimated results, shows that London last week suffered not more than its ordinary rate of mortality.

Births.—Last week the births of 812 boys and 761 girls, in all 1573 children, were registered in London. The average number in eight corresponding weeks of 1845-52 was 1561.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·587 in. The mean temperature was 52°, which is slightly above the average of the same week in 38 years. The wind blew generally from the north-east. Amount of horizontal movement of the air 205 miles; rain 0·94 ins.

DEATHS *in the Metropolis for the week ending Saturday, October* 15, 1853.

Causes of Death.	Oct. 15. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	511	342	184	1039	9491
Specified Causes	507	342	183	1034	9420
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	212	67	12	291	2519
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	27	22	50	462
3. Tubercular Diseases	64	108	1	173	1703
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	39	31	28	98	1014
5. Diseases of the Heart and Blood-vessels	1	26	12	39	317
6. Diseases of the Lungs and of the other Organs of Respiration ...	92	31	27	150	1238
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	21	19	21	61	636
8. Diseases of the Kidneys, etc. ...	...	8	9	17	102
9. Childbirth, Diseases of the Uterus	...	9	1	10	99
10. Rheumatism Diseases of the Bones, Joints, etc.	2	3	3	8	64
11. Diseases of the Skin, Cellular Tissue, etc.	1	3	...	4	14
12. Malformations	5	...	...	5	32
13. Premature Birth and Debility ...	24	...	...	24	197
14. Atrophy	27	2	5	34	223
15. Age	...	...	40	10	457
16. Sudden	4	2	...	7	79
17. Violence, Privation, Cold, and Intemperance	14	6	2	23	234
Causes not Specified	4	...	1	5	71

BOOKS RECEIVED.

Transactions of the Pathological Society of London. Vol. IV. Including the Report of the Proceedings for the Session 1852-3. London. 1853. Pp. 286. 8vo.

Thoughts on Cholera. By Edwin Hearne, M.B. Lond. London: Churchill. 1853. Pp. 56.

Cholera; its Physical Phenomena, Causes, and Treatment. By J. T. Mitchell, F.R.C.S. London: Pigott. 1853. Pp. 16.

Cholera; its Nature, Treatment, and Sanitary Requirements. By S. Scott Alison, M.D. London. 1853. Pp. 35.

The American Journal of Dental Science. July, 1853.

Transactions of the Medical and Physical Society of Bombay, 1851-2. Bombay. 1853. Pp. 354.

Handbook of Organic Analysis. By Justus Von Liebig. Edited by A. W. Hofmann, Ph. D., F.R.S. London. 1853. Pp. 136.

Advantages of the Starched Apparatus in Fractures and Diseases of Joints. By J. S. Gamgee. London. 1853. Pp. 90.

The Diseases of the Chest and Air-passages of the Horse. By W. Percivall, M.R.C.S. London. 1853. Pp. 224.

Valentin's Text-book of Physiology. Translated by W. Brinton, M.D. Part II. London 1853.

Coup d'œil Sur la Chirurgie Anglaise,—des Hernies Curales. Par M. Le Docteur A. Deville. Paris. 1853. Pp. 98.

Etudes Critiques Sur la Surdi-Mutité. Par M. E. Hubert Valleroux. Paris. 1853. Pp. 70.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your number, published October 15, is a case of duplicate placenta, in which it is reported, that in a quarter of an hour after the expulsion of the fœtus, the placenta was thrown off. The uterus still feeling full and hard, a second child was diagnosed. Query.—Is it possible that the placenta could be expelled before the birth of the second child, unless situated over the os uteri; or in other words, could the uterus so contract as to dislodge one placenta, a second fœtus remaining in utero at full growth. I am, &c. NOVICE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Your inquirer as to matters connected with the medical department of the Militia, will find answers to all the questions in the first part of his letter, on reference to "The Militia Regulations, made by the Secretary-at-War," bearing date, July, 1853, which he can obtain from (I presume he is a militia officer) the adjutant of his regiment. As regards the second part of his letter, the information he there seeks must be influenced by the regulations made by the colonels of their respective regiments.

The Surgeon wears the same dress and appointments as Surgeon in the line. The Assistant-Surgeon ditto.

If the Assistant-Surgeon holds also the commission of ensign or lieutenant, and his colonel requires him to do regimental duty, he must provide himself with the uniform of his grade; it will be borne in mind, that he receives the pay of both ranks—Assistant-Surgeon and Subaltern.

The cost of outfit of course varies with different regiments, and the regulations of the commanding officer; but about £40 would be the price of the outfit. This can be best obtained, and, in the end, more cheaply, of a London tailor accustomed to military outfits, than of a provincial tradesman.

I enclose you my card, and, if I can give any further information to your correspondent, or any other, I will, if written to, with pleasure reply.

I am, &c. A MILITIA SURGEON.

ON DEATH FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the case of Death from Chloroform reported in your last Number, I can find no account of the state of respiration before or about the time of death. Now this I take to be a great omission, and do not doubt but that a large number of my medical brethren would be glad, with me, to have better information on this particular. Notwithstanding the letter of your correspondent "Surgeon," I shall still continue to pay more attention to the respiration than to the circulation, as an indication of the "first symptom of impending danger," for I believe syncope to be an exception as the terminal influence of Chloroform; and in asphyxia (which I believe to be the more common) the condition of the lungs found after death, is a sufficient proof of the heart's action being carried on for some time after the muscles of respiration have ceased to act. In death from asphyxia, therefore, the cessation of the pulse as an indication of death, is good; as a premonitory symptom utterly useless. I am, &c.

Oct. 18, 1853. WATCH.

[To the Editor of the Medical Times and Gazette.]

SIR,—Among the remarks made by the meeting at Newcastle, in your Number of the 1st inst., Mr. Newton is made to say that "cholera was to be managed as easily as the hooping cough or scarlatina." If so, why has there been in every place in which the disease has appeared, so great a mortality? The Profession would like to know the number of cases which have occurred in Newcastle, and also the number of deaths. We should like, also, to know the treatment pursued by the different medical men in the town. It is greatly to be desired that they would furnish the Profession with accurate statistics on these points as soon as possible, not omitting the plan of treatment recommended by the missionaries of the Board of Health. I am, &c. L.

Oct. 17, 1853.

Dr. Nourse's paper has been unavoidably delayed, with some others, by the necessary insertion of cholera communications immediately.

D. Newcastle.—No doubt the inquiry will be granted.

Old Physic is a Homœopathist in disguise. Surely it cannot be unfair in a reviewer to point out that Dr. Henderson "parts company with his oracle whenever he finds the arguments against him too strong to be refuted;" and we think, that in a thick and thin supporter of Hahnemann's doctrines, such a proceeding shows a "disingenuous adroitness." The analogy drawn between Jenner and Hahnemann is pure nonsense: the first makes a series of experimental researches on which he founds a beneficial practice, without any hypothesis; the second makes a number of absurd hypotheses, on which he founds a *do-nothing* treatment, and then he boasts, that people do not uniformly die when left to themselves. Again, vaccination is admitted almost universally to be prophylactic of small-pox, as proved by innumerable instances; homœopathy, on the contrary, is gradually dying away in the countries where it was first promulgated, and its chief advocates are not certainly to be found among the deep thinkers or the best practitioners. In fact, its truth can be proved neither by theory nor by practice. But, to answer "Old Physic," would be fighting with a shadow, and it is not worth the trouble.

We are sorry we had not space to insert *Dr. Willing's* cases of Cholera treated by Sulphuric Acid, this week.

Mr. Sparrow.—We will attend to the case.

Mr. Morriss.—Unless officially employed, the right of examining private premises cannot be insisted on.

Dr. Borrett.—The first case was acknowledged. The second paper has also been received.

Mr. Barrett.—The articles on the Adulteration of Drugs will be continued occasionally, but the most important drugs only will be examined for the future.

Pract, Lancaster.—The suggestion shall be borne in mind.

If *Alpha* will ask his questions in a letter to the Secretary of the University of London he will obtain an official reply.

Dr. Ramsbotham's excellent letter on the Vaccination Act shall be published next week.

Staff-Surgeon Hunter.—We have not room for the letter this week. Is our Correspondent's name to be appended to it?

If James T. will send us his name and address, he shall receive a private communication.

A Reader.—The Work of Mr. Erasmus Wilson.

Mr. Weston.—It will not be advisable to renew a personal discussion.

[To the Editor of the Medical Times and Gazette.]

SIR,—Pray allow me to correct a slight error in your Journal of last week, respecting the valves in the splenic veins. I have never seen them in the "Carnaria," as stated by your reporter; nor do I think that they are present in this class of animals. I am, &c.

21, Parliament-street, Oct. 19, 1853. EDWARDS CRISP.

B. W.—The patient appears to have been poisoned. Washing down pills of acetate of lead and opium, with a draught containing carbonate of ammonia, would be equivalent to poisoning a patient with carbonate of lead.

"CONSUMPTION, ASTHMA, DROPSY, &c.

"Dr. Melhuish having been, for many years, more particularly engaged in the treatment of all functional and structural diseases of the Heart, Lungs, Liver, Stomach, and Digestive Organs, publicly announces that he may be consulted by patients suffering from the above diseases, either at their own residences, or at his house, 60, York-road, Lambeth.

"N.B. Dr. M. Continues giving advice gratuitously to the poor thus afflicted every morning (Sunday excepted) from 9 until 11.

"W. S. WORBOYS,
CHEMIST AND DRUGGIST,
76, NEW CUT, LAMBETH,
TWO DOORS FROM PEEL'S PRINTING OFFICE."

Dr. Melhuish appears in the Directories as a contributor to the Medical Journals. He should also add that he is a partner of Mr. Worboys, of the New Cut.

Communications from Dr. RANSOM, Nottingham; Dr. P. FRANK, Manchester; Mr. HADWEN, Lincoln; Mr. TEALE, Leeds; Mr. WILDE, Dublin; OUR GERMAN CORRESPONDENT; A MEDICAL STUDENT; and A REPORT OF THE NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY, are in type, and will appear very shortly.

COMMUNICATIONS have been received from—

Messrs. SHAW and Co.; Dr. W. SMART, R.N.; OLD PHYSIC; HOLMES COOTE, Esq.; Dr. P. FRANK, Dantzic; T. W. WILLIAMS, Esq., Denbigh; G. S. MORRISS, Esq., Sydenham; W. MOSS, Esq, Tunbridge Wells; Mr. MITCHELL; Dr. MELHUISH; Staff-Surgeon HUNTER; SECRETARY OF THE MEDICAL AND CHIRURGICAL SOCIETY; S. T. SPEER, Esq., Cheltenham; J. H. AVELING, Esq.; W. WOODMAN, Esq.; WM. COULSON, Esq.; SECRETARY OF THE MEDICAL AND PHYSICAL SOCIETY OF BOMBAY; Mr. BATE, of Plymouth; Mr. GIBB, of Newcastle; Dr. HOFMANN, of the Royal College of Chemistry; Dr. R. QUAIN, etc. etc.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture XIV.

CONSTITUTION OF ALCOHOL AND ITS DERIVATIVES.

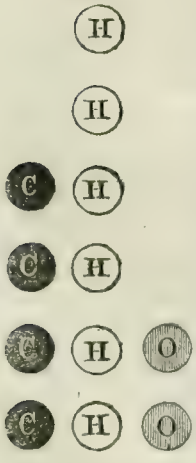
Gentlemen,—In the last four lectures, I have brought under your notice a series of componnds equally interesting for their extensive use in common life and for the characters which they present in a purely scientific point of view. I have given you a succinct account of the composition and of the principal properties of the individual members of this group which embraces sugar, alcohol, and acetic acid, and I have endeavoured to trace the connexion of these substances by describing to you the remarkable process which changes sugar into alcohol (alcoholic fermentation), and the passage of the latter into acetic acid (acetic fermentation,—acetification). Chemists have not been satisfied with the elaboration of the quantitative composition of these bodies, and of the numerical relation in which they stand to each other; they have gone a step farther, and endeavoured to throw some light upon the mode in which the elements are arranged in these substances, in one word, upon their molecular constitution. These endeavours have as yet scarcely furnished satisfactory results with regard to the saccharine substances; but they have been crowned with the most perfect success in the case of alcohol and acetic acid. By the united efforts of a considerable number of inquirers, these substances have, as it were, become transparent to the mental eye which traces their internal construction, and thus affords a perception of relations which but a few years ago appeared utterly inaccessible to observation. I might give you at once the result of these researches, but I consider it more instructive to point out to you the observations on which these results are based. Once in the possession of the line of argument, you will be enabled to draw the conclusion yourselves.

Without entering into any details with regard to sugar, whose molecular constitution, as I have stated, is still shrouded in darkness, I will proceed forthwith to alcohol. It is to the metamorphoses of this body under the influence of a variety of chemical compounds that I have now to direct your attention.

Let me remind you, first, once more of the formula

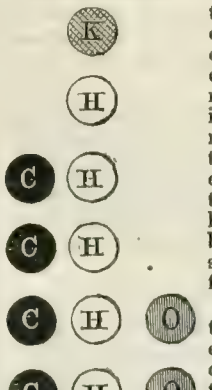
$$C_4\,H_6\,O_2$$

Alcohol.



which expresses the composition of alcohol. For reasons which you will understand bye and bye I may be allowed to represent this formula by the annexed diagram, in which the black discs designate the carbon-atoms, the white ones the hydrogen-atoms, and, lastly, the lined discs the atoms of oxygen. This diagram represents alcohol in what is called its absolute state, perfectly free from water, the absence of which may be recognised without difficulty, by means of the test which I mentioned a few days ago, namely, by anhydrous sulphate of copper retaining its white colour when left in contact with it. Alcohol thus tested is contained in this flask, into which I now introduce a few balls of potassium. A very powerful action instantaneously takes place, attended with a copious evolution of a gas which I collect by means of a delivery-tube. Its inflammability, and the product to which its combustion gives rise, show us at once that it is pure *hydrogen*. The residue in the flask, when saturated

Potassium-alcohol.



with potassium, solidifies, on cooling, to a white foliated mass, which may be obtained pure and dry by desiccation over sulphuric acid *in vacuo*. This crystalline mass has received different names; I will call it *potassium-alcohol;* its composition is illustrated by the next diagram which shows you that the new substance differs from alcohol only by containing one atom of potassium in the place of one atom of hydrogen, which was simply expelled by the potassium. We shall directly see that this compound is interesting for a variety of reasons.

It is by no means only a portion of the hydrogen in alcohol for which other elements may be substituted. By a process,—of which at present I can say only that it resembles, to a certain extent, the mode of converting a metallic oxide into a metallic sulphide,—the alcohol is transformed into an inflammable very volatile liquid, boiling at 60° C. (140° F.); lighter than water, upon which it floats; and possessing an indescribable odour, which combines all that is most unpleasant in the whole range of chemical odours. This substance, which I must despatch as quickly as possible, is called *sulphur-alcohol*, or *mercaptan*. It differs from ordinary alcohol by the two oxygen atoms of the latter being replaced by two atoms of sulphur, as seen in the subjoined pictorial representation.

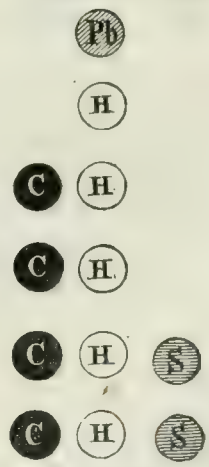
Mercaptan.

This substance exhibits a very remarkable phenomenon. When coming in contact with oxide of mercury, a powerful re-action ensues, water is formed with evolution of heat, and the red oxide of mercury is converted into a white crystalline mass, which fuses to a yellow oil, if the heat rise very high. It is, in fact, this deportment which has gained for sulphur-alcohol the name of mercaptan. This substance *captivates* the *mercury*, as it were. The white crystalline mass is called *mercaptide of mercury*.

Mercaptan produces, though less readily, similar compounds with other metals; on adding an alcoholic solution of mercaptan to a solution of acetate of lead, a yellowish white precipitate is formed, which is mercaptide of lead. The relation of these two metallic compounds to mercaptan and to alcohol is evident from the following diagrams:

Mercaptide of mercury.

Mercaptide of lead.



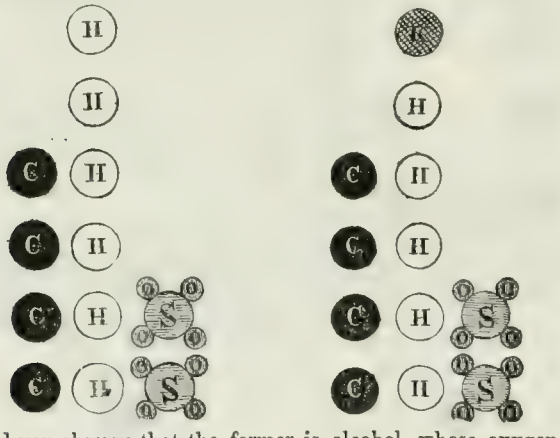
These substances are mercaptan, an atom of hydrogen of which is replaced respectively by an atom of mercury and an atom of lead, or alcohol, for the whole of whose oxygen,

sulphur has been substituted, while mercury and lead, in equivalent proportions, have taken the place of one-sixth of the hydrogen. The mercaptides of mercury and of lead are thus derived from alcohol by the replacement of two of its elements by other elements.

In the metamorphoses of alcohol, which I have brought under your notice, the elementary atoms of this substance were replaced by other elementary atoms; but very frequently compound molecules are introduced by substitution in the place of the elementary atoms of alcohol. The deportment of alcohol with sulphuric acid affords one of the most striking illustrations of this statement.

The action of sulphuric acid upon alcohol gives rise to the formation of a variety of products according to the proportions in which the two substances come in contact, and the temperature at which the re-action takes place. On mixing one part of alcohol of about 90 per cent., or, better, of absolute alcohol, with two parts of concentrated sulphuric acid, and heating the mixture to 100°,—when it does not assume this temperature, in consequence of the re-action,—the two substances combine; the solution now contains, in addition to free sulphuric acid, a peculiar acid, which is commonly called *sulphovinic acid*. By saturating the solution with carbonate of potassa, both sulphuric and sulphovinic acid are converted into potassium-compounds; the sulphate of potassa, being less soluble, crystallises out first, and leaves behind a very soluble salt, sulphovinate of potassium, which may be purified by repeated re-crystallisations. The composition of sulphovinic acid and sulphovinate of potassium may be pictorially represented as follows:—

Sulphovinic acid. Sulphovinate of potassium.

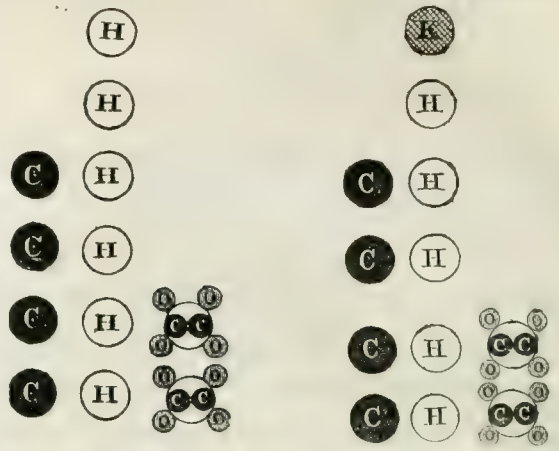


and you observe that the former is alcohol, whose oxygen atoms are replaced by compound molecules, consisting of one atom of sulphur and four of oxygen, while the latter contains, in addition, an atom of potassium, substituted for an equivalent quantity of hydrogen. It is not difficult to see that alcohol, sulphovinic acid, and sulphovinate of potassium, stand to each other in the same relation which exists between water, sulphuric acid, and the potassium-compound of the latter.

Alcohol exhibits a perfectly similar deportment with a great number of other acids. By allowing oxalic acid to act in a convenient manner upon alcohol, and subsequently neutralising the solution with carbonate of potassa, two compounds are produced, the composition of which places them in one line with sulphovinic acid and sulphovinate of potassium. These compounds are called *oxalovinic acid* and *oxalovinate of potassium*; the former being an extremely ephemeral liquid, which is decomposed even on evaporation, while the latter crystallises in scales which are perfectly insoluble in alcohol.

The analogy with sulphovinic acid and sulphovinate of potassium becomes evident by a glance at the subjoined diagrams—

Oxalovinic acid. Oxalovinate of potassium.



which show that they differ from the latter solely by the oxygen atoms in alcohol and potassium-alcohol being replaced by molecules, consisting of two atoms of carbon and four of oxygen, instead of one atom of sulphur and four of oxygen.

Even many feeble acids produce an analogous effect with alcohol, especially in the presence of powerful bases. On passing a current of carbonic acid through a concentrated solution of caustic potassa in absolute alcohol, a crystalline deposit takes place immediately, which consists of not less than three different salts, viz., carbonate of potassa, bicarbonate of potassa, and *carbovinate of potassium*. The latter salt is somewhat soluble in alcohol, but insoluble in ether; its precipitation is therefore completed by ether and the saline mixture filtered off. From this the carbovinate is extracted by means of alcohol, from which solution ether precipitates it in beautiful, somewhat fatty, scales, exhibiting the lustre of mother-of-pearl. These crystals are carbovinate of potassium,—that is, alcohol, the oxygen atoms of which are replaced by compound molecules, consisting of one atom of carbon and three of oxygen, while potassium is substituted for one atom of hydrogen.

Carbovinate of Potassium.

In a perfectly similar manner, alcohol behaves with bisulphide of carbon. A solution of potassa in absolute alcohol, when gradually mixed with bisulphide of carbon until the alkaline reaction disappears, solidifies on cooling into a silky mass of orange-yellow crystals, which are the potassium-compound of a very peculiar vinic acid, which might be called *sulphocarbovinic acid*, but which is better known as *xanthic acid*. Xanthate of potassium may be thus represented.

Xanthate of Potassium, or Sulphocarbovinate of Potassium.

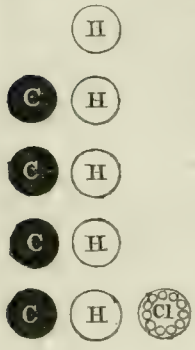
You perceive the analogy with the former compounds, and especially with the carbovinate of potassium at once; in fact, it differs from the latter only by containing two atoms of sulphur in the place of two of oxygen.

If you glance at the various diagrams which I have exhibited to you in succession, you perceive that, how great soever the variety of compounds which they represent, the type of alcohol is changed in none of them, and that they are derived from alcohol by the replacement of a comparatively small number of atoms. In fact, it is either one of the six hydrogen-atoms, or the two oxygen-atoms, or both hydrogen and oxygen, for which

a series of elementary or compound molecules have been substituted. *The four carbon-atoms and five atoms of hydrogen have remained perfectly intact.* The persistence of these atoms in alcohol under the several influences to which the remainder of its constituents gave way, has induced chemists to assume a more intimate connexion between these atoms, which affords them mutual protection as it were; in one word, to consider this association of four atoms of carbon with five atoms of hydrogen, as a compound radical, which exists in alcohol, and all the compounds which we have derived from it.

It is true in all the derivatives of alcohol which I have pointed out to you, this substance has not undergone any profound alterations, the original construction of the type and the number of molecules composing the individual members of the series remaining, as you have seen, the same. But even in cases in which these changes are of a more complicated character, the presence of the group $C_4 H_5$ may still be traced.

If absolute alcohol, kept cold by a frigorific mixture, be saturated with a current of dry hydrochloric acid gas, and then be submitted to distillation, a gas is disengaged which, after being washed with warm water, may be condensed in a tube surrounded by a frigorific mixture. In this manner a colourless liquid, of an extremely penetrating odour, is obtained. This substance—it is frequently called *hydrochloric ether*—must be preserved in sealed glass vessels, since it boils at as low a temperature as 12·5° C. (54·5° F.) The accompanying diagram represents the composition of hydrochloric ether. And you perceive at once, that, although we have no longer the number of molecules in the original alcohol-atom—this number being *twelve*, while hydrochloric ether retains only *ten* molecules—you perceive, nevertheless, that even here the group of four atoms of carbon and five of hydrogen has remained intact.

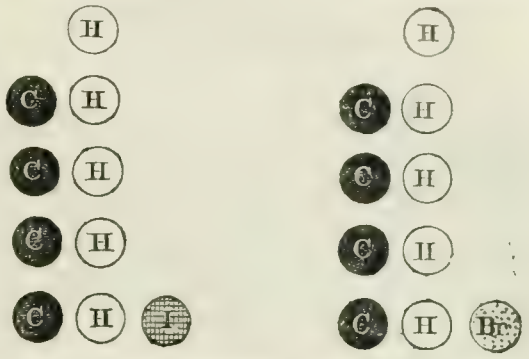


By a somewhat different process, namely, by the joint action of phosphorus and either iodine or bromine upon absolute alcohol, two substances—*hydriodic ether* and *hydrobromic ether*—are formed, which differ from hydrochloric ether only by containing iodine and bromine in the place of chlorine. As these substances have acquired considerable interest on account of the assistance which they have afforded in several recent researches, I may say a few words on the subject of their preparation. In fact, the formation of hydriodic ether is going on before your eyes. Into a flask with two necks, containing some absolute alcohol, together with a few pieces of phosphorus, is fitted by means of a perforated cork, an upright adapter filled with iodine, which is prevented from falling into the flask by a plug of asbestos. The wide mouth of the adapter is connected with a globular tap funnel, having likewise two openings, the upper one of which carries a long vertical glass tube, with a safety tube at the top, while, from the lateral aperture another tube descends to the second neck of the alcohol flask, and establishes a direct communication between the latter and the tap-globe. The alcohol is now heated to ebullition, its vapour rises through the lateral tube, and is condensed, partly in the globe, partly in the tube over it. The alcohol, still warm, passes through the half-opened stopcock, which separates the globe and adapter, and, percolating through the iodine of the latter, returns, charged with iodine, to the flask containing alcohol and phosphorus. The re-action which ensues is indicated by the brown colour of the iodine solution disappearing instantaneously when it comes in contact with the phosphorus. By protracted ebullition, the whole of the iodine is gradually washed in this manner out of the adapter, and a considerable quantity of phosphorus will have likewise disappeared. The liquid in the flask is now poured off from the residuary phosphorus, and mixed with water, which causes a separation into two layers, the lower one of which is hydriodic ether. It is separated, by means of a tap-funnel, from the supernatant acid liquid, dried over chloride of calcium, and rectified once more. Purified in this manner, hydriodic ether is a colourless liquid, nearly twice as heavy as water, (its specific gravity being 1·97,) and boiling at 70° C. (158° F.) It contains more than 80 per cent. of iodine, the presence of which can be readily exhibited by projecting a few drops upon a red-hot metallic surface, when dense violet clouds of iodine vapour are evolved.

In a somewhat similar manner, hydrobromic ether is obtained. It is likewise a colourless liquid, of less density (1·473), and boiling at a lower temperature [41° C. (105·8° F.)] than hydriodic ether.

Without entering further into the history of these compounds, which will engage our attention repeatedly in several of the following Lectures, I must briefly allude to their composition, which is illustrated by the subjoined diagrams:—

Hydriodic Ether. Hydrobromic Ether.



At a glance you perceive the analogy of these compounds to hydrochloric ether, and the persistence of the radical $C_4 H_5$, which was traced in the preceding compounds.

This radical has received the name *ethyl*, since, as you will see bye and bye, it exists likewise in common ether. The molecule ethyl is generally represented by the letter E.

The idea of *ethyl* once conceived, the constitution of the substances which I have brought under your notice this evening assumes an exceedingly intelligible form.

Alcohol becomes in this manner a compound of 1 atom of ethyl, 1 atom of hydrogen, and 2 atoms of oxygen; or, as many prefer to view it, as a compound of 1 atom of oxide of ethyl, and 1 atom of oxide of hydrogen or water.

$$C_4 H_6 O_2 = EHO_2 \text{ or } EO, HO$$

The constitution and formation of potassium-alcohol are represented by the equation,

$$\underbrace{EO, HO}_{\text{Alcohol}} + K = \underbrace{EO, KO}_{\text{Potassium-alcohol}} + H$$

The following formulæ express the constitution of mercaptan and its derivatives:—

Mercaptan $C_4 H_6 S_2 = EH S_2 = ES, H S$
Mercaptide of mercury $C_4 (H_5 H_g) S_2 = EHgS_2 = ES, Hg S$
" lead $C_4 (H_5 Pb) S_2 = E Pb S_2 = ES, Pb S$

The equation

$$\underbrace{EO, HO}_{\text{Alcohol}} + 2\ \underbrace{H(SO_4)}_{\text{Sulphuric acid}} = \underbrace{E(SO_4), H(SO_4)}_{\text{Sulphovinic acid}} + 2\ HO$$

shows that the formation of sulphovinic acid is attended by an elimination of water. And now you will understand also the formation of mercaptan, to which I could allude only in the most general terms as long as you were unacquainted with the constitution of alcohol. This substance is produced by distilling sulphovinate of potassium with hydrosulphate of sulphide of potassium, when sulphate of potassium and mercaptan are generated.

$$\underbrace{E\,SO_4, K\,SO_4}_{\text{Sulphovinate of potassium.}} + \underbrace{KS, HS}_{\text{Hydrosulphate of sulphide of potassium.}} = \underbrace{ES, HS}_{\text{Mercaptan.}} + \underbrace{2KSO_4}_{\text{Sulphate of potassa.}}$$

I have already previously alluded to the perfect analogy which exists between sulphovinic, oxalovinic, carbovinic, and

sulpho-carbovinic acids, so that it may be sufficient to give you the formulæ of these compounds.

Oxalovinic acid.. .. .. E (C_2 O_4), H (C_2 O_4)
Oxalovinate of potassium .. E (C_2 O_4), K (C_2 O_4)
Carbovinate of potassium .. E (CO_3), K (C O_3)
Sulpho-carbovinate of potassium E (CS_2 O), K (CS_2 O)

It remains just to glance at the formation of hydrochloric, hydriodic, and hydrobromic ethers. As to the former, its production requires scarcely any explanation, since it is perfectly analogous to that of chloride of potassium, from hydrate of potassa, and hydrochloric acid.

KO, HO	+	HCl	=	K Cl	+	HO
Hydrate of potassa.				Chloride of potassium.		
EO, HO	+	HCl	=	E Cl	+	HO
Alcohol.				Chloride of ethyl.		

The term, *chloride of ethyl*, which is, in fact, more frequently employed than hydrochloric ether, is now likewise perfectly intelligible.

The re-action which gives rise to the formation of hydriodic and hydrobromic ethers (iodide and bromide of ethyl) still deserves briefly to be noticed. In this re-action, half the oxygen in the alcohol is eliminated in the form of water, while the remainder separates in combination with the phosphorus, which becomes converted into phosphorous acid. The latter containing 3 of oxygen, 1 atom of phosphorus is capable of deoxidising not less than 3 of alcohol; and hence the formation of iodide of ethyl is represented by the following equation :—

3 (EO, HO)	+	3 I	+	P	=	3 E I + 3 HO, PO_3
Alcohol.						Iodide of Ethyl. / Hydrated Phosphorous Acid.

The formation of bromide of ethyl is perfectly similar.

The ethyl-theory, which has been elaborated chiefly by Liebig and his school, has very materially assisted the progress of organic chemistry. Frequently the subject of sometimes rather lively controversies among the leading chemists of the day—often doubted, attacked, but always successfully defended—this theory is closely linked with all the achievements of organic chemistry; it has served as a point of crystallization, if I may use this expression, for almost all those recent inquiries which have thrown and are throwing light upon the constitution of organic bodies.

In the next lecture, I hope to bring under your notice some instances of this kind; and you will perceive that, while serving as a guiding-thread through the intricacies of many recent investigations, the ethyl-theory has received in return from these very inquiries some of its most striking illustrations.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. VIII.

ON ELEPHANTIASIS GRÆCORUM, OR LEPRA TUBERCULOSA,

AS IT IS SEEN IN THE ISLAND OF CRETE.

By WILLIAM R. E. SMART, M.D., R.N.

The disease known to travellers in the Levant as leprosy, and in medical nomenclature as "elephantiasis græcorum," fell frequently under my notice while serving on the coast of Crete, in the summers of 1851 and 1852; and the following remarks are founded on observations noted on various occasions through those periods.

In the immediate vicinity of the chief towns there are distinct communities of lepers, congregated from all parts of the island.

Inquiry of persons whose report may be relied on has informed me that the number of those assembled in the leper villages is accurately shown in this Table :—

Province.	Canton.	In Suburbs of	Village named.	Resident Lepers.
Candia	Candia	Megalo-Kastron	Cazzabas	127
..	Messara	Dibocki	Not named	48
..	Mirabella	Critza	..	62
..	Riso	Androgna	..	92
..	Kendri	Petro-Kefalo	..	143
..	Girapetra	Girapetra	Meschinides	50
Retimo	..	Retimo	Not named	57
..	Amara	Aia-Vasali	..	7
Canea	..	Canea	..	42
			Total.....	628

In forming an estimate of the frequency of the disease throughout the island, it must be borne in mind that these people have been expelled from their native villages through the popular belief of the contagiousness of their malady; and that, in diseases which involve social exclusion, concealment to the latest moment is a natural result. Moreover, from the insidious nature of the disease at its commencement, and in consequence of the fatalist doctrines of the Mohammedan portion of the population, it may be safely concluded that the Table which is here given does not represent the whole number of lepers in Crete; and it may be stated approximately, that one-third of the lepers on the island reside with their friends, either in places of concealment or mixing unsuspected with the inhabitants.

The entire population of Crete,—where no statistics by authority exist,—is computed to be about 250,000; and we may consider that not less than 900 are afflicted with elephantiasis in its more or less advanced stages.

A visiter to a leper village cannot fail to observe a marked dissimilarity of appearance presented by those residents in whom the disease is far advanced.

Many of them, who bear on the countenance no unusual expression beyond that imparted by chronic disease, have the extremities so seriously mutilated, that they move about with difficulty, and are nearly deprived of the prehensile power of their hands; while others, that have the face greatly disfigured, are not prevented from following the avocations of peasants, since the power of their limbs is but slightly impaired; and a few others are seen, in whom the disfigurement of the face and the mutilation of the extremities are combined.

The sufferers have learned to designate their maladies by different names; that form in which destruction of the small bones of the extremities is the marked feature, is called by them "lovo;" while that in which the disease commences on the surface is termed "lepra."

Mr. Robinson was the first to publish a correct description of elephantiasis.(a) He had seen the disease among the people of Hindoostan. He distinguished and named the two varieties,—e. anæsthetica, and e. tuberculosa,—and defined them in these words :—"The dropping of the extremities and insensibility of the skin belong to the first; the tubercles of the skin, ulcerations of the palate, and affections of the cartilages and bones of the face, to the second."

He advocated the non-contagiousness of the disease, and brought to light a successful treatment of the anæsthetic variety.

Mr. Robinson has afforded a very graphic description of the anæsthetic variety; but his account of the tuberculous seems to me to be wanting in details, which I shall attempt to supply.

The earliest pathognomonic signs of the disease must not be looked for on the residents in those villages, because their maladies had become strongly pronounced before their removal. To obtain precise information on such points is a difficult matter, where a belief is entertained of the contagious and incurable nature of a disease, and where the usual fate of the afflicted is a forced withdrawal from friends and home, which concealment alone can delay.

In the remarks I wish to offer on the primary stage of the disease, I have not any notes made at the time of observation to guide me; but, when stationed at the east end of the

(a) "Medico-Chirurgical Transactions," Vol. X.

island, far remote from any town to which the peasants could conveniently repair for medical advice, I was frequently consulted on cases of skin disease. Some of these were ordinary forms of porrigo, eczema, psoriasis, and lepra vulgaris; and there were others in which I did not recognise any very strongly pronounced signs of disease, in which I was unable to comprehend the desire for secresy which actuated the parent or intimate friend accompanying the patient.

This happened before the subject had begun to engage my attention; but, as far as memory can supply the want of recorded observations, these people seemed indifferent to their condition; they bore a stupid, lowering expression of face; their skin, when cool, showed here and there, on the face, forearms, and legs, slightly roughened patches of a darker shade than the surrounding parts, and these patches assumed a slightly urticarious look, and were affected with itchings when the system was excited by exercise or by stimulants.

There existed a dry scurfiness of the surface, which I attributed to the prevailing want of cleanliness.

I find much reason to regret that I then viewed these as cases of minor importance, as I am now convinced that they were in reality cases of elephantiasis in the earliest stage; in fact, before the diseased appearances had become so evident as to excite clamour for expulsion from their native villages.

I offered them advice, founded on an opinion, that their diseases were referable to disorder of the digestive organs.

The value of that opportunity of studying the first symptoms of the disease became evident to me at a later period, when I had examined many whose disease had progressed beyond the earliest stage.

In both varieties of elephantiasis, two pathological conditions are clearly defined; and these seem to me to include all the phenomena of organic change which characterise the stages of the disease.

1st. Morbid nutrition, causing the deposit which constitutes the primary organic lesion.

2nd. The process of reparation, by which an effort is made to throw off the morbid deposit. It consists of ulceration, granulation, and cicatrisation, when acting on the integuments, as in e. tuberculosa; and of caries, with suppuration, when exerting itself on the diseased bones, as in e. anæsthetica.

A peculiar feature of the disease demands notice here, viz.—the altered state of the nervous influence in the part affected. In the anæsthetic variety, there exists a paralysis of the sentient nervous fibrillæ, the motor influence being less affected; while the organic nerves which superintend the functions of organic life are not implicated, since, by their agency, the reparative action is set up by which the diseased growth is thrown off, and the parts are healed.

On examining closely the progress of e. tuberculosa, it is found that the structural lesion consists of an effusion into the subcutaneous—and, at a later stage, into the submucous—tissues, and that the elimination of this deposit by the capillaries is always attended with a diminution of the normal sensibility of the part.

When the deposit has formed, the functions of the skin are greatly deranged, the natural perspiration no longer exudes from its surface, it loses its covering of hair, and cuticular scales are constantly falling away, and are reproduced abundantly, even in positions, as under the nails, where in health the growth of cuticle is not found to be excessive.

The effusion is usually deposited in nuclear forms; and the shape which these assume, as they increase, depends on the anatomical disposition of the part. Thus, on those portions of the extremities where the skin is loosely connected with the aponeurotic fascia, the effusion into the areolar tissue begins in the form of rounded moveable bodies, which enlarge their dimensions slowly, and, flattening out under the skin, become attached to it, and raise it up in broad, flat eminences. On other parts of the limbs, where greater resistance is offered by the deep tissues, or where less of subcutaneous areolar tissue exists, as in the neighbourhood of large joints, the nuclei grow in an outward direction, and form an early attachment to the skin, which expands with their growth, and thus enables them to take the form of sessile, and, frequently, of pedunculated, tumours.

On the face and head such tumours occur, appended to the tarsal, nasal, and auricular cartilages. The forehead frequently presents the moveable nuclei; but, on other parts of the face, the morbid deposit is always of a diffused form, disposed in raised wheals, which correspond to the muscular lines of the features. The earliest alteration of expression is seen in a widening of the alæ of the nose, which, combined with thickened lips, impresses a negro-like cast. When the effusion increases in the face, the aponeurotic lines of muscular insertion serve to bound the several collections of semi-fluid matter, giving undue prominence to some parts, and sinking others in deeper furrows; and the orifices of the mouth and eyes lose their linear form, and become round and gaping from thickening of their boundaries. At a later stage, the conjunctiva, partaking of the disease, is seen red and turgid, the lids are everted, and, ultimately, a caruncular growth extends across the cornea, and obliterates the sight.

These alterations of the countenance obtained for the disease the name "leontiasis," by which a resemblance of features to those of the lion was happily expressed. Throughout the stage of deposit, the patient is liable to moderate attacks of gastric or of constitutional disturbance, which is, perhaps, symptomatic of temporary aggravation of the cachectic habit, since there co-exists with it an increased activity of the process of effusion; but no permanent excitement of the great centres is set up.

Through long periods the pulse remains slower than natural, and the nervous system is, as it were, benumbed; the mental faculties are lethargized, and their physical expositor, the face, bears a vacant, inexcitable aspect, conveying the idea of an apathetic indifference of the sufferer to his condition and fate. The ulcerative action supervenes on that of deposit at uncertain periods. It exists, in some parts, when the stage of effusion is not far advanced in others; or it may not occur in any part of the integuments before the morbid deposit has covered the cornea with pannus, and extensively affected the mucous membranes.

Its commencement in any definite spot is mainly dependent on the mechanical distension of the part by the effused matter. As the part increases in fulness, the arborescent tufts of vessels on its surface become varicose, and the skin tense and shining. The integuments are slowly attenuated; and, at length, a small fissure occurs, from which an offensive ichor exudes and forms a foul crust.

The skin is removed by ulcerative absorption, and the contents of the swelling fall away in successive scabs, an ichorous discharge being kept up until the effused matter has been removed from the vicinity of the ulcer, and then the healing process commences. I am not aware that hæmorrhage from the ulcerating surfaces ever occurs.

The ulcerative action usually begins at points most remote from the centre of the circulation. Ulcers form early under the nails and in the flexures of the digital joints, and also over the large joints and ridges of bone where the effusion is tightly bound down. If its commencement be on the face, its progress is more speedily fatal, since the disease, when active in that part, extends rapidly to the mucous surface.

Two forms of ulcer which occur in this disease require particular notice: one has its seat on the cornea; the other, on the plantar surface of the heel. In the first, the morbid effusion extends under the conjunctival covering of the cornea, and produces a dense pannus, which eventually ulcerates.

This ulcer is peculiar in its slowness of progress and rounded form. The irritation caused by it extends to the deep tissues, and dropsical effusion into the anterior chamber is a result; and this, by its pressure on the weakened points of the cornea, produces staphylomatous protrusion.

The activity of the reparative process in the disease is well shown by this ulcer; indeed, cases are very frequent in which the pannus has been removed by ulceration, and a dense cicatrix leucoma substituted for it.

And, although staphyloma is frequently met with in the ulcerating stage, yet entire sinking of the eyeball afterwards is rare, the perforation healing after a partial discharge of the humours.

The other form of ulcer has its seat underneath the heel. It displays the insensibility and absence of excitability which affect the diseased parts. It is of round form, of the size of a sixpence, like a trephine-hole cut down to the derma, which lies at the bottom, smooth and glazed like the thick pile of velvet.

I have seen two cases of it, in which the exposed surface was quite insensible; the patients had walked from a distance without inconvenience. In both of them the deposit was in a very early stage in other parts of the body.

Mr. Robinson considers this last form of ulcer to belong to the anæsthetic variety.

While the ulcerating action progresses, the patient suffers scarcely any pain. The ulcers seem to possess neither sensibility nor irritability, and, as they are not accompanied by any constitutional irritation, the drain on the system kept up by them is well compensated by unimpaired appetite and strong digestive powers.

The succession of the granulating and cicatrising processes to that of ulceration is uniform in this malady. It occurs even in the eye, and scarcely any old leper can be found who does not afford ample evidence of the fact in the form of large cicatrices on the face or limbs.

Such favourable results, in a natural course, almost indicate the curability of the disease, or at least they stimulate to perseverance in studying it, with a view to the discovery of a rational treatment. But, as the specific cachexia is not eradicated from the system, fresh deposits occur, at a later period, in other tissues of a higher organization, and go through the same process of ulceration as those on the exterior surface, so that a fatal termination is, sooner or later, inevitable.

The mucous membrane of the nose, mouth, and fauces, undergo the same morbid changes as the skin. The tongue, palate, uvula, and tonsillar folds, are thickened and studded with flat, tuberculated eminences, of a pale colour; and the larynx being involved, the voice is rendered husky, then hissing in tone, and, in the last stage, incapable of exertion above a whisper.

As my opportunities of examining patients in the final stage have been insufficient, and as I have had no chance of a *post-mortem* investigation, I must draw from other sources a description of the changes which terminate life.

In doing this I shall not hesitate to regard as cognate diseases, embraced under the nosological species, "Eleph. Græcorum."

1. The lepra and lovo of Crete.
2. The disease of Hindostan, called "Soubharry" or "Jugarn."
3. And that of Norway, named "Spedalskhed," or "Radesgye."

I cannot speak from my own observations of the last symptoms and the *post-mortem* appearances presented by the leprosy of Crete; but, as all that I have heard respecting them, corresponds with the statement contained in the quotations I am about to make, I shall adopt the inference, that the pathological changes, which conduct to the fatal issue, are, most probably, the same in the diseases of these distant climates; and, likewise, that death invades, with the same series of symptoms, in both varieties of the disease.

The symptoms which precede death are thus described by Dr. Tweedie, in Vol. I., Lib. of Med., page 418, Art. Lepra Tuberculosa, (E. Græcorum):—"Those individuals whom we have seen perish from this disease were carried off by enteritis. Large ulcerations were found in the ileum, cœcum, and colon; excepting one case in which death was caused by tubercular phthisis."

And Mr. Robinson, with special reference to the anæsthetic variety, writes—"At last he is carried off by diarrhœa or dysentery, which the enfeebled constitution has not the stamina to resist." The morbid changes which produce these symptoms are detailed in the following report on the Norwegian "Spedalskhed" (Eleph. Græcorum) from Virchow's "Archives of Pathology," &c., translated in the *Medical Times and Gazette*, of November 27, 1852:—"In the cavities of the body, namely, the abdomen and thorax, similar softened knots are found. They are seen under the mucous membrane of the stomach, in the mesenteric glands, in the pleura and pericardium." I may add, that in Crete many cases of e. tuberculosa terminate fatally within five years; and others live on, even to twelve years, from the commencement of their symptoms.

In the other variety, "e. anæsthetica," the morbid action falls early on deeper tissues; it destroys the vitality of the small bones of the hands and feet.

In the first stage, the extreme parts of the limbs possess diminished sensibility to external impressions and injuries; frequently, the points of the fingers have the cuticle detached, as if the effect of burns, which, indeed, I have known assigned as the cause, and accounted for as owing to the insensibility of the parts.

The affected parts soon swell, and become restricted in their movements, by an effusion which distends the integuments. They are liable to attacks of inflammatory excitement, marked by increased swelling and dull pain, accompanied by febrile erethism of the system.

Each attack renders the sufferer more disabled and less sensitive in the limbs.

At length the fingers and toes, and a considerable extent of the integuments of the forearms and legs, are deprived of the sense of touch and of the perception of pain, whether from internal or external excitants; and in some degree, also, of the sense of muscular effort.

The extremities become stiffened and inflexible, of a purplish hue and glazed appearance, resembling frost-bite. Their bony structures,—the phalangeal, often the metacarpal, and metatarsal bones, and, more rarely, those of the carpus and tarsus,—undergo destructive lesions; many years may, however, elapse before a disposition to separate the diseased bones shows itself.

When this change is about to take place, the investing soft parts become more tumid; an asthenic inflammatory action, allied to the scrofulous, is set up; suppuration is established, and openings are effected in the condensed soft tissues, through which the decayed osseous tissue is expelled. I have stated, that the carpal and tarsal bones are sometimes involved. I have seen a case in which some of the tarsal bones had been removed; and I have heard that cases exist in which the extremities have been lost at the wrists and ankles. I have not seen the disease affecting any of the large bones or joints.

The soft parts of the fingers and toes are sometimes implicated in the destructive changes which centre in the bones; but it most frequently happens, that they retain a low degree of vitality; and, after the removal of the diseased bones, they remain supported on the metacarpus and metatarsus, in the form of distorted stumps bearing ill-shaped nails.

Throughout such extensive injuries of the animal structure, the constitutional disturbance has been very moderate in degree; and the parts that undergo destructive changes appear to be cut off from the animal economy by anæsthesia. After a course of disease, continued, with varying activity, through ten or fifteen years—during which period, the extreme points of the limbs have fallen in succession, the separation of the diseased bones has been completed, and the breaches in the soft parts have healed—the maimed patient may have a period of freedom from any active disease.

I have seen cases in which this state of quiescence had lasted two years; and it would appear, that the sufferers may sink slowly to the grave without any renewal of diseased action. But if the specific cachexia should be again excited to activity, the mucous membranes will go through the same series of changes as lead to the final issue in e. tuberculosa.

I have seen cases in which the disease was of a mixed form; and others far advanced, in which the disease, having commenced as e. anæsthetica, and having effected the mutilation of the extremities, had then attacked the mucous membrane of the nose, mouth, and fauces.

[To be continued.]

HISTORY OF THE RECENT EPIDEMIC OF INFANTILE LEUCORRHŒA.

WITH AN ACCOUNT OF FIVE CASES OF ALLEGED FELONIOUS ASSAULTS

RECENTLY TRIED IN DUBLIN.

By WILLIAM R. WILDE, F.R.C.S.
Surgeon of St. Mark's Hospital, etc.

[Concluded from page 371.]

In the Medico-Chirurgical "Transactions," Mr. Kinder Wood has described the disease in its most acute and dangerous form, as ten out of twelve cases proved fatal. In his Surgical Lectures, Mr. Lawrence describes the disease under the head of a "Peculiar Affection of the Genitals in Female Children,"—(see *Medical Gazette*, for August 21,

1830; Vol VI., p. 828,)—and mentions a case in which he was concerned, and which was tried at the Old Bailey, in which it was supposed, "in consequence of previous professional opinions, that it was the venereal disease; the child was questioned and interrogated, until, I believe, from fear and apprehension, she gave in to the idea that had been suggested and strongly entertained by the parents, and said that a certain youth had done something or other to her." As the learned author did not mention, in the work referred to, what the result of the trial was, I lately wrote to him, and received the following answer:—"I can, however, inform you, that the accused person, who was of respectable family and character, was acquitted. I do not know that there is any legal report of the case. The child was not seen by me until the ulcerations, which had been extensive and deep, were cicatrised. The affection had been pronounced to be venereal by a general practitioner, who was first called in; and this opinion was corroborated by a surgeon of some eminence, although not connected with an hospital. The matter was first brought before the police-office in Bow-street, where the magistrate—the late Sir Richard Birnie—having inquired very carefully into all the circumstances, and heard my decided opinion respecting the nature of the disease, and its entire want of resemblance to syphilis, dismissed the complaint. The friends of the child, however, still trusting to the different view of the two gentlemen first consulted, brought the matter before the Criminal Court at the Old Bailey, where the Judge, having heard my evidence, and looked at the paper of Kinder Wood, in the Medico-Chirurgical "Transactions," Vol. VII., to which I had referred, the Counsel soon stopped the case. I have since seen many instances of this affection, of which the local symptoms are often severe; but, in my experience, it has not been so serious as in that of Mr. Wood, nor in any instance fatal."

One of the latest authorities upon this subject is Mr. Kesteven, of London, who, in the *Medical Gazette* for February 28, 1851, has recorded a case of this very nature, and attached thereto some practical and useful observations, from which the following is an extract. With reference to the physical indications of chastity, the medical opinion upon which he says may be divided into two classes, the public and private, the former, or the most frequent, "are those in which vaginal discharges in young children are mistaken by the parents or friends for the evidences of sexual intercourse by elder male persons, having gonorrhœa or syphilis. Such cases have frequently occurred to myself, as they have to others; and, although now better understood by the Profession than formerly, yet so strong is often the notion entertained by the public with regard to these cases, that it is not unfrequently extremely difficult to persuade parents that we have merely to deal with the results of ordinary disease, and not with those of violence. This notion, in several cases that have come under my notice, has unfortunately been *confirmed by hasty and erroneous opinions*, given by surgeons on the mere representation of the friends, without a proper examination having been made. *It is scarcely possible to speak too severely of such culpable and wilful ignorance.* Within the last few weeks, a child of nine years of age was brought to me, upon whom it was suspected that violence had been inflicted. A careful examination afforded evidence that the case was simply one of vaginitis. There was complete absence of any indication of violence, for although it can scarcely be believed to be possible that sexual entrance into the vagina of an infant could, under any circumstances, be perpetrated; yet in the *attempt*, much contusion of the young and delicate soft parts *must have ensued*, had it been made. The parents were satisfied, and an individual unjustly suspected was forthwith released from so odious an imputation."

What might have been the result had Cosgrave's case gone to the jury,—or what would have been the charge of the Lord Chief-Justice, it is difficult to say; but it was quite manifest that the Court held the medical opinions for the defence at a discount. Conversing with some of the most intelligent of the jury, they informed me, that independently of the *alibi*, they were strongly inclined to an acquittal on account of the contradiction of the Crown witnesses; and that being conversant with such cases they made it a rule to acquit where the man was not diseased.

With respect to the *alibi*, which, like all similar evidence, must be a matter of the merest chance,—but was here the means of saving the prisoner where medical evidence was not receivable,—it was so far useful in assisting the public to come to a proper conclusion as to the veracity of the witnesses produced by the Crown.

Several questions of grave importance are suggested by the foregoing details,—and first, with regard to the original propagation of such cases in a pathological as well as an ethical point of view. The disease, although denominated by Churchill and other modern writers upon the diseases of children, *leucorrhœa infantilis* is better designated by the term *vaginitis*, for it is of a much more inflammatory character than either leucorrhœa or gonorrhæa, at least as these two diseases present in the adult female; and the discharge is much more profuse in the former, and much more purulent in the latter. This discharge proceeds principally from the vagina, although the external parts are generally bathed with it when we come to examine them, in the same way as the surface of the glands and the inside of the prepuce are usually covered with discharge, in persons labouring under gonorrhœa, particularly where the foreskin is abundant. The redness and swelling of the labia, clitoris, and orifice of the vagina, is generally very great, and the hue of the former is somewhat purplish. Not being acquainted with the appearance of gonorrhœa in children under 10 years of age, I cannot say whether the inflammatory symptoms are equal in appearance to those now described. The disease is, I believe, usually painless in the first instance; and it is only when excoriation has taken place from the irritation of the discharge, and that the urine passing over the abraded surface produces some degree of soreness, that any complaint is made. After some time, the period varying according to the virulence of the disease, and the state of cleanliness or the contrary in which the child is kept, the discharge excoriates the labia both on their external and internal surfaces, the fourchette, perineum, the margin of the anus, and all that portion of the integument of the thighs washed by the discharge, or which come in contact when moved one upon another. In fat children, the amount and extent of excoriation, which presents much the character of an eczematous eruption, is always greater than in those who are thin, or have been in any way wasted by previous ill-health. The extent of this eruption is generally very well marked by a defined eczematous margin, extending from the pudendum, in a crescentic form, over the thighs, and sometimes into the cleft of the nates. The character of this eruption, its *defined margin and extent*, may possibly, to a practised and unprejudiced eye, serve to distinguish this disease from the results either of violence or the mechanical irritation produced by the "friction of the penis" between the thighs and external labia, as was endeavoured to be proved by the Crown in the late trials in Green-street.

With respect to the discharge, it is generally of a very acrid nature, and is the cause of the excoriation and eruption upon the true skin; and, unless the disease has been discovered by accident in an earlier stage, (such as by observation of the child's linen, or by the chance of some second party seeing the child,)—the two circumstances which first attract attention are, the difficulty of walking, or the pain in making water; but the date of the discovery varies from a few days to several weeks, according to the violence of the affection or the care and attention bestowed by mothers on their children. For the same reasons the duration of the disease will vary from a fortnight to six weeks, or two months. The age at which this vaginitis is most frequent is, from four to ten, but it may appear earlier, of which an example is given in the "Association Medical Journal" for the present week, August 27, extracted from the *Deutsche Klinik*, in which this disease appeared in a child five months old, and produced inflammation of the lymphatics, and violent constitutional symptoms. The causes of the disease have been already explained in the foregoing portion of this communication. The little patient is generally pale, and looks out of health; the tongue is almost invariably white; and there is some loss of appetite. The treatment consists in extreme cleanliness, the use of mild astringent washes, attention to the state of the digestive organs, the administration of bark and other tonics, and the removal to a more healthy atmosphere. Where the disease has been of long standing, as in the case of the child Cosgrave, and the excoriation and superficial ulceration has proceeded to any depth, the parts bled freely, even with handling; and, therefore, if such friction as the medical witness swore might have taken place,

and, as the Crown wished to prove, had really *occurred while the child was labouring under the disease*, very great pain must have been experienced, and considerable hæmorrhage ensued.

Is the disease communicable by infection? Professors Cusack and Geoghegan think it is;(a) and their evidence, when published, will prove this. If it be, and that the accused man has no disease, it ought in the minds of dispassionate persons to go far in exculpating him. Suppose, however, that the unfortunate man accused of the crime happens to have gonorrhœa, what will be his defence? This is a very serious question, which I submit to the ingenuity of medical jurists, and to practitioners acquainted with the appearances of gonorrhœa and also of vaginitis in young children.

Under two circumstances only is the violation of a child of tender years likely to be attempted;—to get rid of disease by instantaneous transmission upon the application of the male to the female genital organs, under the ignorant delusion to which I have already referred; or for the gratification of sensual lust. In the former case, the man's passions need in nowise be affected; he may, as I endeavoured to explain to the Court at the late trials, (because I have known such to occur,) simply apply the penis to the genitals of the child, as (in his opinion) a sanitary measure; and thus a rape would, in the eye of the law, be consummated, and the disease be communicated; whereas, in the former, with aroused passions, a certain amount of violence (even without penetration, which is scarcely possible) must be inflicted upon the labia and external parts, and evidences of which would be unmistakeable.

Suppose, however, that the violator was careful enough (as in the five cases tried at Dublin) to avoid rupturing the hymen, but simply to have recourse to the "friction" with the penis, sworn to by the medical officer of the Crown, would the consequences thereof be a profuse vaginal discharge, such as that seen in the cases which recently formed the subject of investigation here? Or, again, if the discharge proceeds only from the external parts and the true skin, must not such discharge be the result of suppuration consequent upon extreme violence, laceration, and contusion, such as would attract the attention of the mothers and friends, long before such discharge was established, no matter how willing children might be to conceal the act? Would not some hæmorrhage or other marks of violence be apparent on the dress? Could children so treated have pursued their ordinary play without complaint, or walked, as one of these did, a couple of miles immediately after the committal of the crime? Would it not be, to say the least of it, a very remarkable coincidence—taking up the opinion of the Crown—that each of the five children said to be violated should happen to be at the moment labouring under this well-known affection called "vaginitis," or "leucorrhœa infantilis"? These are medical questions worthy the consideration of the Practitioner and the medico-legal jurist, although they may not be appreciated or understood by lawyers; but there are others which intimately concern the police, the Crown lawyers, and the country at large, a few of which I will here briefly state.

Have any cases, in which the crime of violation upon a child of tender years has been fully and satisfactorily proved, resembled those which formed the subject of this communication; where, in each instance, the state of the child was *accidentally* discovered many days after the date assigned to the commission of the crime? and are any of the signs of rape laid down by medical jurists, either in the infant or adult, similar to those which presented in the five Dublin cases? With respect to "corroborative evidence," such, I believe, can always be procured, because, in most instances, the threatened or tortured child simply acknowledges to the fact of sitting upon the accused's lap, being in his company, or having received some trivial act of kindness from him, at the time and place when the crime is alleged to have occurred; and plenty of witnesses can always be procured to corroborate these facts.

How does it happen, that in no instance does the child ever tell what has occurred until interrogated or threatened by the mother? She has neither love nor lust to influence her. She has no feeling of shame to cause her to withhold the desired information; and yet it is supposed that, for a "bit of sugar," or a "pennyworth of strawberries," she (who may have been heretofore truthful, affectionate, and obedient,) will withhold from her friends the name of her ravisher for days together, or until compelled to give it up by threats or punishment; or that she only remembers the name when mentioned to her? With regard to the veracity of children, much might be written, did space permit; but all who are acquainted with human nature know with what pertinacity they will adhere to a lie equally with the truth; and as a certain amount of latitude is given by the Court and the jury to children, lawyers say they are "dangerous witnesses" to cross-examine. Those who practise medicine much among the lower orders can bear testimony to the difficulty of eliciting the truth about the most ordinary accident or disease among young children.

Generally speaking, the mothers are themselves fully convinced of the commission of the crime, and are therefore not only most justly indignant, but are anxious, by every possible means to have the accused party punished. One can therefore understand how persons in their rank of life will, by constantly going over the case with a child, prompting it when it forgets, and suggesting to it when it comes to the recital of the commission of the act, not only persuade the child into the positive belief of the occurrence, but also tutor it into details such as few prostitutes would be willing to recite. (Such really occurred in the case of Walsh *v.* Barber.) These infatuated mothers are much to be pitied, more particularly when the police, the Medical examiner, (who should, in such cases, be the guardian of their honour,) and the law-officers of the Crown, back them in their mistaken idea. They should be shown the moral injury they are inflicting on their children—forcing them, under the threat of torture, to lie; demoralising their young minds, by tutoring them into descriptions of scenes of immorality; exposing them in public Courts, and attaching to them in after life the stigma,—one which will not be forgotten among their friends and neighbours,—that they were violated and diseased. Lawyers must be shown, that all these cases are got up by a systematic procedure on the part of the mothers, and that, in nine cases out of ten, that procedure is but a paraphrase of the scene so graphically described by Sir Astley Cooper. So long, however, as such cases are entertained by the police, supported by medical testimony, and brought forward by the Crown prosecutor, so long will they continue to disgrace science, morality, and justice. But then, it must be remembered, that, with the exception of the presiding magistrate, each person concerned in the trial has a pecuniary interest therein. Having once taken up the case, the police, no doubt with the best intention, endeavour to show that crime has been committed. The Medical officer of the police is not only paid for the examination, and the subsequent examination at Court, but, being himself a policeman, looks with a jaundiced eye upon all accused persons. The Crown solicitor receives his salary, and all his clerks and officers are paid for their briefs, and what is called "the getting up of the case." The Attorney-General is paid his fee, and all the Crown lawyers are paid their fees—the county pays for all. Where does the fault lie? I believe in the police-office. If the cases were properly investigated there, all this unnecessary expense, all this disgrace toward the accusers, and unjust accusation of the accused, might be avoided. The system of medical police in this country is lamentably defective; and of this we have had examples in this and in other trials of recent date, and which have served to bring medical evidence into disrepute, not only with the lawyers, but with the public. I conceive it to be the duty, as I have already stated elsewhere,(a) of the medical adviser of the police, not only to be well acquainted with the jurisprudence of the case he is required to investigate, but "to afford *negative* as well as positive evidence, and to inform the magistrate, when cases like those under discussion are submitted to his inspection, that the disease which, to use the words" of Dr. Ireland after the late trials had taken place, "gave rise to the *unnatural* suspicion of the mother," affords of itself no evidence of attempted violence, but is an affection peculiar to a certain class of children. The magistrates had, I think, in the case of Barber, insufficient evidence to send it for trial, the child having sworn that the crime was committed in a public

(a) In the instructions which I gave the lawyers for the defence in Kane's case, I pressed them to ask this question; but they said they were afraid of it. As lawyers, they had nothing to do with the medical question, or the elucidation of truth; they had only to "get off the prisoner."

(a) See letter published in the *Freeman's Journal* for Aug. 9, 1853.

hall in the erect position while her feet were on the ground, and by a man six feet high, who was perfectly free from disease, whereas she (the doctor said) was labouring under gonorrhœa.

In conclusion, I do not think it necessary to offer any apology to my readers for this lengthened recital, which I have made solely upon public grounds, and with a well-founded hope that it will be the means of causing a stricter investigation into such cases for the future, while it can in nowise assist to clear the guilty where the crime has been absolutely committed, as no doubt it often is. The works on medical jurisprudence, both in English and other languages, contain the records of many cases similar to those which I have described; but, in addition to those already referred to, I would call the attention of my readers to the following extracts from the work of Dr. Taylor, now the highest authority in this country: "The existence of a purulent discharge from the vagina has been erroneously adduced as a sign of rape in these young subjects. The parents, or other ignorant persons who examined the child, often look upon this as a positive proof of impure intercourse, and perhaps lay a charge against an innocent person, who may have been observed to take particular notice of the child. Some cases are reported, by which it would appear, that individuals have thus narrowly escaped conviction for a crime which really had not been perpetrated. .....It is met with in girls up to six or seven years of age; and children thus affected have been tutored to lay imputations against innocent persons.....This state may commonly be distinguished from the effects of violence by the hymen being entire,—the non-dilatation or laceration of the vagina,(a)—the red and inflamed condition of the mucous membrane, and the abundance of the purulent discharge, which is commonly much greater than that which takes place as a result of violence. Capuron mentions two cases in which charges of rape on children were falsely made against innocent persons on account of the existence of a purulent discharge, the nature of which had been mistaken.

"As a summary of these remarks with respect to purulent discharges, we may observe, that they should never be admitted as furnishing corroborative evidence of rape, except: 1. When the accused party is labouring under gonorrhœal discharge. 2. When the date of its appearance in the child is from the third to the eighth day after the alleged intercourse. 3. When it has been satisfactorily established that the child had not previously to the assault any such discharge. It may be said, however, that all these conditions may exist, and yet the prisoner be innocent, for a child may, either through mistake or design, accuse an innocent person."—P. 581.

Had these tests been applied in the first instance to the five cases brought forward in Dublin, they would in all probability never have come to trial; but, on the one hand, the police examiner stated, that he formed his opinion irrespective of that of any other surgeon; and the Crown lawyers and the judges would still have informed us, as the Lord Chief Justice did with Sir Astley Cooper's statement, that it was only a medical opinion, and not law.

There is only one other subject which, though scarcely worthy of notice, suggests itself from the foregoing inquiry, but, as it might hereafter form a precedent for lawyers, it is worthy of examination. The police adviser swore in his informations, that the whole assemblage of symptoms seen in the children Cosgrave and Delmere "might result from riding on a stick." Now, I have searched carefully through medical and medico-legal works, and I have also inquired very extensively among my friends, and I cannot find a single instance of a disease resembling infantile vaginitis produced by this amusement.

(a) Is it possible to dilate a child's vagina without rupture of the hymen?

Ethnology.—Dr. Freund, who left London early in the spring, for the purpose of collecting facts bearing upon the Ethnology of the ancient inhabitants of the Tyrol and the Grisons, has just returned to this country, and is expected to lay before the Ethnological Society of London, the results of his literary researches in this interesting part of Europe. His journey thither was undertaken under the direction of the Prussian Government.

Caffre Doctors.—The last mail from the Cape of Good Hope states that the death of Kreli's favourite son had caused great consternation among the whole tribe, and induced that chief to put his principal witch-doctor to death.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

DEATH FROM THE ADMINISTRATION OF CHLOROFORM —AUTOPSY.

[Under the care of Mr. PAGET.]

The following are the particulars of the case of death from chloroform to which we alluded last week. In reference to the administration of the agent, we may state, that at St. Bartholomew's it is, by appointment, always confided to the very able charge of Dr. Black, one of the Assistant-Physicians.

On Thursday afternoon, Oct. 20, it was intended to apply the actual cautery to a sore of cancroid nature in the vagina of a patient named Ann Smith, aged 22 years. She was a stout, florid young woman, formerly of dissolute habits, but apparently, with the exception of the local ailment, in perfect health; she had been in the hospital several months, and, about a fortnight previously, had been put under the full and prolonged influence of chloroform, for a like purpose, and without the occurrence of any untoward symptoms whatever. Her pulse was regular, of good power, and average frequency. It had been ordered that she should omit her dinner on the day of the operation, but, as discovered at the *post-mortem*, she had, unknown to the nurses, taken a quantity of food, though not a full meal.

The usual form of inhaler was employed,—a padded metal cup, fitting over the nose and mouth, and supplied with valves. A drachm, by measure, was first poured on the sponge, but, as the administration did not immediately commence, a considerable part of this was no doubt wasted; after a short inhalation, a second drachm was supplied, and subsequently the further quantity of half a drachm. The patient had gone through the usual stages of excitement, etc., and the last dose was scarcely used, as she sank off, almost immediately after its application, into a state of complete insensibility, unattended by any alarming symptoms. About five minutes had been occupied in the inhalation, and probably not more than a drachm and a-half of the fluid really inhaled. The apparatus was now removed from the face, and the patient having been drawn into the proper position, Mr. Paget was about to commence the operation, when Dr. Black, who throughout had kept his finger on the pulse, noticed it to have become extremely feeble and fluttering. Almost immediately afterwards the patient's countenance was observed to be dusky, turgid, and congested, and the respiratory movements began to be performed at long intervals, and by slight catching efforts. No time was lost; cold water was at once dashed on the thighs, face, and breast, and, the failure in the respiration becoming shortly complete, Mr. Paget immediately began artificial insufflation of the lungs by alternately blowing into the nostrils, and compressing the chest. Just before commencing this process, Mr. Paget had ascertained, by drawing the tongue forwards and examining the glottis with the finger, that the epiglottis was not pressed down. Artificial respiration through the natural passages having been very efficiently kept up for about ten minutes, the nose appeared to have got clogged, and Mr. Paget accordingly performed tracheotomy in order to permit of the more free introduction of air into the lungs. A brandy enema was administered, and, within ten minutes of the seizure, galvanism was also put in use, but without any good result, and after about three quarters of an hour had been spent in persevering efforts to produce re-animation, they were laid aside as hopeless. It was noticed, that immediately after the first alarming symptoms the pupils were of medium size, neither contracted nor dilated. All efforts at respiration ceased about two minutes after the first indications of failure; the pulse, however, as a very feeble flutter, was felt occasionally for at least two minutes later. Thus, then, the facts of the case were briefly these:—A patient, in profound coma, from the administration of an anæsthetic, had, the exhibition of the drug having been remitted, been suddenly seized with symptoms of failing circulation, followed by the speedy suspension of respiratory efforts; the pulse had remained perceptible a little time after the cessation of the latter, and had been lost, together with every manifestation of vitality, within five minutes of the first indication of danger. Every effort to re-excite the play of the organs essential to life had been fruitless. In the turgidity and suffusion of the countenance there had been some indication of death by asphyxia The preceding coma, and the fact that the failure of the pulse had been the first symptom exciting attention, each pointed to other conclusions. The brain, the heart, the lungs,—in which organ had death commenced? This seemed the important problem. Let us now see

what evidence the *post-mortem* examination furnished for its solution.

Autopsy performed by Mr. Paget Twenty-two Hours after Death.—The countenence was still bloated and suffused; the *post-mortem* rigidity was moderate in degree, or rather less than usual; there was much congestion and lividity of the skin of the depending parts of the body; the corpse was very fat. The thorax was first examined, and nothing whatever abnormal could be detected in any of its viscera; the lungs were healthy and crepitant in every part; their posterior lobes were not more congested than is seen in almost every examination; the heart collapsed, but not contracted, and containing a small quantity of fluid blood in each cavity, was of normal size and proportions in every respect, and its muscular structure examined by the microscope showed no degeneration. Excepting that the exterior of the right kidney was puckered in places, as if from disease in early life, nothing worthy of note was observed in the abdominal viscera. The brain, its sinuses, ventricles, etc, were all carefully examined, and neither in texture nor quantity of blood was anything abnormal detected. The spine was not examined. In every part inspected—the heart, great vessels, lungs, vessels within the abdomen, those of the scalp, pia-mater, and brain—the blood was universally fluid, and without the slightest trace of coagulum, or even of inspissation. Collected in the quantity of an ounce or two, and allowed to stand in an open vessel, it did not coagulate, nor in any material degree change its dark purple colour. Looking then at these facts, and comparing them with the symptoms manifest during life, we seem compelled to seek in a humoral pathology the cause of the patient's death. There was no visceral disease, functional or otherwise. In all probability the blood, poisoned past recovery by the vapour it had received, had died, and ceasing then to afford to any of the organs their natural stimulus, the whole of the vital functions had ceased almost coincidently.

This case, in common with most of those which occur in our Metropolitan hospitals, has one most especially melancholy aspect—a matter as far as our knowledge goes of pure accident, it teaches us nothing for the future. We need not recapitulate to convince the attentive reader that the patient was one to whom chloroform might, with the least of apprehension, be administered; she was in good health; she had taken it safely before. Then, again, in the manner of exhibition, every precaution was adopted, and, in the after treatment, all that science could suggest was perseveringly tried. In our large hospitals the requisite skill, assistance, and appliances are always at hand; and there, if anywhere, an immunity from fatal results might be expected. It is mournful, indeed, to consider that from cases such as the last three or four, which it has been our lot to record, the practical surgeon gains no knowledge calculated to authorise the hope, that in future the like tragedies will be of less frequent occurrence.

ST. BARTHOLOMEW'S, GUY'S, AND CHARING-CROSS HOSPITALS.

CASES OF EPIDEMIC CHOLERA.

St. Bartholomew's Hospital.—The sister of Radcliffe Ward, whose case we mentioned last week, has since died. Another patient then under care has since died. One patient, a man, has been admitted during the week, and, together with the other cases, is doing well. All now in the hospital may, we believe, be considered as in process of recovery.

Guy's Hospital.—Four very severe cases have been admitted during the week. Of these one is dead, two are in an almost hopeless condition, and one is apparently recovering. In the fatal case, which was under the care of Dr. Hughes, saline injection into the veins (chloride of sodium) was practised; the patient, however, was moribund at the time, and died in less than an hour afterwards, no effort at rallying having been apparent.

Charing-cross Hospital.—One case of mild cholera, and one of choleraic diarrhœa, unattended by collapse, are under treatment; both are doing well; they are under the care of Dr. Goolden.

In St. Thomas's Hospital, a severe case of diarrhœa, with depression approaching that of cholera, is under the care of Dr. Bennett. No cases of true cholera have, during the week, been admitted into this or any of the following hospitals:—University College, St. George's, the Middlesex, or St. Mary's. The result of our general inquiries on the subject tends to show, that cases of bilious diarrhœa, and of severe colicky pains in the abdomen, without diarrhœa, have been decidedly on the increase during the past week.

CASES ILLUSTRATIVE OF THE MODERN TREATMENT OF EXTERNAL ANEURISM.

THE following series of cases will include all the examples of external aneurism which have recently fallen under our notice in the Metropolitan Hospitals, as well as several which have occurred in the Provincial Institutions. It is good evidence of the very general favour with which, in this country, the treatment by compression is now viewed, that, with but one exception, in which there existed patent and very conclusive reasons against its employment, it was resorted to in the first instance in all the cases. With regard to its general results, we shall have to see that it has been brilliantly successful in a few instances, satisfactorily so in a considerable number, a failure in several, and actually prejudicial in one or two. From the circumstances, that they all occurred under the charge of surgeons of the first eminence, that they excited unusual interest, and had consequently devoted to them an unusual amount of scientific skill and attention, the following cases may probably be considered as fair illustrations of what, under the most favourable conditions, may be expected from the compression treatment. The series will include upwards of twenty cases, and will be found, we trust, to reflect important information on one of the most interesting questions in modern surgery. Before proceeding with those cases which we must publish in detail, we shall briefly allude to several which, either from their having already appeared in our pages, or other reasons, it does not seem desirable to report at length.

Case 1.—Guy's Hospital.—Messrs. Hilton and Poland.—R. S., a wine-cooper, aged 34, was admitted on August 9, 1851, with an aneurism in the left popliteal space the size of an orange. Compression of the femoral was commenced three days afterwards, and continued until November. During the first part of the treatment low diet was enforced, and small doses of digitalis exhibited. The aneurism was very tardy in becoming solid, and at the time of discharge, 102 days after admission, although contracted to the size of a bantam's egg, hard and solid feeling, yet it still pulsated slightly directly backwards; there was, however, no lateral yielding. The man remained well until Oct. 20, 1852, when "he strained himself, and felt something give way in his ham." The pulsations again returned with force, and he was re-admitted on Nov. 10. The pressure was again resorted to, and this time the cure only occupied about three days, the man being discharged quite well at the end of three weeks. The case was an example, in its first part, of the solidification of an aneurism of very considerable size, under prolonged and persevering treatment; and in its second, of the cure of a much smaller tumour, and one formed, probably with some laceration and disturbance of parts, in a very short space of time. Up to the present time (Oct. 25) the patient remains well.

Case 2.—The London Hospital.—Mr. Critchett.—In this case, the cure was effected by compression on the eighth day. The patient was a hawker, aged 32. The aneurism had been known to exist for about nine weeks, was the size of a very small orange, and situated in the left popliteal space. The man left the hospital on the fifty-second day, and made a perfect recovery. (For particulars see the *Medical Times and Gazette* for October 9, 1852, page 362.)

Case 3.—The London Hospital.—Mr. Ward.—An Irishman, aged 45, had a popliteal aneurism, the size of an orange, and of three weeks' known duration. Under treatment by compression, solidification of the contents of the sac ensued, on the third day after its efficient employment, and on the fifteenth from its first application. The man left the hospital six weeks after admission, the tumour being then the size of a lime, and feeling as hard as cartilage.—*Medical Times and Gazette*, August 9, 1851, p. 155.

Case 4.—Guy's Hospital.—The late Mr. Bransby Cooper.—This case was an example of a form of aneurism,—the diffused,—for the treatment of which, as a rule, pressure is not well adapted, and very much resembled one which recently occurred in the Leeds Infirmary under the care of Mr. Samuel Hey, and to which we shall have to allude in a later part of our report. The disease had followed a blow on the thigh, and affected the middle of the right femoral artery. The tumour was very large, ill-defined, painful, and rapidly increasing. Without delay, Mr. Cooper placed a ligature on the upper part of the trunk of the vessel, and recovery, without a single unfavourable consequence, resulted.—*Medical Times and Gazette*, October 23, 1853, page 411.

We will now pass to cases which we must report at length:—

ST. GEORGE'S HOSPITAL.

Case 5.—LARGE POPLITEAL ANEURISM CURED BY COMPRESSION, EMPLOYED, WITH MUCH INTERRUPTION, FOR FIVE MONTHS.

[Under the care of Mr. PRESCOTT HEWETT.]

It is usually remarked, and with great truth, that, in the compression plan of treatment, the chance of success very much depends on the endurance and self-command of the patient. The following case, however, shows that, in the hands of a persevering surgeon, it may be carried out to a favourable termination even with the most restless and intractable of subjects. The course of events—under much interrupted, and always, as far as arrest of pulsations was concerned, inefficient pressure—is also well illustrated by it.

Jane B., aged 31, was admitted on the 17th of January, 1852, with a large aneurism completely filling the right ham. Pulsation and expansion were very evident throughout the sac, which was very soft, and could be easily emptied. The whole tumour was very painful when handled, and at times there were severe shooting pains down the limb.

The patient, a servant of all work, with an anxious countenance, and of a spare frame, but very active habits, had first noticed the swelling about a fortnight previous to her admission into the hospital; it was then small, but her attention had been drawn to the spot by the great pain she felt there. No cause could be assigned for the appearance of the disease; but pain, more or less severe, had existed in the calf of the leg for several months. No disease was detected either in the heart or in the large vessels.

Ordinary diet.

A few days after the admission of the patient into the hospital, two instruments were applied—one in the groin and the other in the lower part of the thigh. They were alternately made use of; but the pressure was never sufficient to stop the circulation in the sac.

The instruments could only be borne for a short time; but even in two days the sac could no longer be completely emptied. It became necessary, however, to suspend all compression, as the patient was very fidgetty and hysterical. Menstruation shortly afterwards made its appearance.

The instruments were re-applied on the 8th of February; but it was found, after a few days, that, notwithstanding all possible care, the skin, which was exceedingly irritable, had begun to vesicate in one or two places. These vesications were followed by slight ulcerations; and, as the patient was still very nervous, it was thought advisable to lay aside the instruments for a few days. At this time, there was much less pain about the aneurism itself, which appeared to be somewhat contracted; but there was a very painful and burning sensation over the knee-cap.

The skin having recovered itself, compression was again resorted to. Slight pressure only was made, and the patient gradually became accustomed to the use of the instruments; but they were obliged to be left off again at the time of menstruation, owing to the irritable condition of the patient, and at her own urgent request. Thus matters went on for some little time, the sac contracting but very slowly, and the deposition of fibrin being but very gradual; there was, however, little or no pain in the tumour, and the patient appeared to be improving in general health.

A weight applied in the groin was subsequently substituted for the pelvic instrument, as the patient preferred it; and she was put upon low diet, the pulse being rather full, and the countenance florid. This plan was fully carried out for some time; but it did not appear to have much effect on the tumour. The sac, although somewhat contracted, was still large and easily compressed, and pulsation still remained evident throughout its whole extent. Notwithstanding these apparently slight results, it was determined that compression of the artery should be persevered in; the patient herself being most anxious that no operation should be resorted to. Pressure was therefore kept up alternately, by means of the weight in the groin, and by a ring tourniquet in the lower part of the femoral; but it was always found that it was necessary to lay aside all mechanical treatment at each menstrual period.

Towards the end of May, some enlarged articular branches were observed running over the inner condyle; the sac was evidently less in size; it was much more solid, and all pulsation could be easily controlled by pressure on the ham. Direct pressure was therefore made upon the tumour, and a bandage applied to the lower part of the limb; but this was left off after a few days, as it became painful, and as little or no benefit appeared to be derived from it.

At the latter end of June, a new nurse having been appointed to the ward, the case was very closely watched, and the instruments were kept constantly applied. The patient again complained of intense pain in the cap of the knee, and of a burning sensation down the leg. This went on for two or three days, and, on the 1st of July, all pulsation suddenly ceased in the tumour, which, when examined, was found to be perfectly solid, and of the size of a large egg. Slight pressure was kept up for a day or two, after which all mechanical treatment was abandoned. In a few days, she was allowed to get up, and, after some little time, as the tumour was rapidly diminishing in size, the patient was sent into the country.

The long period which the treatment occupied in this case may, in some measure, be explained by the natural irritability of the patient, and by the light manner in which she viewed the disease. Once relieved from the great pain she had been suffering, she not unfrequently relaxed the pressure, and, at one time, it was found out that, during the temporary absence of the nurse, she removed the instruments and walked about the ward. It was then represented to her, that, unless cured by compression, she would certainly have to undergo an operation; this had the desired effect, and the plan of treatment was subsequently fairly carried out.

After her return from the country, this patient applied for the situation of nurse in the hospital, and, at the present time, she is doing the duty of night-nurse. She is in excellent health, and is able to go through all her work remarkably well, and, excepting some slight thickening in the popliteal space, all traces of the aneurism have disappeared.

GUY'S HOSPITAL.

Case 6.—ANEURISM OF THE POPLITEAL ARTERY.—TREATMENT BY COMPRESSION.—CURE ON THE ELEVENTH DAY.

[Under the care of Mr. COCK.]

William Gilbert, aged 57, a tall, spare man, standing nearly six feet two, by trade a carpenter, was admitted on November 15, on account of an aneurism in the right popliteal space. He had first noticed it two months previously, when it was about the size of a walnut, but as it gave him little or no inconvenience, he had not sought medical advice until quite lately, and it had now attained the size of an egg. Its pulsations were strong, and equal in all directions, and gave to the finger the impression that they were conveyed through coats of moderate thickness.

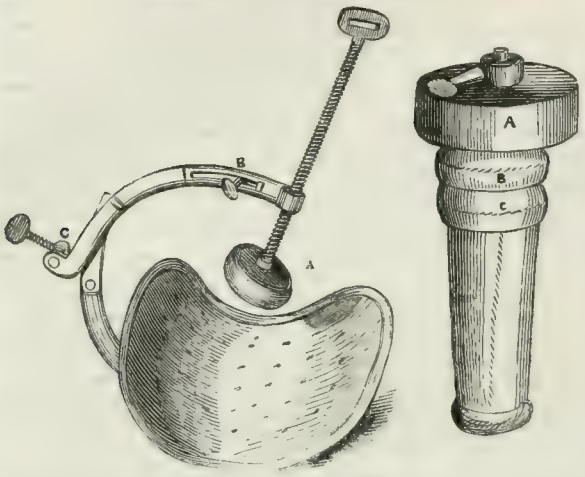
He stated that he had always enjoyed good health, with the exception of occasional slight attacks of lumbago, that he lived temperately, and had been accustomed to considerable exertion. For some years he had been subject to a sense of pain behind the sternum, on taking active exercise, attended also with slight dyspnœa, the liability to which had decidedly increased. On attempting to feel his pulse, it was discovered that at the right wrist the artery could be readily found as a soft cord, of considerable size, but that it yielded either no, or the very feeblest, pulsations. The same was the state of the right common carotid and its branches, none of which pulsated in the least. The left common carotid was very large, and beat with a powerful pulsation, while the left radial artery afforded an example of a full, soft, and rather feeble pulse. In no situation could any signs of ossification be detected in the arteries. The impulse of the heart was normal, and its sounds, though rather sharp, were heard distinctly, and free from bruit in all parts, excepting in the middle of the sternum, a little above its base, where a very faint murmur, synchronous with its first sound, became audible. This murmur increased in intensity on passing towards the left clavicle, and beneath its scapular third was extremely loud; it was also feebly heard beneath the right clavicle. On being questioned, the patient stated, that for some years his right arm had been getting weaker than the other, and that he had been much troubled with loud ringing sounds in the right ear. There was not any very perceptible difference in the muscularity of the two arms.

As the patient appeared to be a quiet and sensible man, on whose assistance in the management of his own case some reliance could be placed, Mr. Cock decided to attempt the cure by means of compression. The man was accordingly directed to keep in bed, and to have a nutritious, but moderate meat diet, with as small an allowance of fluid as possible.

On November 24 the screw compress was applied to the femoral artery in the upper third of its course, the pad being screwed down so tightly as nearly, but not quite, to suspend the flow of blood through the tumour. The patient was furnished with a heavy cylinder, such as is ordinarily used for that purpose, and directed to unscrew the apparatus when its pressure became too painful, and to place

the weight over the artery where it crosses the brim of the pelvis, thus changing the part at which the compression was applied.

Sketch of the Apparatus Employed.



The clamp here represented is the one employed by Mr. Cock, and much approved of by him. It is made by Mr. Bigg, the instrument-maker to the Borough hospitals, and is known, we believe, as "Bigg's Compressor." Its peculiarity consists in its having a hinge at C, where a screw is fixed, so as to allow of alteration being made in the curve of the upper half of the steel arc, and, by consequence, in the direction in which the pressure of the pad, A, is exerted. By this means it may be fitted to a thigh of any size, and to any part of the limb. A short slide at B provides for the same object by allowing of the lengthening of the steel arc.

The other figure represents the cylinder compressor in common use: it is made of lead, and well protected by wash-leather. A B and C are heavy rings of lead, which may be removed or applied at pleasure, making the weight heavier or lighter as may be wished. This cylinder is usually steadied by being suspended by tape from one of the cradle-bars.

During the first week the inconvenience produced by the pressure was so great that he was obliged to alternate between the screw pad and the weight every twenty minutes. His sleep was consequently obtained only by very short instalments, and although his general health in other respects continued good, yet the want of rest induced considerable restlessness and disturbance of the nervous system. The skin having become excoriated at the place where the pad had been at first placed, Mr. Cock altered its position to the middle of the thigh, and ordered the application of zinc ointment to the abrasion.

On December 10, as during the past week the force of pulsation in the tumour, when the pressure was taken off, had been very slight, and for five days quite wanting, Mr. Cock ordered the apparatus to be discontinued. The tumour was now much diminished in size and felt quite solid; it was not tender, and never occasioned pain. Running over its centre was the trunk of a small artery, the pulsations of which were very distinct. The man appeared to be in good health; he had borne the pressure with much less inconvenience during the latter part of the treatment than at first, and only twice during the whole time had it been necessary to exhibit opiates. His diet had been meat to dinner, and bread and butter morning and evening, with four small cups of coffee per day as the only diluent.

20th.—Ten days having now elapsed since the suspension of pressure, the tumour still continuing quite free from pulsation, Mr. Cock allowed him to get up, the parts being supported and confined by a bandage. The artery before noticed as running over the original tumour is increasing in size; there are one or two others at the sides of the swelling, probably enlarged anastomotic branches.

26th.—The cure appearing to be complete, he is discharged. The tumour has diminished to the size of a small walnut, and is quite hard.

The physical phenomena of his chest continue precisely as before. Dr. Hughes, who at Mr. Cock's desire has examined the case, expresses his opinion that there is aortic disease, but as it does not give rise to any distressing symptoms, there appears little object for attempting anything in the way of treatment.

Oct. 11, 1853.—Mr. Cock informs us that he has recently heard a very good account of this patient's condition. He is now regularly at work, has had no indications of return of the popliteal disease, and does not suffer materially from that within the chest.

We append to this case the following brief but very sententious clinical observations which it elicited from Mr. Cock.

"The want of success which I have seen attending the application of pressure in several previous instances, may, I think, fairly be ascribed to certain causes and circumstances, the regulation of which is in great measure under the control of the surgeon and his patient. Both parties must combine to carry out certain principles and practices, without the observance of which a favourable issue can hardly be expected. The patient should be both willing and intelligent; he should thoroughly understand the mode and *rationale* of the practice about to be adopted, so as to be able to adjust and regulate the apparatus in the unavoidable absence of his medical adviser. His wishes and feelings should be engaged in the success of a scheme, the beneficent intention of which is to save him from the more dangerous, although less tedious operation by the knife.

"It not unfrequently happens that a man comes into an hospital for the special purpose of having his artery tied, as he has been told that this is the only means of cure. A prize-fighter was some years ago under my care with popliteal aneurism. I in vain tried to persuade him to submit to compression: the apparatus was thrown aside as soon as it became irksome. He had no fear of the knife, and at his urgent request I tied the artery with a favourable result.

"One of my colleagues had a man under his care who repudiated compression, and declared he would neither eat nor drink until the vessel was ligatured. He kept his resolution long enough to induce compliance with his demand.

"An important item in the treatment is the regulation of the patient's diet. A moderate, perhaps sparing, quantity of nutritious solid food, of whatever character may best suit his taste and habits, with the smallest possible allowance of unstimulating fluid, seems to me best adapted for the purpose. I place much stress on the abstinence from drink, as I believe it will be allowed, that a quantity of even the blandest fluid received into the stomach seldom fails to add to the volume of the blood, while it accelerates the action and increases the impulsive force of the heart.

"Much depends on the first adaptation of the instrument, and I think it would in most cases be judicious to use little or no positive pressure for a day or two, or until the patient has become reconciled to the inconvenience and constraint which the apparatus produces. Pressure should be applied with much gentleness, and increased most gradually. Moreover, as a principle, which I am aware cannot always be carried out, I would say, that the screw should never be turned so tightly as to require subsequent relaxation or removal, except for the purpose of obtaining ease by transferring the pressure to another locality. I have reason to believe, that much of the pain, and that of the most unbearable character, is produced by undue pressure on the vein, causing impediment to the return of blood, and consequent congestion. This involves a difficulty not easily overcome, as the same instrument whose pressure diminishes the calibre of the artery must necessarily exert more or less influence on the contiguous vein; but the injurious effects may, in great measure, be obviated, first, by moderating the force applied until time has been given for the collateral venous channels to come into play; and, secondly, by raising the limb and placing it in such a posture as may best accord with the feelings of the patient. Much depends on the perfection of the instrument, and its capability of being easily regulated and controlled by the patient, without shifting the position of the pad over the artery. Much also may be expected from keeping the patient in a tranquil and hopeful state.

"Lastly. All unnecessary interference with the patient or the apparatus; all handling or squeezing of the sac by those whose curiosity exceeding their discretion, renders them anxious to ascertain what change may have taken place; all relaxing of pressure to see the amount of success, disturbing the progress of events, interfering with the processes of nature, and not unfrequently 'undoing all as all had never been,' should be strictly interdicted. No two cases of aneurism are probably exactly similar; and whatever principles we may propose or lay down for their treatment, they must be modified according to circumstances."

Case 7.—DOUBLE ANEURISM OF THE RIGHT FEMORAL ARTERY.—SHORT TRIAL OF COMPRESSION.—PALLIATIVE TREATMENT.

[Under the care of Mr. HILTON.]

THE following case affords an example of a certain class of aneurisms, in which radical treatment, whether by ligature or compression, is inadmissible on account of the great risk to life involved:—

John Kitchner, aged 67, a ship-caulker, accustomed to live freely and work hard, was admitted on November 10, 1852. About an

inch below Poupart's ligament, on the right side, was a large tumour, much larger than a turkey's egg, projecting prominently forwards, and giving very forcible pulsations. On pressing the finger just above it, the external iliac was felt to be much dilated and rigid from disease of its coats. In the middle of the thigh was another tumour, quite distinct from the one above it, about the size of a hen's egg; it also pulsated strongly. The man stated that the lower one had appeared first a little more than a year ago, and that the other soon followed it. Since their appearance he had been able to do but little work. He was a stout, rather florid man, and had always enjoyed fair health; no disease of the heart or large vessels was detected by the stethoscope; his pulse was 60, soft, and very feeble, but somewhat stronger in the right wrist than in the left. Mr. Hilton expressed from the first an opinion strongly unfavourable to the adoption of any plan of cure, stating that he considered the patient's age, the existence of two aneurisms in one artery, and the rigidity and dilatation of the iliac vessel, as so many circumstances concurring to contra-indicate the performance of an operation. Were the iliac to be tied, he thought there would be a great risk of secondary hæmorrhage. About a fortnight after the patient's admission, at the suggestion of the late Mr. Brausby Cooper, Mr. Hilton made trial of compression by means of a cylinder placed on the vessel just where it crosses the brim of the pelvis. The man, however, became very irritable under the treatment, which occasioned much pain, and as the lower tumour, previously much contracted by the use of ice, appeared to get softer rather than harder, the plan was abandoned after two or three days. The man remained in the hospital for about two months longer, during which time a bladder of ice was kept applied to the larger tumour, which, under that treatment, conjoined with restriction to the recumbent posture, very materially diminished in size. Mr. Hilton finding that the opinions of his colleagues coincided with his own as to the unsuitability of the case for any attempt at radical cure, had a metal cup constructed, to be worn over the tumour, with a view to prevent its increase, and so provided the man was discharged in the beginning of January, 1853.

Mr. Hilton informs us that he has since heard from the man's wife, to the effect that some months after his return home he was one day suddenly seized with great swelling of the entire thigh, attended with faintness, and from the account then given there appeared reason to believe that the sac had burst, and that the case would soon terminate fatally.

Case 8.—POPLITEAL ANEURISM.—TREATMENT BY COMPRESSION.—CURE ON THE THIRTY-SECOND DAY.

[Under the care of Mr. HILTON.]

William Duckworth, aged 37, a warehouseman, accustomed to much standing, and to running up and down long flights of stairs, was admitted on July 20, 1853, on account of an aneurism the size of a hen's egg in his left popliteal space. The tumour pulsated very forcibly, was definitely circumscribed, and equally soft and smooth in all parts; a bruit was heard over it synchronous with the pulse, and both pulsation and bruit were arrested by making pressure on the femoral artery. The man stated, that he had first felt pain behind the knee six weeks previously, and that he had discovered the presence of the swelling a few days afterwards. He was an intelligent person, quite willing to submit to and to aid in any plan of treatment thought best for him; although rather stout, yet his muscular system was flabby and soft. It did not appear that the tumour had materially increased in size since his first discovery of it, and it had occasioned him very little pain.

Treatment was commenced on the 21st, at eight in the evening, when Mr. Hilton adjusted a clamp and pad over the junction of the superior and middle thirds of the femoral. It was screwed tightly down, and the pulsations of the aneurism quite arrested. The man was ordered to have a full meat diet, without any stimulant, and to restrict himself to as small a quantity of fluid as possible. To take fifteen minims of the tincture of digitalis every four hours.

July 22 (2nd day).—The pain produced by the pad was so severe that after about two hours the apparatus had to be removed. This morning Mr. Hilton again applied it, and furnished the man with a heavy cylinder, directing him to alternate the pressure by the two instruments, but never to be without one of them in use. To continue the same medicine and diet.

23rd (3rd day).—Has slept badly, in part from pain and in part from mental anxiety. The pressure has produced tingling and numbness down the leg, with slight swelling about the knee.

24th (4th day).—The thigh being fat it has been found necessary to screw the pad very tight in order to keep up sufficient pressure, and the skin has consequently become chafed. The tumour is certainly firmer than it was. The skin is to be protected by dusting it with powdered oxide of zinc, and the apparatus is to be frequently moved from part to part.

27th (7th day.)—The patient has not exceeded a pint of fluid per diem since the treatment was commenced. His health continues good, and he now gets a fair amount of sleep, though he complains of feeling stiff and tired. The tumour hardens, and is, perhaps, a little less in size than it was. The skin of the thigh is still inflamed and vesicated.

August 4th (15th day.)—Owing to the fat and flabby condition of the thigh much difficulty has been encountered in keeping up constant pressure of sufficient force, and the cure appears to be delayed on this account.

6th (17th day.)—The man is this morning somewhat feverish; the bowels have not acted for several days. To take a calomel and opium pill (gr. ij., and gr. ss.) and a dose of castor-oil afterwards.

7th (18th day.)—The medicines have acted, and he is much better. The clamp apparatus is to be removed, in order to have the hinder pad altered. Pressure is to be kept up constantly with the cylinder.

10th (21st day.)—The skin is so sore, that it has not been thought advisable to re-apply the clamp. The cylinder is kept in constant use; but it is probable, that during sleep, it often gets displaced. The tumour is, however, becoming much firmer, and its pulsations, though still strong, are diminished.

13th (24th day.)—Steady progress. The medicine (digitalis) was omitted yesterday; it has throughout kept the pulse quiet, though not markedly depressed. The same diet is still to be persevered in.

21st (32nd day.)—Pulsation in the tumour which has been gradually decreasing day by day, has now quite ceased. The swelling is not now larger than a pigeon's egg, firmly resisting, and free from tenderness. An artery of some calibre may be felt crossing over the sac. The pulse in the posterior tibial cannot be felt. Throughout the treatment the limb has never perceptibly lost temperature; it is, perhaps, a little larger than the other, but no marked œdema exists. Since August 7 the cylinder only has been used as a compressor; it is to be continued for a few days longer.

31st.—The entire limb has been bandaged in flannel, and supported to the neck by a long sling, and in this way the patient has been allowed to move about the ward with crutches.

Sept. 6.—The tumour is still further diminished in size, and continues quite solid. During the last few days the man has been walking about, and occasionally bearing his weight on the affected limb. He is discharged.

We have extracted the preceding narrative from the notes taken by Mr. Ince, one of Mr. Hilton's clinical reporters. Mr. Hilton informs us that the man is now (Oct. 26) quite well, and at his usual employment.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

LEEDS GENERAL INFIRMARY.

Case 9.—POPLITEAL ANEURISM.—PRESSURE TRIED WITHOUT SUCCESS.—LIGATURE OF FEMORAL.—RECOVERY.

[Under the care of Mr. T. P. TEALE.]

William Stuart, a daily labourer, aged 30, of tall, thin figure, and delicate aspect, was admitted into the infirmary August 19, 1853, suffering from popliteal aneurism.

On the 7th of July, while at drill as a militia-man, he first found a small painful lump in the left ham, but continued on duty until August 3, the lump having in the meantime become larger, and the leg and ankle slightly swollen. He afterwards worked at a flax-mill until the 19th, when he became an inmate of the hospital. On his admission, the leg was œdematous, and the veins below the knee enlarged. A well-defined tumour filled the popliteal space, strongly pulsating, having distinct lateral expansion at each beat, becoming reduced in size by pressure upon the tumour or upon the femoral artery, and regaining its former size by pulsatile stages when the pressure was discontinued. There was slight feverishness, but, in other respects, his general health was good. No other disease could be detected in the heart or large vessels. He is directed to lie in bed, to take his ordinary diet, but without stimulants, and saline medicines with digitalis.

August 22.—The feverish condition having abated, Mr. Teale directed pressure to be applied in the course of the femoral artery, by means of the circular steel tourniquet described by Mr. Skey, in his "Operative Surgery." The instrument answered remarkably well, and perfectly commanded the artery. It also admitted of being readily moved from one part of the artery to another, so as to vary the points of compression. The patient, being an intelligent man, entered upon the treatment with the wish and the ability to second the efforts of his surgeon. The pressure was directed to be applied to such a degree as greatly to subdue the pulsation in the tumour, but not absolutely to arrest it. The patient was, moreover, directed to move the pad higher or lower in the course of the artery in the upper third of the thigh, when the continuance of the pressure produced distress.

23rd.—Pressure has been employed during the day six hours, and during the night four hours. The tumour is much reduced in size, and the limb less swollen.

24th.—Pressure seven hours in the day, and four hours in the night.

25th.—Pressure has been employed seven hours and a half in the day and two hours and a half in the night. Tumour considerably smaller, œdema less, veins much less distended.

26th.—The tumour is rather larger. At seven p.m. yesterday it began to be very painful and hot; the pulsation was much increased. Pressure has been employed as originally directed, seven and a half hours during the day, and one hour during the night, and more gently for four hours during the intervals.

27th.—Tumour larger, œdema increased, veins more enlarged. He complains of thirst; pulse 90, rather hard. Pressure has been applied eight hours during the day and two in the night. Salines and liquid diet ordered.

28th.—Severe shooting pains up and down the thigh. Tumour rather smaller, œdema less, thirst continues, bowels confined. Pressure has been employed nine hours during the day, and two during the night. A dose of castor oil ordered.

29th.—He has slept very little during the night; the shooting pains continue, but he feels a little better. The bowels have been freely moved. The tumour not much altered. Pressure has been employed seven hours in the day and six in the night.

30th.—A larger and flatter pad has been employed, in the hope that the pressure, which has of late rather distressed the patient, might be better borne. By this pad the pulsation is commanded as well as by the other, and its use is less distressing. Tumour rather larger. Pressure has been employed seven hours in the day and two at night.

31st.—Tumour much larger and very painful; leg and ankle more swollen. He is feverish, and feels ill and anxious. Pulse 80. The pressure to be omitted for the present. An effervescing saline medicine to be taken, and a linseed poultice applied to the tumour.

September 1.—He is feverish; pulse 90; bowels confined; tumour painful and tender on pressure, pulsating strongly. Six leeches to be applied to the ham. Castor-oil.

2nd.—Tumour less painful. The pressure to be again employed.

3rd.—He is feverish and thirsty, and suffers from nausea and pain at the pit of the stomach. The pressure has been employed seven hours in the day and two at night.

4th.—Tumour rather less.

5th.—Tumour larger again. The patient urgently requests that the artery may be tied. He is feverish, and looks ill and anxious.

6th.—The tumour being much the same in size as when the treatment was commenced, and the patient feeling unable and unwilling to proceed with the pressure, Mr. Teale, with the approval of his colleagues, tied the superficial femoral artery just where it passes behind the sartorius. The pulsation immediately ceased, and the tumour became much reduced in size.

7th.—The patient is easier; the limb warm, except the toes, which are rather cold. The foot and leg to be wrapped in carded wool.

8th.—In the afternoon of yesterday he again became affected with nausea, pain at the stomach, and thirst. A blister to be applied to the epigastrium, and the effervescing medicine taken.

9th.—Much relieved; the limb warm and comfortable; tumour much smaller, and hard.

15th.—Ligature has come away this day.

October 5.—He is now convalescent, walks about freely, and is quite relieved of pain and œdema. There is very slight trace of the tumour in the ham perceptible.

For the particulars of the preceding case we are indebted to the notes taken by Mr. R. G. Hardwick.

Case 10.—LARGE DIFFUSED FEMORAL ANEURISM.—FAILURE OF COMPRESSION TREATMENT.—LIGATURE OF THE VESSEL.—RECOVERY.

[Under the care of Mr. Samuel HEY.]

The subjoined case presents some very instructive features. We alluded to it in a former part of the Report as bearing much similarity to Case 3. From that, however, it differed in respect to rapidity of increase, which, in Mr. Cooper's, was so great, as to preclude any attempt at cure by compression, while it permitted of it in the following. Both cases, but the latter more especially, are interesting, as examples of how large a quantity of fluid blood may be ultimately absorbed from an aneurismal sac, and strongly encourage surgeons to leave such tumours, provided they do not pulsate, to the natural processes:—

Richard Sheldon, aged 39, an engineer working at Crewe, was admitted into the General Infirmary, at Leeds, on June 24, 1853. He states, that, a month ago, he twisted his leg while lifting a heavy weight, and immediately felt something give way, but experienced little pain or swelling until a week after the accident, when a tumour began to appear on the inner side of the thigh, attended with severe pain.

When admitted, the swelling was of large size, somewhat pyriform, occupying nearly two-thirds of the limb in circumference, and from three and a-half inches below Poupart's ligament to the opening in the triceps. Pulsation was indistinctly felt, and the articular bruit was perceptible, but not loud; there was also considerable feeling of fluctuation. The most distinctive symptom, however, was the diminution when the palms of the hands were firmly applied to the tumour, while the femoral artery was compressed against the pubes.

The treatment adopted in this case was, first, to apply pressure to the femoral artery, as it was found to give instant relief to the pain, which, by degrees, had become extremely severe. Mr. Hey also deemed himself justified, as the tumour was not rapidly increasing, in trying whether this means, as used in circumscribed aneurism, might produce an attempt at a curative process.

After perseverance for fifteen days, it was found that the tumour still increased, the fluctuation became more and more evident, and a red blush began to appear in the skin. Mr. Hey then thought it dangerous to defer the operation longer, and, accordingly, the trunk of the femoral artery was tied on Sunday morning, July 10. A single ligature was used, and placed at about one inch and a-half below Poupart's ligament, and a little below the profunda artery, which was given off high up, and could be felt by the finger.

Nothing particular occurred in the operation; the vessel, which appeared deeper than might have been supposed in that situation, probably from the effect of the tumour below, was but little exposed, and the needle passed from within outwards. The vein was not seen. On tightening the ligature the pulsation ceased, and never returned.

Without giving a special detail of the patient's progress from day to day, it may be sufficient to say, that the measurement of the tumour, which was a first nineteen inches at the upper part, eighteen and a-half inches over the middle, and fifteen and a-half inches at the lower part, diminished in eleven days to sixteen and a-quarter, seventeen and a-half, and fourteen inches, at the same points respectively.

For three days there was, at intervals, severe ralgic pain, which was, however, always entirely relieved by opiates.

On the 19th day after the operation, there was a sudden gush of blood from the wound, to the amount of about two ounces, which was immediately arrested by a small compress of lint, and did not recur; the ligature, which was probably detached at this time, came away on the 22nd day, and the wound afterwards speedily healed. For some time subsequent to the operation, fluctuation was so manifest, that it was supposed that suppuration might occur; the fluid, however, gradually disappeared.

No other treatment was adopted than that of keeping the limb at rest, with the exception of a lead lotion while the skin was discoloured, until the patient began to walk about, when a mercurial plaster was applied, and the limb supported by a bandage.

At the present date (Oct. 25) the man appears perfectly well, and, indeed, quite robust, and is able to walk with perfect ease; the whole swelling has disappeared, with the exception of a small quantity of fibrin in the middle of the thigh, over the immediate course of the artery. He has returned to laborious occupation in the Leeds Railway Station.

[*Note.*—We shall continue, and hope to conclude, the series of aneurism cases next week.]

Medical Times & Gazette.

SATURDAY, OCTOBER 29, 1853.

THE CHOLERA AND THE DRAINAGE OF LONDON.

After two terrible visitations of cholera—after reiterated invectives from a press for once united—after innumerable meetings and consultations of the Commissioners of Sewers,—a third threatened outbreak of cholera still finds the Thames at the same time the source of supply of water to a very large portion of the Metropolis and the reservoir for its sewage.

The amount of sewage now daily discharged into the Thames has been estimated by the Commissioners of Sewers; and it appears that the Metropolitan area on the northern side of the Thames daily discharges 9,100,000 cubic feet of filth into the river, one-half of this being discharged during six hours of the day, or at the rate of 12,638 cubic feet per minute. The low-level Metropolitan area on the South side of the Thames daily discharges 3,000,000 cubic feet into the river; the ratio being 4166 cubic feet per minute during the six hours of the greatest flow.

These calculations refer only to sewage discharged during dry weather; and any system of drainage must provide, not only for this, but for rainfall. Now, the rainfall on the Northern Metropolitan area of forty-seven square miles would produce a flow of 19,132 cubic feet per minute; and that on the South side of the Thames of 8671 cubic feet per minute.

If we consider that more than half the streets of the Metropolis are undrained, and that the population, rapidly increasing, will require additional drainage, it is very plain that any system of Metropolitan drainage, to be effectual and useful for some years to come, must provide for a daily discharge of 25,000,000 cubic feet, and a discharge of 71,000 cubic feet per minute during the six hours of the greatest flow, as rainfall during those hours must be anticipated.

It is also evident that the public will not be satisfied until the whole of the sewage is diverted or intercepted from the Thames. Thus, any plan which does not provide for this interception, or which is not capable of removing the quantity of sewage and rainfall we have just calculated, should be rejected as unsatisfactory or inefficient.

The great London Drainage Company proposed to effect the total interception of sewage matter from the Thames, by constructing lines of sewers on both sides of the river, which would carry their contents into reservoirs at some distance to the eastward of the inhabited portions of the Metropolis, where the sewage was to be converted into dry portable manure. It was calculated that the sale of this home-made guano would afford a remunerative return upon the original outlay. Accordingly, the Company offered to drain the Metropolis upon very moderate terms, provided their right to the manure were secured.

At first sight this scheme appeared very promising,—the Thames would be purified, the Metropolis drained, and the ratepayers not heavily taxed; but objections were raised:—1st. That no *private* company ought to be entrusted with such a scheme; and 2ndly. That the plan, though good in the principle of interception, was not good in detail.

We need not enter into the question of entrusting the scheme to Government or to private enterprise. So much may be said on both sides, that it is difficult to discover which might prove the better course. As to the details of the plan, the Report of the Commissioners certainly demonstrates that the sewers of the Company would be inadequate to carry off the quantity of sewage and rainfall required to make any system of London drainage complete.

A new scheme has just been promulgated by Mr. Bazalgette, the Engineer of the Commissioners of Sewers, who have published his Report, with comments by Sir W. Cubitt and Mr. Stephenson. The details of the plan may be found in the *Times* of Friday last.

The scheme, though a perfect measure in itself, only includes a portion of the drainage of the district north of the Thames, and might be proceeded with at once; but no portion of the plan could be made to answer the purpose on the south side until the whole is completed. Mr. Stephenson merely characterises the scheme as a "step in the right direction." He adds, that "its effect will scarcely be felt if not followed up by similar designs of much greater magnitude both on the north and south sides of the Thames."

Before the meeting of Parliament, other plans will doubtless be brought forward. Whether recommended by the Commissioners or not, we trust that none will be accepted which does not provide for the perfect drainage of the whole of the Metropolis, for the increased requirements of an increased population, and for the entire purification of the Thames.

CLINICAL MEDICINE AT THE LONDON SCHOOLS.

We felt great pleasure last week in inserting the letter of Mr. Holmes Coote, upon the mode of clinical instruction adopted at St. Bartholomew's Hospital. We are rejoiced to find that attention is being paid at the largest of the Metropolitan Medical Schools to this, the most important, because the most practical, portion of professional education. But, in making the remarks that called forth Mr. Coote's reply, our observations were not intended to apply to any one hospital whatever. We emphatically stated our opinion, that practical bedside medicine was imperfectly taught in London generally; and we urged the appointment of clinical professors, whose duty would be to collect cases from the wards, and deliver explanations of them to the students. We alluded, moreover, to the staff attached to each hospital; expressing our opinion, that the proportion of medical attendants to the host of sick that crowd the gates of our charitable institutions is far too small for the former to perform their duty to their patients, their pupils, and themselves. We also took occasion to contrast the state of Clinical Medicine at our own schools and in other countries, and urged upon the Examining Bodies the necessity of taking the initiative, by demanding a regular course of Clinical instruction from those who sought admission into the Profession.

We might have stated, that some of the Examining Bodies have already done this; for, on looking over the Regulations to be observed by candidates for the Diploma of the University of London, we find that the student must bring evidence of having attended lectures on Clinical Medicine and Clinical Surgery previous to his second examination for the Bachelorship of Medicine; and the Society of Apothecaries have long included Clinical Medicine in their Curriculum.

It appears, however, that these Regulations have by no means been well understood by the Schools or observed by the Pupils; and hence we find, that constant doubts have arisen as to what the term "Clinical Medicine" actually

implies. The Physicians and Surgeons of the hospitals, too, often consider that they have done their duty by allowing the pupils to walk the wards and to see the operations; and the latter have been well content to escape attendance on Clinical Lectures when any are delivered. That such is not the meaning of the Examining Bodies, is, however, quite apparent from perusing their Regulations. The University of London requires certificates "of having attended the Surgical practice of a recognised hospital or hospitals during twelve months, *and Lectures on Clinical Surgery*," and "of having attended the Medical practice of a recognised hospital or hospitals during other twelve months, *and Lectures on Clinical Medicine*."

The Regulations of the Society of Apothecaries require the student to attend for a specified period the Medical practice of an Hospital, *and Clinical Medicine*. It is quite evident that the mere routine perambulation of the wards is not the Clinical Medicine contemplated by either of the Examining Bodies alluded to, but is something superadded to the ordinary Hospital attendance.

But we find that the Apothecaries' Society have still further defined the meaning of Clinical Medicine, by some recent Regulations made upon the subject. In the last edition of their Rules, published for the guidance of students, it is stated, that "in place of the second course of lectures on the theory and practice of medicine, the Court of Examiners will admit a certificate of attendance on a course of clinical lectures delivered *in a recognised Hospital by a distinct Professor, consisting of not less than seventy-five lectures*." This is a direct encouragement to the delivery of regular courses of Clinical Lectures; but it would be far better to make the attendance compulsory, instead of optional, as at present.

On turning over the Regulations of the Royal College of Physicians, we find no mention made of Clinical Medicine at all; and in the Regulations of the Royal College of Surgeons, a similar silence is observed in relation to Clinical Surgery.

Surely the good beginning made by the Apothecaries' Company might be followed by the College of Surgeons substituting a course of clinical surgery for the second course of lectures on the "principles and practice" of this science. Very few students can sit through two courses of lectures on the same subject by the same lecturer, and probably the profit would not be great if they could.

If all the Examining Bodies were to unite in demanding attendance on specific courses of clinical instruction, the Hospitals would very soon accommodate their arrangements to the necessities of the case, and the students would be relieved from the wearisome attendance upon routine lectures, delivered from a book, and little varied from year to year.

Perhaps the Clinical Professors should not be selected from those who possess large private practices, or from those who have been very many years in the Profession; but juniors should be appointed for the purpose, men in the prime of life, who are not yet overburdened with the labours of private practice, and who would be willing to devote a large portion of their time to the special duties of instructing the pupils in the nature, the progress, and the treatment of disease. This selection of the younger members of the hospital staff would be no disrespect to the seniors; for the latter, while occasionally delivering a clinical *lecture*, might fairly be exonerated from the laborious clinical *teaching* which must necessarily devolve upon the Clinical Professor.

It is said that the only objection to so wholesome an arrangement springs from some jealousy existing among the officers attached to our public hospitals; but we do not doubt that at some period not very far distant, the Physicians and Surgeons of the great Metropolitan charities will see the matter in a proper light, and render the immense resources of those establishments more generally available for the instruction of the rising generation of students, and for the dissemination of sound principles of practical medicine and surgery. We hope, before many years have passed, that clinical teaching will be thoroughly and efficiently carried out, that clinical lectures will be almost daily delivered, or that the system of clinical teaching of the great Continental hospitals may be adopted; that all the Examining Bodies will make such courses compulsory; and that the students will throng the benches of the clinical theatres. Much of the knowledge required for the Practitioner may be learned from books, and may be acquired in the solitude of the closet; but the great hospitals are the living museums of pathology, and Clinical Professors are required, to point out to the student the actual phenomena of disease, to teach him how to discriminate its varieties, and to enable him to remedy its results.

IMPORTANT DECISION IN A COUNTY COURT.

We are glad to publish a rather important exposition of the law relating to unqualified Practitioners of Medicine, by the Judge of the Salford County Court. It appears, that a person practising as a druggist has been in the habit of attending patients at their own houses, attending women in their confinement, vaccinating their children, and, in fact, performing all the functions which devolve upon the licensed Practitioner, and demanding and receiving money for his services. In this course he might have proceeded unmolested, had he not, with unparalleled audacity, sued one of his patients in the County Court of the district where he resided. The defence which was set up was at once decisive as to the validity of the plaintiff's claim; namely, that as he was not qualified to practise medicine, he could not sustain an action for services rendered in a Medical capacity. This view of the case, which is quite obvious to any member of the Medical Profession, and, indeed, to any person of common sense, is not always entertained upon the bench; and we have, on previous occasions, performed the disagreeable task of showing that the quack and the pretender are often much more protected by the strong arm of the law than the legitimate Practitioner. We are, therefore, happy to point to the common-sense view taken of this particular case by the Judge of the Salford County Court; and we cannot but hope that his plain interpretation of the law will inflict a "heavy blow and great discouragement" upon the practice of Medicine by druggists. The impudence of the plaintiff in bringing the action at all is surprising; and his conduct in so doing proves that he calculated upon the anomalous condition of the law for a verdict in his favour. It is well that his expectations have been so signally disappointed.

The following is an abstract of the case from the *Manchester Courier* :—

"In a case, Ecroyd *v.* Knowles, at the Salford County Court, on Wednesday, the 24th ult., His Honour (J. W. Harden, Esq.,) gave judgment in an important case. The plaintiff is a chemist and druggist, and keeps a shop in Broughton-road, and having served an apprenticeship to a surgeon, he is in the habit of giving advice to his customers, sometimes attending them at their own houses, but charges for medicines only and not for advice. He attended the defendant's wife in her confinement, and was paid for that attendance.

In February, 1851, he vaccinated the child, and, shortly after, it began to suffer from scrofula, and died in about three months, after very great suffering. During that illness, the plaintiff and no one else attended the child, frequently calling at the defendant's house, and being always addressed as 'Dr.' This action is brought for lotions, powders, and ointment, supplied in the course of his medical treatment. The defence was, that by the Act 55 Geo. III., cap. 194, sec. xxi., it is declared, 'that no apothecary shall be allowed to recover any charges claimed by him in any court of law, unless such apothecary shall prove on the trial that he was in practice as an apothecary prior to or on the 5th August, 1815, or that he has obtained a certificate to practise as an apothecary from the Master Warden and Society of Apothecaries;' that the plaintiff was probably not born in 1815, and had no certificate. The defendant, moreover, contended, that, as the death of the child was attributable to the plaintiff using diseased matter for vaccination, it could not be said that his services were worth anything. My decision turns upon the first point only, and it becomes necessary for me to inquire what are the relative duties of an apothecary and of a chemist, within the statute 55 Geo. III., c. cxciv., by the 28th section of which it is provided, 'that nothing in this Act contained shall extend, or be construed to extend, to prejudice, or in any way to affect the trade or business of a chemist, in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale and retail; but all persons using and exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business in such manner, and as fully and amply, to all intents and purposes, as the same trade or business was used before the passing of this Act.' The business of a chemist is, in my opinion, to prepare and dispense, that is, distribute or deal out and sell medicines; but if he presume to prescribe or administer medicines in the ordinary course of attending patients, it appears to me that he practises as an apothecary, and that he cannot recover for the phials. See the Apothecaries' Company *v.* Greenough, 1 2 B 799; Allison *v.* Haydon, 4 Bing., 619; Steed *v.* Henley, 1 C. and P. 574. Each branch of the Medical Profession has its own province. It is, I think, quite clear, that the plaintiff in this case has interfered with the province of the apothecary, and that charging for the drugs is a mere blind; he is, consequently, debarred by the 21st section of the Apothecaries' Act from maintaining this action, and the verdict must be entered for the defendant."

THE CHOLERA.

SANITARY NOTABILIA.

Our Metropolitan intelligence with regard to the sanitary condition of the lower classes furnishes matter for melancholy enough reflection. The burden of it is this:—There exists, as is well known, a Metropolitan Society for the Improvement of the Dwellings of the Labouring Classes. Now, had the mortality throughout London generally been in proportion to the mortality which prevailed in the establishments under this Society, the deaths, instead of being 55,354, would have amounted only to 29,485. Thus it is calculated that 25,000 lives would have been saved for the service of the State, leaving out of the question the awful amount of private affliction which must have arisen from this devastation. It is probable that the above calculation is somewhat loosely made, but it is evidence of a fact within the knowledge of all who give the most passing attention to the subject—namely, that our fellow-creatures are struck down by thousands by causes perfectly within our control.—*Times.*

SCOTLAND.

In the epidemic of 1848-49 some of the larger towns of Scotland were the first attacked, among the dense populations of which the disease spread with appalling rapidity, and proved most destructive. In the present visitation, there has, as yet, been no similar outbreak. In numerous places, indeed, sporadic cases have occurred, and in some few, as in Dunse, Bathgate, and Coldingham, the attacks have occurred in groups. Deaths have also been recorded from the malignant form of the disease in Edinburgh, Leith, Glasgow, Dundee, Annandale, Rothbury, and Featherstonehaugh; but in none of these places has there been any general outbreak, nor, as far as appears, has there been any extensive prevalence of diarrhœa, though some deaths have been produced by the latter disease. It would seem, that the dreadful visitation of 1848-49 has, in some instances, left a salutary impression on the minds of the people. Dr. Lyon Playfair refers particularly to St. Andrews as an example of this. In 1849, cholera broke out in a virulent form in this city. On that occasion, Dr. Lyon Playfair, at the request of the local authorities, superintended the application of the measures then adopted for preventing the spread of the epidemic. From a recent personal inspection of the town, and particularly of the old haunts of the pestilence, Dr. Playfair is satisfied that the town, owing in a great measure to the judicious and energetic course taken by its Provost, is in a much better state for resisting an attack of cholera than it was in 1849; and that, were it not for the abominable condition of its apologies for sewers, in all human probability St. Andrews would remain exempt from attack.

Numerous applications have been received from Scotland for increased powers for carrying into effect sanitary improvements; and at the instance of the Board of Supervision at Edinburgh, and on consultation with the Lord Advocate, supplementary regulations, specially adapted for the Scotch towns, have been issued.

THE METROPOLIS.

The deaths from cholera, which had declined in the two previous weeks from 66 to 45, rose again last week to 83. Forty males and 43 females perished by this disease. The districts on the south side of the river still assert their fatal pre-eminence, 49 out of the whole number of cases having occurred there. Rotherhithe, Battersea, St. Saviour, St. George, are the parts of that division which suffered most. The deaths from cholera in London, in the corresponding week of 1848, were 34.

The public have been frequently cautioned against indulgence in spirituous liquors at periods of epidemic cholera. The readers of the Registrars' notes, published from week to week, will find too many instances in which this advice has been neglected. A person drinks to excess; in a few hours he is suffering from an attack of diarrhœa, and the disease runs through its several stages to a fatal termination. When cholera is at the door, temperance in the use of intoxicating liquors, and an almost total abstinence from gin and other spirits, becomes extremely necessary for the preservation of life.

It is admitted that diarrhœa generally precedes cholera; that there are few, if any, exceptions to the rule. But it is of importance both to establish the rule, and show its extent, by a mass of observations accurately recorded. It is therefore desirable that medical informants should inquire specially, in all cases, whether the attack of cholera commences by "diarrhœa," and state the interval of time in hours and days between the appearance of diarrhœa and the supervention of spasms, or of the other characteristic symptoms of cholera.

Last week, the 83 deaths from cholera occurred as follows:—In the West Districts, 2; in the North, 5; in the Central, 3; in the East, 24; and in those on the South side of the Thames, 49.

THE PROVINCES.

The following are fatal cases of cholera, as reported by the Board of Health:—

October 21.—Gateshead, 1.

October 22.—Cockermouth, 4; Newcastle, 3; Heworth District 3.

October 23.—Newcastle, 1.

October 24.—Dundee, 1; Hemel Hempstead, 1; Newcastle, 1; Luton, 1; Boxmoor, 1; Heworth District, 2.

October 25.—Newcastle, 0; Heworth District, 2.

Cholera in Berlin.—List of those daily attacked from the 13th to the 19th of September, 1853:—38, 33, 33, 32, 41, 37, 43. Since the beginning of the epidemic, 629 have been attacked, 383 have died, 96 have recovered, 150 still uncured. In the only cholera hospital at present opened there are no more received than 120, of whom 70 have died, 18 have recovered, 32 remaining uncured.—*Deutsche Klinik*, Sept. 24.

Mortality in Public Institutions for the week ending October 22:—

	Males.	Females.	Total.
Workhouses	33	42	75
Military and Naval Asylums.. ...	4	1	5
General Hospitals	16	12	28
Hospitals for Special Diseases ...	3	1	4
Lying-in Hospitals	...	...	...
Lunatic Asylums	4	3	7
Military and Naval Hospitals ...	5	...	5
Hospitals for Foreigners, &c. ...	...	...	...
Prisons	...	2	2
	65	61	126

REVIEWS.

1. *Cholera:* its Nature, Treatment, and Sanitary Requirements. By S. Scott Alison, M.D. Pp. 35. London. 1853.
2. *Cholera:* its Physical Phenomena, Causes, and Treatment, together with the Sanitary Arrangements and Appliances for preserving Health, necessary to be Adopted at the Time of the Epidemic. By Joseph Thomas Mitchell, F.R.C.S., late Medical Officer of Lambeth. Pp. 16. London. 1853.
3. *Thoughts on Cholera.* By Edwin Hearne, M.B., London, formerly House-Surgeon to University College Hospital. Pp. 56. London. 1853.

Dr. Alison's pamphlet was written in 1848, and published in the "Health of Towns' Journal," and he now reprints it, as he states, "for distribution among his patients and friends, and in a form procurable by the Profession and the public at large." Without making any objection to the matter or the manner of Dr. Alison's little work, which we have read with much satisfaction, we think that the Doctor's "patient's and friends" might be better employed than in reading it. If any of them are attacked by premonitory symptoms, let them by all means apply to the Doctor for his advice. The perusal of medical works by the general public is by all means to be deprecated, as it often frightens nervous people into the diseases which they most dread.

Mr. Mitchell, the author of the second pamphlet, appears to have had considerable experience in the treatment of the epidemic, the advent of which in our country is now again announced. During the prevalence of the disease in 1849 he attended a great number of cases in the populous district of Lambeth. His style is somewhat crude, and he is evidently not accustomed to literary composition; but his remarks are the result of considerable practical experience. Among the peculiarities of his treatment, he recommends the copious imbibition of cold water, (which, by the way, Dr. Scott Alison strongly disapproves,) and he urges, moreover, the employment of the *cold wet sheet* and *blanket bath*, which practice, he states, he has found to be attended with the happiest effects. Mr. Mitchell very justly stigmatizes the niggardly conduct of certain Boards of Poor-law Guardians during the last epidemic, and gives as an example, that in his own case he had one morning no less than seventy cases of cholera on his list, and only two Medical students were allowed him as assistants. He considers, that in any future visitation of the disease, the Medical staff in all the districts should be increased in number, and their pay augmented.

Mr. Hearne's thoughts on cholera are founded upon the experience derived from the treatment of upwards of 500 cases at Southampton, during the months of July, August, and September, 1849. In this number, however, are included about 200 cases of severe diarrhœa. The author inclines to the idea, that cholera is not infectious or contagious in the strict sense of that term; and he adduces some pretty strong arguments in support of this view. His principles of treatment do not develope any very novel features; but he speaks in high terms of the employment of opium with acetate of lead, and expresses his doubts as to the efficacy of calomel. He also advocates derivation to the skin by means of bottles containing boiling water, and by the application of mustard poultices to the entire trunk.

The Diseases of the Chest and Air Passages of the Horse. By W. Percivall, M.R.C.S., Veterinary Surgeon in the 1st Life Guards. 8vo. Pp. 224. London. 1853.

We have many medical friends who like to treat the diseases of their own horses, and have little confidence in the judgment of some country veterinarian. To them we can recommend the work before us. It treats of the diseases of the air passages, of the lungs, pleura, and diaphragm, and of the heart, pericardium, and great blood-vessels. The subjects of percussion and auscultation are treated at some length, but rather from the writings of Delafond than from the observations of the author himself.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON FATTY LIVER.

By Dr. H. BAMBERGER.

Pathological Anatomy.—The anatomical characters of fatty liver in an extreme case are:—Increase in bulk of the organ with expansion of the surface; flattening and thickening of its borders; smooth, glistening, transparent, and tightly stretched peritoneal covering; a doughy feel; without and within a continuous yellowish red or pale yellowish white colour; contents of the consistence of tallow, which clings to the blade of a dry and somewhat warmed knife. A variety of the preceding is the waxy liver, which differs in presenting a deeper colour, like yellow wax, greater consistence, and a dry fracture: it is characterised by a peculiar modification of the infiltrated fat. Under the microscope there are usually seen greatly enlarged hepatic gland-cells filled with oil-globules of every size, often to that extent that the nucleus is no longer visible. Also between the cells free fat, in the form of drops, is effused. Sometimes there may be observed the peculiar radiating crystals of margarin. Of the chemical conditions of the bile in this form of disease nothing certain is known. Its visible characters do not differ materially from the normal; according to Frerichs, it is always poor in fatty matter; according to Lehmann, it sometimes contains albumen.

Etiology.—The fatty metamorphosis of the organic parenchyma cells is one of the most important morbid changes to which this organ is subject. According to Reinhardt, fat molecules may be deposited, under circumstances, in all cells supplied with albuminous contents; according to Virchow, cells of a certain age contain granular fat, whose appearance usually precedes their spontaneous destruction; certain anomalies of nutrition, either of excess or deficiency, favour this degeneration, which occurs from the metamorphosis of the actual contents of the cell. In most cases of fatty liver, however, the fat does not appear to originate in the interior of the cell, but to be absorbed from without,—namely, from the blood,—and to become infiltrated into the cells. This view finds support from an observation of Gulliver, that those parts which have become most diseased lie about the ramifications of the portal vein; also from the experiments of Majendie, Gluge, etc., who produced fatty liver artificially by injecting fluid fat into the blood; also by the observation of Gluge and Thiernesse, that fatty liver may easily ensue from habitual indulgence in fatty food.

Upon the bio-chemical antecedents of this disease nothing very certain is known; but there are many conditions which favour its development. For example, want of bodily exercise; indulgence in food containing fat, or easily changed into that substance; excess in spirits, especially brandy. Under circumstances of health, the greater part of the fat obtained from the chyme enters the thoracic duct to be conveyed to the right cavities of the heart, thence to be carried to the lungs, where it serves as a material for respiration. Part of the fat probably goes by the portal vein to the liver, here to be used in the formation of the bile, a fluid abounding in carbon; so that, in the normal state, there is no excess of fat, which can become infiltrated into the hepatic gland cells. Under the circumstances of fatty disease, it appears that, either from positive excess of fat in the portal vein, or from deficient action of the lungs, or most probably from both causes combined, so much fat is accumulated in the liver, that, after the formation of the bile, the rest becomes infiltrated in the gland-cells in a molecular form. Very often fatty liver is found as an accompaniment to tuberculosis, and also, according to the author, to chronic complaints of different organs; so that he comes to the conclusion, that every protracted disease, especially when it affects respiration, favours the occurrence of fatty degeneration. Moreover, infiltration of fat accompanies the most opposite forms of chronic liver disease,—namely, nutmeg liver, cirrhosis, and cancer. Fatty liver does not occur in infancy or childhood; it is commoner among women than among men.

Symptomatology and Diagnosis.—The slighter degrees of fatty liver give rise to such trivial symptoms as not to need notice here. But even the higher forms usually produce no suffering, or such slight inconvenience as not to be associated with the real seat of disease. A patient usually

feels a weight in the right hypochondrium, especially when he lies on the left side. Severe pain only ensues when the formation of fat is very rapid, and then it arises in all probability from stretching of the serous investment. There are disturbances in the digestive organs, usually attributed to other causes. In spite of this absence of strongly-marked symptoms, the diagnosis of fatty liver is, in its advanced stages, not difficult in the greater number of cases. In individuals whose mode of life favours the production of fatty liver, in those suffering from chronic diseases, especially tuberculosis of the lungs, the physician will rarely err in forming this diagnosis, when he detects an increase in the volume of the organ, both by the hand and by percussion, while there is neither pain, nor icterus, nor ascites, nor enlargement of the spleen.

As regards prognosis in its earlier stages, the disease is of secondary importance, and not likely to demand much attention. In its advanced stages it is important as connected with similar changes in other parts of the organism. The treatment can only be laid down as regards that variety of the disease which is a consequence of inactive life and luxurious habits. Such articles of food as cannot be converted into fat should be recommended, such as lean meat, green vegetables, fruits. Spirituous drinks, too much sleep, fatty kinds of meat, etc., starch meal, and sugary substances, must be forbidden; bodily exercise and mental activity must be insisted on. Alkaline waters may be administered; also the neutral salts. In tuberculosis and chronic diseases of important organs the fatty liver is but an indication of more important changes elsewhere, and requires no particular treatment.—*Wien. Med. Wchnschr.*, 1853.

OBSERVATIONS UPON CANCROID DISEASE OF THE DORSAL SURFACE OF THE HAND.

By Dr. VICTOR SZOKALSKI.

After relating the particulars of three cases in which the cancerous surface was, in the first, removed by the knife; in the second, destroyed by both knife and caustic; and in the third, subjected only to soothing treatment; the author remarks, "We see that cancroid disease of the hand, like other ulcerative affections of this kind, commences by scirrhous degeneration of the skin, or as a consequence of accidental ulceration, which subsequently assumes a carcinomatous character. It is most commonly the result of a particular diathesis; at least, in the three cases referred to, the cancerous diathesis was traced into the families, and in the last case cancroid disease of the hand accompanied cancer of the lower lip. There are three distinct periods in the disease. In the first, the skin is exclusively affected; in the second, the ulceration gains the subjacent tendons, and becomes moveable with the action of the fingers; in the third, it reaches the periosteum and the interosseous structures. The prognosis, favourable in the first degree, becomes more serious in the second, and bad in the third. In the first, the ulceration may be treated by caustics or by the knife, the latter mode being always preferred; in the second, both proceedings must be combined; in the third, palliative treatment alone is justifiable, unless, indeed, amputation of the hand is performed.—*L'Union*, 1853.

GENERAL CORRESPONDENCE

THE VACCINATION EXTENSION ACT.

[To the Editor of the Medical Times and Gazette.]

SIR,—A copy of the "Vaccination Extension Act" was left at my house on Friday, and I have read it *in extenso* for the first time. Surely neither have the Medical corporate bodies been consulted on this Bill, nor indeed any individual Medical Practitioner; for, besides that some of its clauses are indefinite and vague, circumstances must be constantly occurring under which it will be impossible to carry others of them into effect.

For instance, it is enacted, that every child under the guardianship of its parents shall be vaccinated within three months of its birth, and that, on the eighth day after, it shall be carried "to the Medical Officer or Practitioner by whom the operation was performed, in order that such Medical Officer or Practitioner may ascertain, by inspection, the result of such operation;" and "the Medical Officer or Practitioner who shall have performed the operation, shall deliver a certificate, under his hand, that the child has been successfully vaccinated; and shall also transmit a duplicate of the said certificate to the Registrar of Births and Deaths of the sub-district in which the operation was performed."

But we will suppose, that, two or three days after the operation, the mother is obliged to leave home for a distant part of the country, and, of course, obliged to take her infant with her, how is the Practitioner who vaccinated it to be able to give a certificate on the eighth day? Or suppose the vaccinator to be struck down by fever, or laid up by pneumonia, or to have been carried off by cholera—no very improbable presumptions—who is then to write the two certificates required? Such casualties ought to have been provided for, and this might easily have been done by the insertion of a few words empowering any qualified Practitioner to give the necessary documents, after personal examination, in lieu of the vaccinator, if he were unable to do so; and in the case of a pauper child having been vaccinated by a District Officer, by requiring any one of the appointed vaccinators, in any part of the kingdom, to give the certificate, which, I am persuaded, in these rare instances, they would cheerfully do gratuitously.

Again; why should the burthen of transmitting the duplicate to the Sub-Registrar be thrown upon the shoulders of the Medical man? Why not make it obligatory on the guardians of the child to dispose of it in this manner? Was it because it was thought the parents could not be depended upon for doing this simple act, while the known punctiliousness with which the Medical Profession perform their public duties was regarded as a guarantee that this provision also, as well as the others, would be scrupulously executed by them? No one, I imagine, will deny that the District-Vaccinator will fully earn his paltry eighteenpence, by attending on a specified time, at a convenient place, chosen by the guardians of the poor, "within two miles of his residence, by the nearest public road," vaccinating the child, attending at the same place again a week after, and filling up two rather lengthy certificates, without entailing on him the additional trouble of transmitting the duplicate to the residence of the Registrar.

The Act does not set forth how long, or where these said documents, transmitted to the Sub-Registrar, are to be preserved. Are they to be kept in the "State Paper Office," in the "Tower of London," or in the "Victoria Tower," and assiduously added to the archives of the kingdom? Seriously, this appears to me a grave omission. The Act says, "Such certificates shall, without further proof, be admissible as evidence in any complaint which shall be brought against the father or mother of the said child, or against the person who shall have the care, etc., etc., of such child." There is no time specified within which after its birth an information, to be valid, must be laid. It might have been limited with propriety, one would imagine, to three, or at furthest five, years; after which period the certificates might be destroyed. This non-specification of any term may probably be in accordance with the provisions of the Act for the registration of births and deaths; but there cannot surely exist the same necessity for preserving records of successful vaccination for so long a period as is requisite in regard to the other two more important matters.

The registrar of the sub-district is also directed to keep a register of all cases of successful vaccination for the purposes of search; and he is empowered to "give a copy, certified under his hand, of any entry or entries in the same, on payment of the fee of one shilling for each search, and sixpence for each certificate." But there is no provision made to render the production of this copy, certified by the registrar, a sufficient answer to any complaint that may be brought against the child's guardians before the magistrates. This being the case, as I read the Act, it would be necessary to produce one of the original certificates, signed by the vaccinator, in the event of any complaint being made. I may be wrong, but so it strikes me. To be sure, I am not a lawyer—only a doctor; nevertheless, I cannot help thinking that, if the lawyer who drew this Bill had consulted any Medical man, who would have taken a practical, common-sense, and not a lawyer's view of the question, both a more intelligible and a more workable Act would have been the result. No doubt the framers of the Bill intended that this certified copy should stand in lieu of the original medical certificates, provided neither of them could be produced; else why the necessity of registering in a book, and what the use of making a search? If that was really the intention, why not say so distinctly in plain language, that there might be no room for quibble on the subject?

It appears to me, that the duplicate certificate should be deposited with the sub-registrar of the district in which the parents of the child reside at the time of vaccination, and not of the district in which the operation is performed. These two places may be widely apart; and much trouble may be consequently occasioned. The following will be allowed to constitute a very common case:—A lady, having been confined in London or some other large town,

leaves home in five or six weeks for the sea-side, or inland country, to recruit, stays there six weeks or two months, and is compelled to have her child vaccinated while away from home. If on any subsequent occasion the sub-registrar's books require to be searched, how much more easily would that be done by the father near his own house than at the place where the child was vaccinated, perhaps a considerable distance off.

In regard to the medical payments: the district officer is to receive eighteenpence for every child whom he has successfully vaccinated, but, if unsuccessful, he will get nothing, although he may be called upon to give a fresh certificate of the child's not being in a condition fitting it to take the vaccine disease every two months for an indefinine period. This cannot but be looked upon as a hardship. The Act also says, that the vaccinator shall have a fee of two shillings and sixpence for every person successfully vaccinated at any place more than two miles distant from his own residence. This is to me incomprehensible. Does it apply to persons vaccinated at their own homes? If so, how far is the vaccinator obliged to travel for this two and sixpence? It cannot mean a regularly-established vaccine station, I should think; because no guardians or overseers of the poor would fix a station more than two miles from the vaccinator's house, if it were for no other reason than to save the extra shilling upon each case.

Medical men are not under any penalty for neglect of their duties; but that incurred by the guardians of the child for not conforming to the directions of the Act is a fine "not exceeding twenty shillings." There is no mention made of the lowest, as there is of the highest, amount; so that the award for non-compliance might be one farthing. Nor is any power granted to the magistrates to order the vaccination to be performed, in case the information is sustained; neither is anything said about subsequent complaints, in case the guardians continue contumacious.

All penalties are recoverable before two Justices of the Peace, and, when recovered, are to be applied in aid of the poor-rate. Of course, on complaint being made, a summons will issue to compel the child's guardians to answer it. The magistrates, however, will not grant a summons without the customary fee. As it is not enacted that this charge shall be borne by the delinquents, if convicted, it must be paid, in all cases, by the parties making the complaint. This will render the Act, as far as recovering penalties is concerned, a perfect dead letter, for few or no persons will be found to make the complaint on public grounds; and informations will only be lodged out of spite, or to cause annoyance, and this especially as the whole penalty recovered will go to the poor-rate, and none to the informer.

The Act appears to me very defective in another particular—viz., that it makes no provision for the vaccinators obtaining a fresh supply of matter should they run out, or the lymph they have been using become ineffectual. I grant that this might be difficult to accomplish, and attended by expense; but it might be done; and it is both unjust and impolitic to transfer the difficulty from public functionaries to the individual vaccinators, and to make this badly-paid section of the Medical Profession bear the expense, if any, instead of the nation.

In conclusion, Sir, I cannot resist remarking, that if the Medical Profession were to perform their duties in the slovenly manner in which the manufacturers of Acts of Parliament appear to perform theirs, the health of the community would not be safe for a single week. I am, &c. FRANCIS H. RAMSBOTHAM.

7, Portman-square, Oct. 18, 1853.

ON THE TREATMENT OF CHOLERA AND CHOLERAIC DIARRHŒA WITH SULPHURIC ACID, WITH CASES.

[To the Editor of the Medical Times and Gazette.]

SIR,—As the subject of cholera is engrossing the attention of the Profession, as well as the public, at the present time, I conceive it to be the duty of the Medical man to make himself thoroughly acquainted with the best and quickest mode of combating this deadly foe, and to disarm him of his terrors; and, having done so, to promulgate it for the good and benefit of all classes.

Having now treated above two hundred cases of diarrhœa, (and some severe ones, too,) from the infant of a few months to the old man bowed down by the weight of years, with the sulphuric acid, I shall neither be considered dogmatic in urging this subject on the Profession, nor presumptuous in giving my opinion of its merits and speaking most loudly in its praise, after having carefully watched its surprising effects in the almost immediate arrest of all the distressing symptoms—alas! too well known—of choleraic diarrhœa in so many cases.

I am persuaded, that the more this simple remedy is tried, the greater proofs we shall have of its (I may say) specific nature in this fearfully fatal epidemic; and I believe, if given immediately on the first or slightest symptom, it will almost, if not altogether, avert the malignant and collapsed form.

I have now employed this acid for the last eighteen months, in nearly all cases of diarrhœa, successfully, not having lost a single patient; and, although my mode differs slightly from Dr. Fuller's in one or two particulars, yet, on the main point, we agree. Still, I am not prepared to say that mine is better.

I have almost invariably given a few drops of tinct. opii with the sulphuric acid, and with decided benefit, every two or four hours, according to the urgency of the symptoms; and, in very many cases, have found that the first or second dose has completely arrested the urgent symptoms.

I have found also, even in chronic cases of diarrhœa, that the acid, combined with a bitter infusion, either calumba, or cascarilla, or both, acts like a charm in quieting the irritable condition of the intestinal mucous membrane. I would remark, *en passant*, that the old chalk mixtures, with aromatic and opiate confections, have been long exploded from my materia medica for the cure of diarrhœa, and are with me as one of the things that were.

My treatment will be better illustrated and confirmed by the following cases, which have recently come under my care, and may be taken as the type of the whole, and will go to prove the success of this new remedy in speedily checking the premonitory symptoms of what might otherwise have terminated in malignant cholera.

September 29.—Mr. G. was taken suddenly ill this morning at five, with pain in the bowels, followed by purging; has had four very liquid motions up to nine a.m.; cannot account for it in any way, having gone to bed the night before in perfect health. Treatment: Acidi sulphurici dil. ℥ij., tinct. opii ℥ss., aquæ ℥vj., cap. coch. magn. ij. 4tâ quâque horâ.

30th.—Is quite well; diarrhœa and pain ceased after the first two doses.

29th.—Mrs. G., wife of the above, has had slight diarrhœa for the last week, but took no notice of it; to-day is worse, causing her pain and alarm. The sulphuric acid given with opium, as before.

30th.—Diarrhœa and pain quite ceased, and feels quite well and cheerful.

29th.—Charles Clack, an omnibus-driver, was taken with pains in the bowels on Wednesday night, but went to his work on the Thursday morning as usual; but, in the afternoon, was seized with violent cramps in bowels and thighs, followed by purging and vomiting; saw him in the evening, when he was evidently suffering severely. Ordered his feet in hot water, with two tablespoonsful of mustard in it, and to go to bed. Sent him the mixture of sulphuric acid and opium, as before.

After taking two doses, the pain and diarrhœa ceased in a great measure.

October 1.—Diarrhœa came on again; the same mixture to be repeated.

2nd.—Is much better in every respect.

3rd.—Went to his work as usual, and has continued well ever since.

This patient had a severe attack of malignant cholera during the former visitation, and was then ill for some considerable time. He says his present symptoms were quite as bad.

1st.— ——. Daly, a private in the Royal East Middlesex Militia, has had diarrhœa for three days; is unable to attend to duty; has been purged eighteen times in twelve hours, with a good deal of uneasiness, not amounting to pain; has been taking large doses of chalk mixture without effect. Saw him to-day for the first time; ordered the sulphuric acid, with opium, as before.

2nd.—Is much better; bowels have acted only three times in twenty-four hours. To be excused from parade and church to-day.

3rd.—Is now quite well, and to go on duty.

H. W., aged three years and a-half. Bowels suddenly relaxed four times in four hours. The last motion was passed involuntarily, and very watery. ℞ acidi sulph. dil. gtt. x., syrup. papav. gtt. xx., aquæ ℥j., after each motion.

Has had no motion since the first dose, and is now as well as usual. This little patient is one of my own children.

4th.—Wm. Wicks, labourer, aged 26, has been working at the new sewer during the rain, and got wet; has had diarrhœa come on this morning; motions very liquid, accompanied with crampy pains in the bowels; feels sick; extremities cold. Ordered his feet in hot water, with two tablespoonsful of mustard in it, and to be put into a warm bed, and have the sulphuric acid, given with opium, as before.

5th.—To-day feels quite well; diarrhœa quite ceased since the first dose; headache and pyrexia came on in the evening. To have two mild aperient pills.

6th.—Is much better; gone to work.

5th.—Mrs. Cae; has had severe purging for two days, accompanied with pain. The sulphuric acid, given with opium, as before.

6th.—Is quite well, having had occasion to take only one dose.

Serjeant Green's child, aged three years, has had violent purging and vomiting for two or three days, with pain; the child was brought to me this morning at ten, for the first time, when the mother states that the vomiting and purging came on almost every minute; the child's face looks pinched, extremities cold, and appears very exhausted, and in pain. Ordered the feet to be put in hot water, with mustard in it, and the child to be wrapped in a blanket and put to bed; the room to be kept warm. The sulphuric acid, without opium, as before.

7th.—Is much relieved; the vomiting has quite ceased, and the bowels have acted only three times since yesterday. To continue the mixture.

8th.—The child is quite recovered.

6th.—Mr. G., a bricklayer, has been working at some drains for the last week; has had diarrhœa, with nausea, for two days; did not see him, because "his wife could not persuade him to see a doctor." Ordered him the sulphuric acid, given with opium, as before.

7th.—Is quite relieved.

9th.—Mrs. Wick's daughter, aged 17, has had purging and vomiting, with great pain, for two days. The sulphuric acid, given with opium, as before.

10th.—Is quite recovered.

Mrs. Matheson's servant, aged 40, has had purging all day, with occasional pains in the bowels; took a dose of Epsom salts this morning, "to work it off," because, she says, she always doctors herself. Her mistress applied to me. Ordered her the sulphuric acid, given with opium, as before.

11th.—Diarrhœa quite ceased with the first two doses; still has a little nausea. Cont. remed.

12th.—Is quite recovered.

Mr. Dick, Jack Straw's Castle, was seized with violent purging and vomiting early in the morning, which has continued to the present time, ten a.m. Ordered him to keep his bed, and take the sulphuric acid, given with opium, as before.

Eight p.m.—Is much relieved; diarrhœa and vomiting have both ceased.

13th.—Is able to attend to his business as usual, and feels quite recovered. He wishes another bottle, to keep by him.

Miss M., aged 20, was taken with violent vomiting and purging during the night, and continued until eight a.m., when I saw her. Ordered her to keep in bed, and have a hot-water bottle to her feet, and take the sulphuric acid, with opium, as before.

Eight p.m.—Much better; to continue medicine.

14th.—Feels quite recovered, and is as well as usual.

Mr. Waight, aged 50, was taken suddenly, while at work in the evening, with purging, but took no notice of it until one a.m., when vomiting came on, with crampy pains in the bowels. Was sent for, and ordered the sulphuric acid, given with opium, as before.

15th.—Is very much better; purging and vomiting ceased.

18th.—Has called to say he should like another bottle, as he felt such immediate relief. He still feels weak, but believes that, had he neglected the first symptoms, he would have had a severe attack.

The above cases cannot but prove to any unprejudiced mind the truth of my statement in the commencement of this letter, that if this treatment is adopted in the first premonitory symptoms, it will stay the progress of the disease, and prevent the second and following stages; and that it will also be a specific in the severest forms of diarrhœa, is evidenced by some of the previous cases. None of them, however, which have occurred, have passed beyond the severest sporadic cholera; but, judging from the effects produced in these instances, we surely have the most presumptive evidence that it will be of infinite service in the malignant forms; and, however much the old routine practitioner may reject any new theory and remedy, yet when such practical results follow, and are confirmed by creditable authorities, with facts authenticated in every possible way, it does seem strange that the old chalk mixtures, with aromatic and opiate confections, and the thousand and one other remedies should still be employed and recommended, even by such authorities as the members of the Board of Health. The Profession must, however, take the initiative, or else the public themselves will—as Dr. Fuller very justly observes—become their own physicians. I am, &c.

GEORGE F. BRUTTON WILLING, M.R.C.S. ENG.

New End, Hampstead.

DEATH FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

SIR,—In common, I am sure, with many of your readers, I was shocked at the report, in your last Number, of the death of a healthy young man under chloroform in the Edinburgh Infirmary. The impression is the more painful from what your reporter states, namely, that "a great error in the administration of chloroform prevails in that hospital;" that in hospital practice its administration is commonly entrusted to some raw dresser, who, thinking he cannot give enough of a good thing, squeezes a towel saturated with it over the mouth, where it is kept firmly applied, so that the admixture of chloroform with atmospheric air is rendered impossible.

Having been much in the habit of employing chloroform during the last five years, always with advantage, and without the occurrence of a single symptom to excite anxiety, it may not be unbecoming in me to make a few remarks on its administration.

Chloroform is a powerful agent, just as opium is a powerful agent. If improperly given, it will cause death; not, perhaps, with the same certainty as opium, for some constitutions resist its injurious influence in a wonderful manner; but still, as experience shows, it *may* produce death, which is all the more appalling from the suddenness, and from the impossibility, in nearly every case after the heart ceases to beat, of effecting resuscitation.

Now, in giving opium in the lying-in chamber in the form of laudanum, or Battley's sedative liquor, to allay false pains, or to soothe after an exhausting delivery, I am in the habit, as I suppose others are, of giving a certain number of drops, or of measuring with care a certain quantity. I don't think of giving the bottle to a nurse or other attendant, to pour out at random a dose for the patient to swallow. Were I to do so, I should hardly fail to have some ill effects. No one in his senses would administer in this way a preparation of opium.

Now, is not the remark equally applicable to the inhalation of chloroform? When administered in proper quantity, and there is a due admixture of atmospheric air, the effect is benign; but, when given in the *ad libitum* manner of some, what wonder if death or alarming consequences follow?

I will relate a case, on purpose to show the mode in which I am accustomed to give chloroform, as also the rash manner in which it is sometimes employed by others.

On entering the chamber of a lady in labour, a few months ago, I found her provided with a bottle of Edinburgh chloroform. Her former labours having been hard, and the children of large size, she had determined, on this occasion, to have chloroform. When the stage for its employment arrived, I placed one end of a smooth napkin (so folded as to be about 7 inches in breadth by 10 in length) between her cheek and the pillow, she reclining on her side; and, requesting the husband's presence, I desired him to pour out a quantity not exceeding the fourth of a teaspoonful, which I sprinkled on the napkin opposite the patient's mouth and nose, at the same time bringing the other end over her face, yet not so as to approach it closely or to cover it; consequently, the air had free admission: three or four proportions of air to one of chloroform at least were inhaled. The sprinkling of a like quantity was repeated, about every three minutes, four times, when the patient was found to be asleep; and in a similar manner she was put to sleep five times in the course of three hours, at the end of which period labour terminated.

I have detailed this simple case for the following reason:—I had noticed, at the outset, that the husband and the nurse smiled at the minute quantity I was administering; and, when sleep followed, I observed a marked expression of wonder, as if something quite unexpected had occurred. The explanation was this:—The nurse had seen chloroform used once only before, and in large quantities, and she had been, I suppose, predicting that the lady's two-ounce bottle would be found too little, because, as she informed me, in the case referred to, the accoucheur had from time to time saturated a handkerchief with chloroform, and, during the labour, consumed nearly half a pint. The patient, she said, struggled and raved violently during its use, and yet without bad effects ensuing.

I have myself known chloroform administered in labour in dessert-spoonsful until the pulse was at 40. Recently, too, I have known it, after being used cautiously for a short while with benign effect, given in the quantity of two drachms preparatory to the application of the forceps; and such were the alarming effects, that the patient turned herself suddenly on her back, and lay, with outstretched arms, for a few moments, pulseless.

Of course I do not mean that a drachm is not a safe, in many cases a proper quantity, provided it be mixed with a reasonable proportion of atmospheric air, and is not repeated until the first quantity has been exhausted. But I do assert, that a larger quan-

tity is dangerous, and I take the liberty emphatically to repeat, that it is as blameable in any surgeon to trifle with chloroform, by allowing it to be administered in random quantities by young and inexperienced hands, as it would be to trifle after the same manner (which, however, no surgeon does) with the preparations of opium.

I am, &c. JOHN ROBERTON.

Manchester, Oct. 19, 1853.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

OCTOBER 22, 1853.

DR. FORBES WINSLOW, President, in the Chair.

PURE METALS A REMEDY IN CHOLERA.

Dr. Routh read a communication from Dr. Burg, of the University of Paris, showing that the presence of various metals had exercised an influence over several diseases, and among others cholera. The author proved this by reference to the comparative immunity from cholera enjoyed by the various workers in metals in the workshops of Paris and the neighbourhood, as well as in Stockholm and St. Petersburg, and to the fact that very few cases had occurred in the metal districts of England, as Birmingham, Sheffield, Anglesey, and Swansea. He also affirmed, that the cramps of cholera had been relieved by the application of a ring of metal around the extremity affected. Various metals were used, as brass, copper, steel, zinc, and silver, sometimes separately, at other times in conjunction, and were so arranged that they might be worn around the body under the ordinary clothes. He believed the *modus operandi* was by absorption into the lungs as it respects the workmen engaged in the factories, and by a metallic influence exerted upon the nerves when the metal is applied locally, as for the relief of cramps. This influence is not electric, galvanic, or magnetic. He does not propose it as a specific in the treatment of cholera, but as an adjunct to other remedies. Dr. Burg was present, and at the close of the meeting exhibited the apparatus and explained its operation.

CANCER FROM INOCULATION.

Mr. Richardson called the attention of the Fellows to a case of cancer uteri, which appeared to have been induced by inoculation. The patient is aged 52 years, and the disease is of the cauliflower excrescence character. Her husband had died five and a half years ago, from cancer of the penis, and had been afflicted with a semi-purulent urethral discharge for some months previously. The medical man then in attendance believed the case to be gonorrhœal, and introduced bougies, but subsequently its true nature was discovered by Dr. Willis. Mr. Richardson had learned that frequent sexual intercourse had occurred during the prevalence of the discharge, and, also, that after the death of her husband the patient had suffered from pain at the lower part of the abdomen. The coincidence as to dates seemed to prove that the case had arisen from the direct contact of cancerous matter.

Dr. Sibson then read a paper on

PERICARDITIS.

He remarked, first, that a well-marked friction sound, whether rustling, rubbing, or creaking, once heard can be recognised again with precision and certainty; but, in the early stages and in some peculiar cases, the best observers cannot say whether the noise is exocardial or endocardial. Of the 40 cases observed and recorded by Dr. Taylor with care and good faith, in 8 only was distinct friction sound recognised at the beginning of the attack; in 17, it was doubtful whether a bellows or a friction sound was heard, although subsequently the *frottement* in most was unequivocal; in 4, a bellows sound was replaced by a *frottement*. One case was not analysed. Dr. Stokes has observed that, after the application of leeches, the friction has given place to a bellows-sound. Dr. Mayne, Dr. Law, Dr. Graves, Dr. Williams, Dr. Hope, and Dr. Walshe, all agree, that, while the exocardial murmur is in its very character usually distinct from the endocardial, yet that in some cases, and especially in the early stages, either of the sounds may be mistaken the one for the other. Dr. Watson and Dr. Latham, claim the power to discriminate between the two classes of murmurs, yet even they admit, that in some cases the two sounds are alike. Skoda, as rendered by Dr. Markham, says, "that there is no kind of endocardial murmur, with the exception of the whistling, which may not be imitated by a friction sound of the pericardium; and no pericardial murmur which may not resemble an endocardial murmur." Here Skoda may go too far; but it is evident that other tests are required, besides the difference of the two murmurs, to distinguish between pericarditis and endocarditis in the early stages when the discrimination of the disease is so important. The principal test proposed by Dr. Sibson is the *employment of pressure*. If a friction-sound exists, that sound invariably becomes louder and harsher by making moderate pressure with the end of the stethoscope, so as to bring the surfaces closer together. In the earliest stage, pressure will often excite a friction-sound when none was previously present. In the last case of pericarditis under Dr. Sibson's care in St. Mary's, pressure brought out a sound like a bellows-murmur. A few leeches were applied. Next day there was a loud to-and-fro *frottement*. In the advanced stages, when the effusion of fluid by separating the two surfaces, extinguishes the sound, pressure, by bringing the surfaces again in contact, will restore the lost friction-sound. The *rationale* of the effect of pressure in exciting and augmenting *frottement* is self-evident. A beautiful illustration of it presented itself in a patient of Dr. Sibson's, in St. Mary's, the other day. A female, affected with phthisis, had ascites. On displacing the fluid, and pressing on the liver, a to-and-fro thrill was felt under the finger. As was anticipated, a loud, harsh, double creaking noise, during inspiration and expiration, was heard on making pressure with the end of the stethoscope; on withdrawing the pressure, the sound ceased. After death, the surface of the liver was found to be roughened. The first patient in whom Dr. Sibson observed the effect of pressure in reinforcing *frottement* was a female, in the Nottingham Hospital, affected with pericarditis, on November 25, 1838. Since that period, he has recognised this important sign in every case of pericarditis he has examined. He gave an account of it in his paper "On the Position of the Internal Organs," in the "Provincial Medical Transactions" for 1844. The effect of pressure is rarely excitable in men after the age of 45, the cartilages being then too firm and unyielding. The only point to guard against is the possibility of exciting anæmic murmur in very young persons. The anatomical position of the *frottement* ought to be noted. Dr. Stokes found that friction-sound is audible generally only over the region of the heart; while endocardial murmurs are transmitted beyond that region. This rule holds good in the ealry stages, and while effusion is present; but when the fluid disappears, and the surfaces come into close contact, the noise may be heard extensively over the front of the chest. The *frottement* differs, in many cases, over different parts of the heart. To the right of the lower sternum over the right auricle, the friction sound is usually double and soft, and equally loud during systole and diastole. To the left of the sternum over the right ventricle, it is also double, but harsher, especially during systole. Over the apex it is generally only sytolic. The point of the region of pericardial dulness is important, being conical; the point upwards reaching to the top of the sternum, as Corvisart pointed out. When the effusion is great, the heart is often raised, so that the impulse is felt and the *frottement* heard in the second and third spaces, instead of the fifth. This Dr. Sibson pointed out in the paper referred to. Dr. Latham observes, that, at this stage, not only is the impulse raised, but the tremor or thrill felt by the hand is raised also. Dr. Walshe, in his valuable work, has noticed the tilting upwards of the impulse of the apex from the 5th to the 4th intercostal space, when there is much pericardial effusion. Adhesions usually begin to form over the outer edge of the right and left ventricles. If so, the *frottement* ceases there, while it remains over the base; the region of *frottement* with the advancing adhesions gradually narrows to the middle of the sternum, and, at length, when adhesions are complete, the friction sound suddenly becomes inaudible. If adhesions do not take place, the friction sound may remain long after the pericarditis has ceased. If a patient is seen at this stage for the first time, care must be taken not to treat him as if he were subject to the disease in the acute stage. In pericarditis, especially if it affect the central tendon of the diaphragm, the respiratory movement of the upper ribs is excessive, especially the right side, while that of the abdomen is restrained. With regard to treatment, there can be little doubt that the severe antiphlogistic plan pursued by Bouillaud, and to a lesser degree by Dr. Taylor and others, increases rather than diminishes the mortality, besides inducing a prolonged and tedious convalescence in those who recover. A few leeches to the region of pain, opium in repeated doses on Dr. Graves's plan, with, in severe cases especially, small doses of calomel, in addition to the treatment previously pursued for the acute rheumatism, will usually prove adequate to meet the disease. Indeed, Dr. Risdon Bennett's paper proved, that, in many cases, the treatment need not be altered when pericarditis sets in in acute

rheumatism. This rule may, however, be carried too far. The great object is to restrain the disease, without doing damage to the constitution, so that the convalescence may be as rapid and complete as possible. Indeed, each case must be treated on its own merits. After the acute stage, food, stimulants, and tonics properly apportioned are often well borne, and materially shorten the convalescence. It is not by one sign only, however distinctive, that pericarditis is to be ascertained, but by the combination of the various diagnostic signs, not neglecting either the character, nearness, or rhythm of the friction sounds; their limitation to the region of the heart or extension beyond it; their reinforcement or actual production by pressure; the form, shape, and extent of the pericardial dulness; the presence of thrill, the seat of the impulse, the prominence of the cardiac region, and the altered movements of respiration, as well as the pain on pressure over the heart and epigastrium, the dyspnœa, and the various general symptoms, the sum of which go to inform us, more even than the physical signs, of the severity of the case, and to suggest to us the requisite treatment.

In the interesting and practical discussion which followed the reading of the paper, the two following points were more particularly referred to, namely, the precise value of the test of pressure over the pericardium as a diagnostic mark of the disease, and the extent of surface over which endocardial and pericardial sounds respectively may be heard.

Dr. Semple considered that the proposed test of pressure could not be of universal application, since, although it might develop existing pericardial sounds, it could not assist in the diagnosis when no such sounds might be heard without it. He also doubted the fidelity of the law laid down by Dr. Stokes, viz., that endocardial sounds may *always* be heard at a distance from the heart; yet he thought that test of some value in forming a correct diagnosis. The history of the case, as to whether it was an acute or a chronic one, would guide him; and by the aid thus obtained, added to the special characters of the sounds themselves, he would feel but little difficulty in determining the nature of the case. He also referred to the scepticism in diagnosis which Skoda's great work is apt to induce in the minds of the Profession.

Dr. Risdon Bennet believed that the author had overstated the value of the difficulties practically attending a diagnosis of endocardial and pericardial disease, and referred to the more superficial position of the sounds indicating pericarditis. The sounds in endocarditis are not usually limited to the precise region of the heart; but to prove that Dr. Stokes's law is not of universal application, he stated that he had then a case under treatment, in which these sounds are absolutely limited to the apex of the heart. He was well aware, from his own practice, that pressure over the pericardium by the stethoscope would increase the intensity of the exocardial sounds, but he doubted much if it would develope them. He further referred to the variation which so frequently occurs in the precise position of the various parts of the heart in relation to the sternum—a variation found both in health and disease; and more particularly in the latter, when its importance is put to the test.

In answer to a question proposed by Dr. Bennet, viz., can a true to-and-fro pericardial sound be produced by pressure of the stethoscope in cases where no effusion of lymph had occurred, Dr. Sibson stated, that he had produced a soft bellows friction sound in a case where there was only vascularity of the membrane, and also in an experiment upon an ass, in which he had caused some slight effusion of blood into the pericardium by the scratch of a needle.

Dr. Hare had been accustomed to exert pressure upon the pericardium, for the purposes of diagnosis, by placing the patient in a semi-erect position, and directing him to lean forward; and he thought it probable that pressure would not only add intensity to existing sounds, but also give development to them. He also called in question Dr. Stokes's law, and believed that the extent of surface over which the sounds are heard is oftentimes equal in both classes of cases; and considered, that the dry character and the superficial position of pericardial sounds may usually suffice to distinguish them from endocardial murmurs. He advised that the patient should be placed in a semi-erect position during the examination, since thus the mass of the effusion is thrown forwards, and the extent of the anterior dulness materially increased.

Dr. Theophilus Thompson agreed with the author in his opinion of the value of the pressure test, he having, on Dr. Sibson's suggestion, applied it in practice, and also of Dr. Stokes's law, and believed, with Dr. Taylor, that pericarditis as frequently follows disease of the kidneys as acute rheumatism. The poisoned condition of the blood thus induced would not necessarily lead to an inflammatory disease of the pericardium, although it might suffice to destroy the patient; and, in confirmation of this view, related the particulars of a case of sudden death from the old hydro-pericardium. The patient was a coachman, whose death was so sudden that Dr. Thompson was not able to see him alive. Fifteen days previously he had suffered from slight diarrhœa, but that had subsided; yet the surgeon, connecting that fact with the suddenness of the fatal attack, and the vomiting and pulseless condition attending it, believed the disease to be analogous to cholera. He died in twenty-four hours, having been pulseless for some hours, but yet retaining consciousness. The pericardium was distended with more than a pint of clear serum. No organ exhibited marks of disease except the kidneys, in which some degenerating epithelial cells occupied the tubes, and a slight opacity of the Malpighian bodies was observed.

Dr. Crisp was of opinion that the effusion in the case mentioned by Dr. Thompson might have gradually increased for some time previous to the fatal attack; and in general approved of Dr. Taylor's bleeding and mercurial plan of treatment in pericarditis.

Dr. Sibson, in reply, referred to the treatment of the disease, and expressed his disapprobation of the use of bleeding, leeches, and calomel; but, on the other hand, concurred in Dr. Risdon Bennet's opinion, that little change ought to be made on the occurrence of this secondary affection. He would not object to the application of a few leeches, and the exhibition of a small quantity of mercury at the commencement of an acute attack; but, upon the whole, thought the free use of opium to be the safest remedy. When the pericardium is greatly distended, he would remove the effusion by the use of a fine exploratory trochar and a small syringe. He would not advise that the position of the patient should be changed for the purpose of examination; and to show his abhorrence of the lowering plan of treatment, stated his belief, that the discovery of the friction sound had indirectly led to many deaths.

The Paper to be read at the next meeting of the Society (this evening), is by Dr. Barnes, "On the Treatment of Labour Marked by Defective Uterine Action, and the Comparative Value of Ergot of Rye and Galvanism in Obstetric Disease."

NEWCASTLE AND GATESHEAD PATHOLOGICAL SOCIETY.

T. M. Greenhow, Esq., President, in the chair.

Dr. Glover exhibited wax models of Cases of

RUPTURE OF THE SMALL INTESTINE, AND CIRRHOSIS OF THE LIVER,

both of which were admirable as morbid specimens, but presenting no peculiarities with regard to symptoms or treatment, were not considered by him worthy of more particular notice.

Mr. Potter sent a

LARGE ENCYSTED CALCAREOUS TUMOUR

for the inspection of the Society, removed by him from the side of the face of a patient in the infirmary. Mr. Gibb communicated the following notes of the case—

The patient, a healthy female, aged 27, first observed a small pea-like tumour in the position of the socia parotidis, about ten years before her admission into the infirmary; it increased to the size of a common nut during the succeeding year, and then remained stationary until about a year ago, when it again began to enlarge, without, however, any pain. Six months ago, when she first applied at the infirmary, it had reached the size of a hen's egg, was moveable upon the zygoma, and in density resembled an osseous tumour. She was pregnant, and on that account refused to have an operation performed at that time. She did not again return until a week ago, when the tumour was found to have been rapidly enlarging. It covered the left cheek, and extended from the temple above, to the lower edge of the jaw below, and from the ear, which it pressed backwards, to near the edge of the orbit and angle of the mouth in front. To look at, it presented all the characters of a malignant tumour. Large vessels coursed over it, and the irregular lobulated surface seemed, in some parts, as if about to burst open, and display a medullary tumour, as a white and pearly structure shone through the thin distended and vascular skin. The bony nature of the tumour was, however, at once apparent when examined by the hand; and its encysted character also evident, from the mass distinctly moving over the parts on which it lay. The removal of the tumour was accomplished under chloroform, with comparatively little loss of blood. Two elliptical incisions were carried over it from the temple to the

angle of the jaw, and by a neat and cautious dissection from off the fibres of the masseter, buccination cartilages of the ear, and temporal aponeurosis, the mass was removed with much less difficulty than was anticipated. The edges of the wound were drawn together by sutures, and the patient recovered rapidly. The tumour was found to be enclosed in a cyst, and composed of scales and small detached masses of a firm calcareous horny substance, firmly consolidated, and mixed with a fibrinous-like animal matter.

Mr. Furness communicated the following case of

STONE IN BLADDER.

On the 11th of November last, John Patterson, a boy of five years of age, was brought by his mother to the Eastern Dispensary. She gave the following account of the ailment of her child:—"That for upwards of twelve months he had complained in passing his water. Latterly his sufferings had much increased. He had a frequent inclination to make his water, when, from the pain experienced, he cried bitterly. It would occasionally suddenly stop, and, at such times, by his straining to empty the bladder, stool was forced away from the gut. In the midst of his play he would be seized with an irresistible desire to make water; and in walking, or more particularly in running, he would stop suddenly with the same impulse. He worked much with his fingers at the glans penis, pulling and pinching at it, and complained of pain there. During the night, he was frequently obliged to get out of bed by the urgent wish to empty his bladder, and cried and moaned with the pain. Latterly, his general health had become affected. He had lost his appetite, had become thin and weak, showed a disinclination to move, had ceased to play with his companions as he used to do, and lay constantly about the house." To any inquiry as to whether he had ever passed any bloody unrine, the answer was in the negative. The child looked very unhealthy, pallid, and pinched in the face; the belly was tumid, and the limbs shrunk and flabby. The symptoms detailed being the usual ones proceeding from calculus in the bladder, a catheter was passed, to try and ascertain its presence there. The urethra was very small, and it was with difficulty that the smallest silver catheter could be insinuated along it. No stone was felt at that time, but a few days after, on repeating the operation, I felt the calculus. It was subsequently felt by Dr. Robinson and Mr. Rayne. A little medicine was ordered, to try and improve the child's general health; and a sound was passed twice a-week, with a view to dilate the urethra, so that a larger-sized instrument might be got into the bladder when the operation was to be performed, as, of course, the larger the staff the more easily is it felt, and the more easy is the groove to hit. On the 22nd November, assisted by Mr. Rayne, I proceeded to perform the lateral operation of lithotomy. The patient was put under the influence of chloroform. It took a considerable length of time before he was affected by it. Owing to the small calibre of the urethra the staff used was perforce a very small one, and I experienced some difficulty in directing my knife satisfactorily into the groove. After making the incision through the membranous portion of the urethra and left lobe of the prostate, and having had the staff withdrawn, the stone, not a large one, was felt lying in the base of the bladder, and very easily extracted. Immediately after the operation was finished the child's countenance assumed a deathlike appearance; the head sunk back, the lower jaw dropped; there was that filmy appearance came over the eyes which bespeaks death; the surface of the body became cold; the pulse at the wrist vanished; respiration was suspended. It was no common faint fit, but something more serious. The lithotomy-garters were quickly loosed; hot dry flannels wrapped round the extremities; warm turpentine applied over the chest and stomach, friction kept up, and brandy and warm water poured cautiously into the child's mouth in small quantities at a time; the liquid at first rested in the mouth for a few seconds, then the muscles of deglutition would act, and the spirit and water be carried onward. While this state continued there were moments when the child seemed certainly lifeless; but we never relaxed our efforts, and at length we had the satisfaction of seeing slowly-returning animation. At intervals, however, there was a tendency to pass into the same state, but the brandy began to be swallowed better, and after two glasses had been taken some re-action set in. The state described continued for nearly half an hour, and it was not until an hour and a-half had elapsed that it was deemed safe to leave the house. At the end of that time the patient was sufficiently recovered to take a little warm tea. The question may be asked, to what cause was the sudden sinking attributable? Was it to the chloroform, a large quantity of which was administered? Or was it to the shock on the nervous system produced by the operation and necessary loss of blood on a debilitated system? From each death has frequently proceeded. All present ascribed it to the latter cause. The chloroform was given with every known precaution; its effects had partly gone off ere the operation was finished, the child having cried out, sensible of pain, several times. Suddenly, and without the least previous symptom of such a thing, almost the moment after the stone was extracted, which was done very gently and by the first attempt, the child fell back lifeless, or all but so. The boy seemed to have gotten all his danger over at once, for from this time he never had a bad symptom. He was ordered wine and a light nourishing diet. On the fifth day some of his urine passed by the urethra; and, on the eighth, the whole of it passed that way. In the sixth week the wound was almost entirely healed, and the child walking about.

Mr. R. B. Ridley exhibited a

FUNGOID TUMOUR.

removed from the neck after death, and read the following notes of the case:—In the beginning of February, 1852, I was called upon to see H., aged 31, labouring under acute rheumatism, from the effects of which he continued to suffer till early in May. During that time she called my attention to a tumour in the neck about the size of an egg. It was hard and moveable, and situated behind the sterno-mastoid muscle. I endeavoured to persuade her to have it removed, as I suspected it to be of a malignant nature, but without avail; and I saw no more of the case till December 25, when I was again called upon to attend her for another attack of acute rheumatism. The tumour had then become of great size, extending upwards to the mastoid process, and ultimately blended with the integuments of the neck. There were, also, three or four external openings communicating with the interior of the tumour, from which a little discharge issued. She was very much exhausted, and apparently in a sinking condition; consequently I did not consider it prudent to advise its removal. I also found that she had been seen a short time previous by Mr. Wallis and Mr. Gibb, who were of the same opinion. She had, during the interval of my seeing her, diligently tried all the quacks and homœopaths in the district, all of whom had promised her a cure, until she was reduced to the frightfully exhausted state in which I found her, and in which she continued, suffering also from some articular pains, and a constant throbbing pain in the region of the sacrum, till her death on the 1st of February last. On taking a *post-mortem* examination, I found the lungs congested, and strong adhesions binding the right to the pleura costalis; the heart healthy, and the liver and intestines also in a healthy condition, with the exception of a portion of the ilium, which was vascular and contracted, and had a cluster of three or four bullæ attached, filled with semi-transparent fluid, resembling hydatids. The kidneys were also in a healthy condition, and no appearance of disease about the sigmoid flexure or rectum to account for the extreme suffering in that locality. The tumour was firmly attached to the mastoid process, and extended down to the clavicle, dipping deeply under the sterno-mastoid among the vessels, and presented, on incision, all the characters of fungus hæmatodes. Portions of the structure were submitted to the microscope, and found to consist entirely of soft granular cells of malignant nature, with an abundance of fatty, granular, amorphous particles intermixed.

Mr. R. H. Wilson presented a

LUNG COMPRESSED BY HYDROTHORAX,

which he had removed from a vagrant, whose previous history was not ascertained. The lung (right one) was about the size of the fist, covered with a layer of false membrane, fibrous, and so completely compressed by the immense accumulation of fluid, as to sink on immersion in water. The heart was pushed out of its normal position to a distance of two inches from the left edge of the sternum, but all the other viscera were healthy.

MEDICAL NEWS.

Oxford University.—A synopsis of the Physiological series in the Christchurch Museum, upon the plan of the Hunterian catalogue, has just been published, which will be of great service to all persons wishing to become acquainted with that very interesting collection. It is understood to have been drawn up by Dr. Acland, Lee's Reader in Anatomy.

Cambridge University. — The Downing Professor of Medicine gives notice that he will begin a course of lectures introductory to the study of medicine in connexion with that of the natural sciences, on Monday, October 24, in Downing College. The lectures will be continued every Monday, Wednesday, and Friday, during the remainder of the term. Terms of attendance, to those gentlemen who are not provided with a professorial lecture ticket, two guineas.

UNIVERSITY OF ST. ANDREWS.—List of gentlemen who had the Degree of Doctor of Medicine conferred upon them, Oct. 21, 1853:—

BICKERSTETH, H., F.R.C.S, Cape Town, Cape of Good Hope.
BRODRICK, HENRY CRITCHLEY, L.A.C., Macclesfield.
BURNS, JOHN JAMES D., M.R.C.S. Ed., R.N., Woolwich.
BUTLER, JOHN MATTHEW, M.R.C.S., L.A.C., Woolwich.
BYASS, THOMAS SPRY, M.R.C.S., Sussex.
CARTWRIGHT, ROBERT, M.R.C.S., Salop.
CLARKE, T. F., M.R.C.S., L.A.C., London.
CORNER, MATTHEW, M.R.C.S., L.A.C., London.
CREGEEN, JAMES JOSEPH, M.R.C.S., L.A.C., Deptford.
DALY, G. H., M.R.C.S., H.E.I.C.S., Bengal.
DIAMOND, JOHN ROSS, M.R.C.S., L.A.C., London.
DUKA, THEODORE, M.R.C.S., East Indies.
FRANKS, H. J., M.R.C.S., L.A.C., Leamington, Warwickshire.
GREENHALGH, ROBERT, M.R.C.S., London.
HUMBLE, G. A., L.F.P. & S. Glasgow, L.A.C., Islington.
MATTHEWS, JOHN, L.A.C., London.
MUIR, J., Lic. Fac. Phy. and Surg. Glasgow, Welwyn, Herts.
PAINE, LEWIS, M.R.C.S., L.A.C., London.
PHIPPS, J. BLAKEMORE, M.R.C.S., Suffolk.
RINGER, T., M.R.C.S., L.A.C., Clifton, Bristol.
SINCLAIR, EDWARD MALCOLM, M.R.C.S., Manchester.
STILLMAN, WILLIAM, M.R.C.S., L.A.C., Birmingham.
THORP, ROBERT CROSSING, M.R.C.S., Devon.
TRULL, JOHN, L.A.C., Bath.
UMPHELBY, ARTHUR, M.R.C.S., H.E.I.C.S. Madras.
WEBB, W., M.R.C.S., L.A.C., Barton-under-Needwood.
WOODMAN, WILLIAM ROBERT, M.R.C.S., Exeter.

APPOINTMENTS.

NAVAL.—Surgeons: William R. E. Smart, M.D. (1850), from the Spitfire paddlewheel steam-vessel, on the Mediterranean station, to the Diamond; Samuel Donnelly (1852), to the Juno. Assistant-Surgeon Frederick L. Leonard (1852), acting Assistant-Surgeon to the Ajax, 58, screw steamship at Devonport, is confirmed as Assistant-Surgeon to the ship.

MILITARY.—36th Foot: John Richard Tobin, gent., to be Assistant-Surgeon, vice Bone, promoted on the Staff. 69th Foot: Staff-Surgeon of the 2nd class Huntley George Gordon, M.D., to be Surgeon, vice Cleland, deceased. 92nd Foot: Surgeon David Stewart, from the 3rd Foot, to be Surgeon, vice Foss, promoted on the Staff. 2nd West India Regiment: Wynne Peyton Frazer, gentleman, to be Assistant-Surgeon, vice Parr, promoted in the 3rd West India Regiment. 3rd West India Regiment: Assistant-Surgeon Thomas Parr, from the 2nd West India Regiment, to be Surgeon, vice Summers, appointed to the Staff. Hospital Staff: Deputy-Inspector-General of Hospitals William Dawson, M.D., to be Inspector-General of Hospitals, vice Charles St. John, M.D., placed upon half-pay. Staff-Surgeon of the 1st Class John MacAndrew, M.D., to be Deputy-Inspector of Hospitals, vice Dawson, promoted. Surgeon Thomas Foss, from the 92nd Foot, to be Staff-Surgeon of the 1st Class, vice MacAndrew, promoted. Surgeon John Summers, M.D., from the 3rd West India Regiment, to be Staff-Surgeon of the 2nd class, vice Ferguson, deceased. Assistant-Surgeon George Frederick Bone, M.D., from the 36th Foot, to be Assistant-Surgeon of the 2nd class, vice Gordon, appointed to the 69th Foot.

ORDNANCE.—Surgeon John Atkins Davis, to be Senior Surgeon, vice Quigley, retired. Assistant-Surgeon Ross Hassard to be Surgeon, vice Davis. Temporary Assistant-Surgeon John Alexander M'Munn, to be Assistant-Surgeon, vice Hassard.

DEATHS.

GORDON.—Aug. 28, at Penang, G. Dalrymple Gordon, M.D., Assistant-Surgeon Madras Native Infantry.

LUDLOW.—Oct. 17, at Bath, after a protracted illness, Samuel Ludlow, F.R.C.S. (hon.), a retired member of the Bengal Board; formerly of Exeter (out of practice).

YELLOW FEVER.—Jamaica advices of the 28th ult. state that the yellow fever had almost disappeared, and that the health of the island was generally good. Late accounts from Port-au-Prince state that the yellow fever, which had for so long a time ravaged the island, had disappeared. The latest accounts from New Orleans state that the yellow fever had almost entirely disappeared from that city. In the interior, however, it was still raging with great virulence. At Lake Providence, out of 90 inhabitants, 60 had died. The total number of interments at New Orleans for the 19 weeks during which the yellow fever prevailed, were 10,960, of which 8148 were from the fever. The yellow fever still continued very bad in the towns bordering on the Mississippi. Mobile still continued sickly, and there were 9 deaths on the 7th inst. From the Sandwich islands our advices are to the 17th of August. A meeting of the citizens had been held in Honolulu, and resolutions adopted, praying the King to dismiss his Ministers, who had become very obnoxious to the people. The small-pox was very prevalent throughout the islands. The number of new cases of small-pox reported for the week ending the 22nd of July, for the island of Oahu was 626; and the deaths reported were 216. From the other islands the new cases were 40, and deaths 19. Total number of cases reported, 2342. Total number of deaths reported, 808. Whole number of cases reported during the week ending July 28, for the island of Oahu, 480; the number of deaths reported in the same time were 219. From the other islands the new cases were 54; deaths, 26. The total number of cases reported were 2886; deaths reported, 1027.

YELLOW FEVER AT BERMUDA.—A private letter from Bermuda, dated September 22, says:—"The yellow fever now at St. George's is the most awful visitation I have ever known. Bad as it was in 1843, it is now ten times worse. Almost every one of the officers and their ladies who have been attacked have sunk under it. They say it is the very worst type of yellow fever, quite like the African fever. This fever does not attack the natives as yet, or, rather, only their children. The officers of the Ordnance have suffered frightfully; only one clerk is left in that department. There is great want of medical assistance. In the Sampson they had only four medical men; two of them were taken ill very early; one of them is dead, the other better. Private Practitioners receive 5*l.* a-day for going to St. George's.

YELLOW FEVER.—A report having become current that yellow fever was prevalent at Lowestoft, the Ipswich papers contradict it, and assert that the town never was in a more healthy state. It is supposed that the report was connected with the arrival there, in consequence of the late gales, of the ship Royal Victoria from New Orleans, that vessel having lost ten of its crew by yellow fever within a fortnight after leaving its port. While at Lowestoft her crew was perfectly healthy.

PRODUCTION OF CARBON BY GALVANISM.—Some sensation has been produced in the scientific circles of Paris by the announcement of the artificial formation of diamond powder. M. Despretz has made two communications to the Académie des Sciences upon carbon. In these he states that, placing at one, the inferior, pole of a voltaic battery a cylinder of pure charcoal, (its purity being secured by preparing it from crystallised white sugar candy,) and, at the superior pole, a bundle of fine platinum wires, so arranged that the charcoal was in the red portion of the electric arc, and the platinum in the violet, he found the carbon volatilised and collected on the platinum wires in a changed state. In these experiments the current has been continued during a month in activity, and the powder collected on the wires has been found to be sufficiently hard to polish rubies with great rapidity, and, when burnt, it left no residue. M. Despretz asks himself,—Have I obtained crystals of carbon, which I can separate and weigh, in which I can determine the index of refraction, and the angle of polarization, without doubt? No; I have simply produced by the electric arc, and by weak voltaic currents, carbon crystallised in black octohedrons, in colourless and translucent octohedrons, in plates also colourless and translucent, which possess the hardness of the powder of the diamond, and which disappear in combustion without any sensible residue. A similar result has been obtained by decomposing a mixture of chloride of carbon and alcohol by weak galvanic currents. The black powder deposited was found to possess equal hardness with that which was sublimed, and rubies were readily polished by it.

DEATHS *in the Metropolis for the week ending Saturday, October* 22, 1853.

CAUSES OF DEATH.	OCT. 22. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	531	332	187	1054	9577
SPECIFIED CAUSES	528	332	187	1051	9521
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	196	88	22	306	2555
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	7	20	17	44	446
3. Tubercular Diseases	53	93	7	153	1625
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	56	29	25	110	1074
5. Diseases of the Heart and Blood-vessels	3	23	13	39	350
6. Diseases of the Lungs and of the other Organs of Respiration ...	116	18	31	165	1394
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	25	24	19	68	553
8. Diseases of the Kidneys, etc. ...	...	6	5	11	121
9. Childbirth, Diseases of the Uterus	...	10	...	10	105
10. Rheumatism Diseases of the Bones, Joints, etc.	1	2	2	5	66
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	1	2	19
12. Malformations	3	...	...	3	32
13. Premature Birth and Debility ...	25	2	1	28	236
14. Atrophy	29	...	10	39	200
15. Age	...	...	30	30	442
16. Sudden	4	2	...	6	76
17. Violence, Privation, Cold, and Intemperance	10	14	4	32	222
CAUSES NOT SPECIFIED	3	...	...	3	56

MORTALITY NOTABILIA.—A thousand and fifty-four deaths were registered in London in the week that ended on Saturday. In the ten corresponding weeks of the years 1843 52 the average number was 958, which, with a correction for increase of population, becomes 1054. It happens that the actual mortality of last week, and a calculation founded on the average of the same week in former years, present in this case identical results.

Births.—Last week the births of 743 boys and 720 girls, in all 1463 children, were registered in London. The average in eight corresponding weeks of 1845-52 was 1400.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·357 in. The mean temperature was 48·6°, which is slightly below the average of the same week in 38 years. The mean temperature rose from 47·6° on Thursday, to 57·6° on Saturday; the latter is 8·9 above the average. It was below the average on the first five days of the week. The mean difference between the dew-point temperature and air temperature was 2·8°. The wind was generally in the south-west.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you do me the favour of correcting a slight error in what your reporter ascribes to me as having said, on the subject of Mr. Coulson's paper, read at the meeting of the London Medical Society on the 15th inst.? The passage should be as follows:—"He referred to two distinct classes of such cases—one associated with antecedent abscess, the other without. Only one of these classes (the first) usually ended in suppuration of the joints—as had been pointed out by the French physicians, particularly Fleury and Andral; but he denied the statement, that, in all cases of gonorrhœal rheumatism of the joints, there was any purulent contamination of the blood." Some further observations, which I send you on the gonorrhœal and syphiloid forms of rheumatism, will place the justness of such an opinion in a yet clearer point of view.

I am, &c. JAMES BIRD.

27, Hyde-park-square, October 24, 1853.

[To the Editor of the Medical Times and Gazette.]

SIR,—Knowing you to be at all times ready and willing to give your opinion in any circumstance relating to the Profession, I have taken the liberty of sending you the following case:—

A negotiates with B for the sale of his practice, stating in his letter, that he is booking about £800 a-year. The books are examined; but, from the way they have been kept, the actual amount of booking cannot be determined on by B. But B at the time being a private friend of A, accepts the purchase, and the deed is signed. It afterwards turns out, that A was not booking more than £600 per annum instead of £800. Do you not consider B justified in withholding a part of the premium as yet unpaid?

An answer will oblige ONE WHO WISHES FOR EQUITY.

[Surely no *gentleman* in A's position would insist on payment of more than was actually booked. The *legal* right of withholding payment will depend on the construction of the deed.]

Dr. Melhuish.—We cannot admit into our columns the contributions of a Physician who acts in partnership with a Druggist.

Mr. Parkin's letter and pamphlet shall not be neglected.

M.R.C.O.—M.D. London.—F.R.C.S., England.—Your letters shall receive the necessary attention.

Dr. Seaton Reid's letter shall be published.

Messrs. Harriss and Bland, Baltimore.—The Journal shall be sent by post.

Dr. Rae.—We will endeavour to do as you desire.

Robt. G. Hill, Esq., Mayor of Lincoln.—The letter shall be published shortly.

A Student might do good service by inquiring about the names and addresses. He will probably find that no such persons are in existence.

Dr. G., H.M.S. Britomart.—The Journal shall be regularly forwarded. Payment can be made through an agent, or order on any London house, or by Post-office order from any friend.

The tables of *Dr. Ranking's* cases have been received.

M. J. McCormack, Esq., Shirley.—We have received the letter, but not the pamphlet.

Mr. Gibson's case of Congenital Dislocation of both Knees shall appear next week.

Mr. Howey's letter from Bromyard has arrived, but we can find no former letter from him. If it has been received, it must have been mislaid.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your publication of the 15th inst. is an advertisement from "A Medical Student, aged 29, of 16 years' experience, fully competent for Midwifery"!!! Can you wonder at the world sometimes laughing at us?

29—Age.
16—Experience.

13—Too clever to live.

IO TRIOMPHE.

Any Correspondent who may know any instances in which their patients have been duped by practitioners of the "manly vigour" and "silent friend" class, will oblige us by sending particulars. In strict confidence, of course.

A Young Physician.—We have inquired into the truth of the reports, and have no doubt that you have been deceived by your patients. One of the gentlemen mentioned in your letter, in answer to an inquiry from the Editor, says, "The statement is an atrocious falsehood. Even when struggling for success in the early part of my career, although I saw numbers of patients for nothing, I never in my life would take half fees. It is true that I have been imposed upon occasionally, though very rarely, by having half a guinea, or half a sovereign and a shilling, so wrapped up in paper that I did not discover the attempt to defraud until I opened my fees in the evening. The statement about tickets is an abominable fabrication." The other gentleman says, "I never take half-guinea fees unless when a patient folds it up in a piece of paper, so that I cannot tell what it is until after he is gone; and this may perhaps happen once, or at most twice, in the year. I find that my time is fully worth a guinea for each visit, both at home and abroad; but I do not find fault with those, whose time, being less valuable, claims a smaller remuneration." We do not name these gentlemen, as we will not permit this Journal to be used as a means of personal annoyance.

[To the Editor of the Medical Times and Gazette.]

SIR,—After midnight last Friday (the 21st inst.), or rather early on Saturday morning, a rather singular phenomenon occurred in my practice, which I should be obliged by your making known, as I am desirous to learn whether any of my professional brethren met with the same. I should premise, that that night there was a very heavy storm of rain, with one clap of thunder, continuing for two or three minutes. I did not notice any lightning.

One person, a martyr to chronic rheumatism, having retired to bed about two o'clock a.m, was unable to sleep. He became restless and feverish, tossing about, in great pain, followed by tightness and oppression in breathing, intense, burning heat all over the body, small, irregular pulse, faintness, and exhaustion; and, finally, extreme warm sweating, so that his night-dress was speedily wet through. Unable to remain in bed from his great restlessness and fever, he rose, dressed, and went down stairs to get a book, thinking he might thus divert his thoughts, and allay the irritability. This, however, was ineffectual, and several doses of morphia, and the lapse of some hours, were requisite, ere the nervous irritability under which he laboured was at all calmed. He was very ill all the rest of that day. A female relative of his, suffering from chronic bronchitis, exhibited precisely the same symptoms, excepting, that in her case, from the greater amount of nervous irritability, I presume, there was delirium, and no sweating. A third instance also occurred in the person of an old man, suffering, or rather recovering, from humoral asthma; he was in a similar state of restlessness, irritability, fever, and inability to sleep. All these three persons were more or less subject to disease; but a fourth example I also encountered, in the person of a young man, in his 22nd year, in full vigour and enjoyment of health—one who knew not before what illness meant, except as regarded his friends; he assures me that that night was passed by him in a state of miserable restlessness, fever, irritability, and insomnia.

What was the electric state of the atmosphere that night? Surely all these attacks, none of which have been renewed since (Oct. 26), must have had their origin in some peculiar electric condition of the atmosphere. All the four persons resided, not only in different houses, but in different streets, and some in different boroughs.

I am, &c., JOHN FOOTE.

36, Tavistock-street, Covent-garden, Oct. 26, 1853.

B. W.—The following extract from the Act (16 and 17 Victoria, c. XXXIV. § 54), will answer the question:—"Any person who shall have made insurance on his life or on that of his wife, shall be entitled to deduct the amount of the annual premium paid by him from any profits or gains for which he shall be liable to be assessed under schedules D or E. Provided always, that no such abatement shall be made in respect of such premium, beyond 1-6th part of the amount of such profits or gains; nor shall any such deduction entitle to claim total exemption from duty on the ground of such profits or gains being *thereby* reduced below £100 or £150."

Mr. Browne, of Tamworth, says he has found good effects from "a lotion made with from 4 to 8 drops of hydrocyanic acid to the ounce of water applied to the scrobiculus cordis in the worst cases of cholera, it having the effect, with the internal use of it, of allaying the pain, cramps, and ness, when other remedies have failed."

R. C. B.—The price of this Journal, when paid by advance to the Publisher, by Post-office order or otherwise, is £1 10s. per annum.

Lectures by Dr. BENCE JONES and Mr. HAYNES WALTON; Original Communications by Dr. RANSOM, of Nottingham; and Dr. FRANK, of Manchester; Reports from the Lincoln Hospital; A Medical Sketch from Germany, are in type.

Mr. Wilde's reply to Dr. Kramer has been received.

COMMUNICATIONS have been received from—

Dr. RANKING, Norwich; J. H. HESLOP, Esq., Birmingham; Mr. WILLING; Dr. RAE, Carlisle; Dr. J. BURQ; E. CHESHIRE, Esq.; JAMES DONALDSON, M.D., Elichpore, Deccan; Dr. RUSSELL, Birmingham; Dr. BUDD; Dr. HINDS, Birmingham; JAMES DIXON, Esq.; SAMUEL HEY, Esq.; JOHN GAY, Esq.; HAYNES WALTON, Esq.

ORIGINAL LECTURES.

CLINICAL LECTURES

ON THE

RELATION OF RENAL DISORDERS TO DISORDERS OF THE STOMACH,

AND TO OTHER ACUTE AND CHRONIC DISEASES.

By H. BENCE JONES, M.D., F.R.S.

Physician to St. George's Hospital.

Lecture II.

ON DISORDERS OF THE RENAL SECRETION IN DELIRIUM TREMENS, AND IN INJURY OF THE SPINAL CORD.

The first congestive disease which I shall bring before you to-day is delirium tremens, as you may occasionally see it here in fearful intensity. This disease, in its effect on the renal secretion, and on the system, has many points of connexion with the diseases which I mentioned in my last lecture. This resemblance is most apparent in the presence of albumen in the urine, in the *post-mortem* appearances of the kidney, and in the tendency to epileptic convulsions. I shall mention three cases which best illustrate my observations on the occurrence of congestion of the kidney in delirium tremens.

A man, 35 years of age, was admitted into St. George's Hospital with delirium tremens. For three nights he had not slept. Two hours after he came in he had an epileptic fit. The urine, examined the second day after his admission, had a specific gravity of 1019·3, and it contained a trace of albumen and a few blood globules. The presence of fibrinous casts was not certainly determined. After two more days of extreme violence, he had two convulsive fits, in the last of which he died. On *post-mortem* examination, both kidneys were large, much congested on their surfaces, and lobular; their capsules peeled off easily, and their surfaces presented in several places slight depressions, as if the cortical structure had there partially disappeared; in other parts the surfaces of these organs were perfectly smooth.

A man, aged 35, was admitted in his seventh attack of delirium tremens. It had lasted five days. The urine passed on admission, six ounces only, was of a deep reddish colour, and contained traces of blood, albumen, and fibrinous casts; specific gravity, 1018. He slowly but gradually recovered, the specific gravity of the urine rising to 1027·9; the albumen disappearing entirely.

Another man, aged 40, was admitted in his third or fourth attack of delirium tremens. It had lasted three days. The urine, passed the following morning, after a most excited night, gave a slight evidence of albumen. It contained a great excess of urea and sulphates. Specific gravity, 1037·8. Another quantity, passed later in the day, gave a considerable deposit of albumen by heat and acid. It contained an excess of urea and sulphates. Specific gravity, 1041·2. He died the following day. The kidneys were congested, the Malpighian tufts being full of blood; on the surface of both kidneys were several small cysts, but the structure was otherwise healthy.

Such cases might mislead you into the supposition that Bright's disease existed; and though it is very possible that the frequent recurrence of this congestion may give rise to that disease, still, in most of the cases which I have seen, when the vascular excitement subsided, the albumen disappeared from the urine without any treatment especially directed to the state of the kidneys.

In the cases of delirium tremens, cholera, and scarlet fever, the passage of the congestion of the kidney into inflammation is rarely made evident during life by the presence of purulent matter in the urine. But there is a congestion arising from another state of acute disease in which not only the kidney but the bladder and ureter are often simultaneously affected, whereby the marks of inflammation become most perceptible.

Severe injury of the upper part of the spinal cord, inasmuch as it almost invariably causes the death of the patient within twenty-one days, may well be called an acute disease. Now, laceration of the spinal cord, from fracture of the spine, very frequently gives rise to the most decided congestion of the kidney, and to the most unequivocal purulent matter in the urine. The effects on the kidneys and bladder, as evidenced by the state of the urine, may be divided into three degrees.

In the first degree, there is no affection of the urine, but the kidneys are healthy, or rather more congested than natural. In the second, the secretion is purulent, but there is no ammoniacal urine. In the third, there is purulent matter and alkalescence of the urine.

I will give you examples of each of these states.

A man, aged 35, fell 30 feet across a piece of wood. He broke the sixth and seventh cervical vertebræ. There was complete paralysis from the mammæ downwards. The urine, the day after his admission, was strongly acid, and had specific gravity 1023·1. It was examined on the third, eighth, ninth, sixteenth, and eighteenth days. On each occasion, it was acid. The specific gravity was 1018, 1022, 1023, 1011, 1011. On the twenty-first day he died, the pulse becoming slower and weaker, and the difficulty of breathing increasing. The spinal cord, to the extent of an inch and a-half, was diffluent. Several ruptures, about two lines in depth, were found on the anterior surface of the right kidney, but it was not inflamed. Nothing remarkable was observed in the other kidney.

A man, aged 30, went to bed intoxicated. Thinking he heard thieves, he got out on the roof of his house, 40 feet high, when he fell, and broke the fifth and sixth cervical vertebræ, lacerating the cord across. Nineteen hours and a quarter after the accident the urine was drawn off. It was all secreted after the fracture, inasmuch as, ten hours after the injury, no urine could be obtained by passing the catheter into the bladder. The water was strongly acid, it remained so for at least seven days after it was passed, and had a specific gravity 1012, and contained some blood globules. He died about twenty-two hours after the fall. The kidneys were very greatly congested. There was no increased vascularity of the mucous lining of the pelvis or ureters. The bladder was healthy, but distended with urine.

The second degree of affection is characterised by the presence of pus in the urine, which remains acid throughout.

A man, aged 31, lying in a cart, fell out backwards, and broke the first dorsal vertebra.

The palsy of the lower extremities increased up to the fifth day, when it was complete. The urine, when drawn off on that day, was acid, and had specific gravity 1014·2.

The sixth day the urine was acid; specific gravity 1030·2; gave a considerable deposit of urates, and some cells resembling pus cells, with some blood.

The seventh day the urine was similar to that passed the day previous. During the night he died of dyspnœa, produced by congestion of the lungs.

The mucous lining of the left kidney was slightly inflamed, and a small quantity of semi-purulent fluid was contained in the hilus. The bladder was somewhat distended with urine, which appeared perfectly healthy, excepting a slight degree of turbidity. The mucous membrane of the bladder was healthy.

A man, aged 48, fell about 9 feet, on a piece of timber; he fractured the sixth and seventh cervical, and the second and third dorsal, vertebræ. The urine passed twelve hours after the accident was acid; specific gravity 1019·4.

The second day it was highly acid; it remained acid for seven days in June; specific gravity 1025·3.

The third day the water was acid; specific gravity 1027. It remained acid at least five days. It deposited crystals of uric acid. It contained a small quantity of albumen and pus-cells most distinctly.

The fourth day the specific gravity was 1024·1. The urine was still acid; there was a trace of albumen, but the pus-cells were less distinct.

The fifth day the urine was still acid; specific gravity 1027·8. There was some blood, but doubtful pus in the water. He died in the afternoon comatose.

On examination, the mucous lining of the pelvis in both kidneys was very slightly congested. The bladder was healthy.

These cases show that the inflammation of the mucous membrane of the kidney precedes the inflammation of the bladder, and gives rise to the formation of pus in the urine before the alkalescence appears, and the specific gravity falls. By closely watching the more severe cases which

belong to the third degree of affection, the same sequence may be detected.

A glazier, aged 39, fell 25 feet from a second-floor window. He fractured the fourth and fifth cervical vertebræ. The paraplegia was complete.

The fourth day the urine had specific gravity 1029·2, and was acid.

The sixth day, specific gravity 1030·2; acid; contains no appearance of any pus-cells, but a considerable deposit of urates.

The eighth day, specific gravity 1022·0; acid; thick from urates; no pus; no albumen.

The ninth day, specific gravity, 1007·3; acid, slightly but distinctly, and remained so the following day; contained a few pus-globules.

The tenth day, specific gravity 1010·8; very full of pus; neutral to test paper four hours after it was passed; in sixteen hours it was ropy.

The eleventh day, urine alkaline; when drawn off contains much pus. It was too decomposed to take the specific gravity. It remained in the same state until the 22nd day, when the patient died. For the last six days there was much diarrhœa.

The mucous membrane of the lower part of the ileum, for the extent of about two feet, was very intensely vascular, and of a dark colour. A few small patches of extravasated blood were found in the submucous areolar tissue of this part, and its internal surface was covered over by a dark red, or almost black, tenacious mucus. The intestinal glands were healthy. The left kidney was very vascular throughout, and studded with numerous small abscesses. The infundibula and pelvis were very vascular, as also was the commencement of the ureter; they were distended with pus. The right kidney was also vascular, but less so than the left one, and also the pelvis and infundibula. The bladder also contained a large quantity of pus, and was highly vascular.

In this case, on the eighth day, the urine was acid, and contained no pus.

On the ninth day, acid, with pus.

On the tenth day, less acid, and more full of pus.

On the eleventh day, alkaline and ropy.

The purulent matter may appear in the urine much earlier, as in the following case:—

A labourer, aged 35, fell from a height of 30 feet. He fractured the eleventh dorsal vertebra. He was completely paralysed.

The second day, the urine had a specific gravity 1029·2; slightly acid.

The fifth day, urine was acid, and remained so for four days at least; specific gravity 1025·3.

The sixth day, urine slightly alkaline, mixed with blood and pus.

The seventh day, the urine had specific gravity 1022·8; it was highly ammoniacal, and contained ropy mucus.

The thirteenth day, the urine had specific gravity 1007·8; was extremely foul.

He died on the thirty-eighth day.

The tissue of both kidneys was remarkably soft, but perfectly smooth on the surfaces. They were much congested; and when cut into, the mucous membrane lining the calices, infundibula, and pelvis of the left kidney was found to be very much congested, and in several places covered with thick patches of recently-effused lymph; but the mucous membrane of the right kidney presented no such appearances, and yet the urine pressed out of the mammillary processes of this kidney were puriform and alkaline to test paper. Some of the mammary eminences of this kidney were much congested. The bladder was slightly thickened, and its muscular coat fasciculated. The mucous membrane of this organ, although of the natural colour, with the exception of some slight congestion in patches, presented several large ulcerations laying bare the muscular fibre.

A false passage existed in the prostatic portion of the urethra, and led into the cavity of a large and very foul abscess situated between the bladder and rectum.

In this case the pus was found on the sixth day, when the urine became slightly alkaline.

From these cases of injury of the spinal cord, it is evident that three states of urine may be observed.

In the first two cases it was healthily acid and free from pus.

In the following two cases it was acid but contained pus.

In the two last cases it was ammoniacal and contained much pus.

It may be concluded, 1st, that injury of the spinal cord does not immediately affect the renal secretion; and, 2ndly, that inflammation of the mucous membrane precedes and probably produces the ammoniacal urine.(a)

The effect of the inflammation upon the specific gravity of the urine is a point which is also worthy of attention, the rather as in Bright's disease the same low specific gravity usually occurs.

The following table of the specific gravity of the urine in the first and two last cases will best illustrate the fact of the gradual decrease in the specific gravity:—

First case:					
2nd day of injury of the cord,				sp. gr. of the urine	1023·1
3rd	,,	,,	,,	,,	1017·6
8th	,,	,,	,,	,,	1022·0
9th	,,	,,	,,	,,	1023·1
16th	,,	,,	,,	,,	1011·4
18th	,,	,,	,,	,,	1011·4
21st day died.					
Fifth case:					
4th day		,,	,,	,,	1029·2
5th	,,	,,	,,	,,	1029·2
6th	,,	,,	,,	,,	1030·2
7th	,,	,,	,,	,,	1021·6
8th	,,	,,	,,	,,	1022·0
9th	,,	,,	,,	,,	1007·3
10th	,,	,,	,,	,,	1010·8
22nd day died.					
Sixth case:					
2nd day		,,	,,	,,	1029·2
4th	,,	,,	,,	,,	1025·9
5th	,,	,,	,,	,,	1025·0
7th	,,	,,	,,	,,	1022·8
12th	,,	,,	,,	,,	1007·8
38th day died.					

In none of the cases of injury of the spinal cord which I have seen has the temperature been increased. There is no doubt that occasionally the reverse occurs. Sir B. Brodie, in his "Physiological Researches," page 121, says "a man met with an accident which occasioned a forcible separation of the bodies of the fifth and sixth vertebræ of the neck. He died at the end of twenty-two hours. At last there were not more than five or six inspirations in a minute. Nevertheless, when the ball of a small thermometer was placed on the inside of the groin the quicksilver rose to 111° Fahr. Immediately after death the temperature was examined in the same situation, and found to be still the same." The experiments of M. C. Bernard(b) and of Dr. Budge(c) render it probable that the increase of temperature occurs only when the sympathetic nerve is injured, and that when the spinal cord alone is injured the temperature is lower than natural. M. Brown Sequard considers that the phenomena observed on injury of the sympathetic nerve are mere consequences of the paralysis (and, therefore, of the dilatation) of the blood-vessels. The blood finding a larger way than usual, arrives in greater quantity, and hence the nutrition of the part is accelerated.

Regarding the treatment of the congestion of the kidney from delirium tremens and injury of the spinal cord, I have but little to recommend.

In delirium tremens the congestion is caused sometimes, perhaps, by the action of the alcohol in the blood on the kidney, but more often by the stimulation of the heart and blood-vessels. I have never found it requisite to abstract blood by cupping; and by allaying the excitement and quieting the circulation by opium, the blood has disappeared from the urine.

In injury of the spinal cord the congestion appears to be the consequence of the paralysis of the capillaries. Here, as in many other diseases, the affections of the eye enable us to see clearly that which in other parts is concealed from our view.

In cases of paralysis of the first division of the fifth nerve, the conjunctiva is often seen to become vascular and to pass

(a) Dr. Brown Sequard says, that he completely destroyed the spinal cord of a young cat from the eleventh and twelfth dorsal verterbræ to its termination. It lived three months. The urine was always highly acid. The bladder was palsied; the urine was occasionally left in it for two days.

(b) Comptes Rendus. 1852.

(c) Frorieps Tagesbuch. No. 512, 1852.

into a state of more or less active inflammation. So, also, in the experiments on the section of the pneumogastric nerve, congestion, and afterwards inflammation of the mucous membrane of the bronchial tubes and mucous membrane of the stomach is produced.

In injury of the spinal cord the same tendency to congestion and inflammation of the mucous membranes and skin exists. In one case it is most marked in the kidneys, in another in the bladder, while even the mucous membrane of the intestines may sometimes be found highly inflamed.

As the injury to the spinal cord cannot be repaired, so the effect may be palliated but cannot be removed. The putrifying urine must be drawn off with great care, at least twice daily, in order that its irritating properties may not increase the inflammation of the bladder.

The injection of warm water is sometimes useful in lessening the irritation, but great care is requisite to avoid the slightest mechanical injury, which greatly aggravates the symptoms.

CLINICAL LECTURE
ON
THE REMOVAL OF A PARTICULAR KIND OF OPACITY FROM THE CORNEA.

DELIVERED AT

The Central London Ophthalmic Hospital.

By H. HAYNES WALTON, Esq., F.R.C.S.

Surgeon to the Hospital, and Assistant-Surgeon to St. Mary's Hospital.

Gentlemen,—The treatment of opacity of the cornea by practical surgery is not of modern invention as many surgeons suppose. We have only to glance at the literature of ophthalmic medicine to be convinced of the antiquity of the practice. Authors who are now considered too obsolete to be received as authority discuss it. There seems to have been misgivings in the minds of our standard writers concerning its practicability, as some do not even allude to it, while others almost treat it as fabulous. Nevertheless, within the last few years it has been discussed in France and Germany, adopted in those countries, and, still later, executed in England.

I certainly recognise in the measure a considerable auxiliary in the treatment of affections of the cornea. It carries us a step further in the alleviation of disease, enabling eyes to be rescued from conditions that are without the pale of ordinary means.

The female who is the subject of this discourse is too well known to you to require her presence. I shall therefore proceed without her.

Elizabeth Wheeler, aged 29, became a patient here so long ago as 1845; attended me for some months, then resorted to some other ophthalmic institution; and ultimately replaced herself under my care in the summer of last year—1852. Of the prior attendance I have no data; my notes apply to the re-entering. She was virtually blind, requiring to be led, and unable to perform any act demanding eyesight. The centre of each cornea, to an extent a little beyond the pupil, (the left eye being the more affected,) was occupied by a dense opacity, slightly raised, and which gave in profile somewhat the appearance of "conical cornea." The form of each was irregularly spherical, with sharp outline. The colour, French-white, with dots or mottlings, not unlike those which appear on the back of the cornea in the affection called "aquo-capsulitis." Altogether, the appearance was peculiar and striking, differing from that of ordinary opacity, and conveying the idea of being due to a deposit of a substance probably cretaceous. The remainder of each cornea was transparent; otherwise the eyes seemed healthy. When the pupils were dilated, she could see to move about in the house alone; but there was not sufficient sight for any employment.

Nothing of her history of any value could be gathered, and a long examination elicited merely that, from childhood, she had been subject to inflammation of the eyes, and her blindness was of about ten years' duration.

Reflecting on the insufficiency of previous treatment, and on the physical character of the disease, I concluded that I had before me a case that warranted operation. I decided to employ the miniature gouge, which, as you know, I generally use to remove foreign substances from the cornea, and to pick away, as it were, the opacity. This I considered safer than to use a knife.

I selected the right eye, picked away at the outer margin of the opacity, detaching some, and was not a little gratified to find that it was superficial, and, as I hoped, not deeper than the anterior elastic lamina. Finding my attempt successful, the opacity reduced, and transparency of the cornea thus far restored, I repeated my little process four times, at intervals of a month, and operated twice on the left eye. Now, there was vision enough with the right for her to read large type, and with the left she could move about alone. Still, in both, especially the left, some opacity remained.

She ceased to attend me from this period till the present summer, when I operated twice more on the right eye, and nearly, but not quite, established a clear cornea, a small spot of opacity passing deeper than I deemed it prudent to penetrate. The left eyeball, too, was scraped a few times, and here, also, a central deep bit resisted removal.

To conclude the report,—the appearance of the eyes is so far natural, that it needs a careful examination in a favourable light, to detect the remaining opacities. The form and outline of the corneæ are normal, and their entire surfaces reflect the light. Vision is nearly perfect. With either eye she can thread a common sewing-needle, (No. 6,) but the left is rather the more perfect.

As this is the only case of the kind of which I have personal experience, I have little to add to the facts that it affords.

Perhaps the first points of practical import that demand remark, are the fitness of the case for the means used, and the signs by which such cases may be diagnosed. Concerning the first, the opacity being raised, and to all appearance of an earthy nature and superficial, induced me to interfere. I suspected that there was a circumscribed deposit of a foreign substance, which could be removed, just as one would extract a particle of iron, or any other extraneous matter, imbedded in the cornea. As to the second, I trust it is sufficient to put you on your guard to prevent you from mistaking small staphylomata of the cornea, or fungous growth from the conjunctiva, for this affection. You must be observant to prevent such errors. It is by personal observation alone that you can learn their distinctive characteristics. Of the precise nature of the substance scraped away, I cannot speak, as neither minute chemical nor microscopical examination was made. I did not detect any grittiness with the instrument, but this does not disprove an earthy nature,

I must tell you that this class of treatment is not restricted to opacities that are raised. So long as we have tolerable assurance that the loss of transparency of a part of the cornea is due to deposit of earthy material, there can be no reason against operating, although such deposit does not interfere with the natural outline of the part. At the same time, the opposite state renders diagnosis more certain, insomuch as it goes to prove that there is some material superadded. Nor does the practice end here; it has been applied to opacities the result of cicatrices from loss of substance of the cornea, or from opaque deposit, the consequence of inflammatory attack; but I should be travelling away from the case before us to enlarge on this; you may find a full account of the subject in my Work on "Operative Ophthalmic Surgery," in the Chapter on the removal of opacities of the cornea by operation. I shall, therefore, confine myself to a short statement from Mr. Spencer Wells, who was present at one of the occasions of my "scraping." Mr. Wells saw Malgaigne perform his second operation, of paring opacities of the cornea, at the Hospital of St. Antoine, Paris, in 1845, as follows:—He made an incision above the upper edge of an opacity, which covered the lowered part of the cornea, and divided the external laminæ. He then fixed the edge of the opaque portion with fine forceps, and on raising it this peeled off very easily, and the separation was completed by another incision round the lower edge. Mr. Wells saw the first patient upon whom M. Malgaigne had operated six months before, and the cornea was perfectly transparent. Mr. Wells tells me that he has himself repeated this operation in two cases, with equally favourable results.

You should realise to your mind, that this application of practical surgery has reference to a portion of the eyeball, about the thickness of one's thumb-nail, and to separate the

component parts of which, even on the dead eye, demands exquisite manipulation.

Let us now inquire a little into the conditions essential to the success of scraping the cornea. It is necessary that that portion of it posterior to the operation, do retain its transparency, and that the repair of the injury inflicted by the instrument be effected by transparent material. I imagine that little is to be apprehended from failure in the former, and the fulfilment of the latter must, I conclude, depend on the depth to which the true corneal tissue, the laminated part, is penetrated.

I strongly suspect that the perfection of repair differs in the two instances of loss of structure from ulceration, and from wounds, being by far more complete in the former. That a breach by ulceration, provided it be small, which will penetrate far into the laminæ,—nay, even go through them, —may, under favourable conditions, be filled by a material in no respect inferior in transparency to the original structure, while the removal of any of the laminæ by art, or the separation of them, must be attended with the greatest risk of opacity, and that in proportion to the extent of the wound. It is said that Malgaigne, who made a great stir about the operation at the time of its revival among educated surgeons, for it seems that it had lapsed into the hands of itinerant oculists, sought to convince himself of its practicability by removing laminæ from the cornea of animals, and obtained success that encouraged him to operate on man. The chance of inflammation of the cornea supervening on any of these operations, and so spoiling that which had been transparent, must be taken into the general account in deciding on the mechanical treatment of opacities. The dread of this was the reason of my proceeding cautiously and in so piecemeal a manner, effecting by many stages what might perhaps have been accomplished at once, or at least by much fewer operations. I have nothing to regret from my caution. But slight action followed each of the applications of the gouge, and the effect so caused passed off in two or three days. It is probable, judging from the result of the operation, that the instrument never penetrated beyond the anterior elastic lamina. The restoration of epithelium, always rapid in slight abrasions of the cornea, was quickly effected.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. VIII.

ON ELEPHANTIASIS GRÆCORUM, OR LEPRA TUBERCULOSA,

AS IT IS SEEN IN THE ISLAND OF CRETE.

By WILLIAM R. E. SMART, M.D., R.N.

[Concluded from page 446.]

The points of analogy or of affinity which mark an identity of morbific agency in the varieties of elephantiasis are :—

1st. The hereditary predisposition in both; it exists in the highest degree in e. tuberculosa.

2nd. The alteration of nervous influence in both; it amounts to complete anæsthesia in e. anæsthetica.

3rd. The absence in both of any persistent constitutional disturbance, as well as of acute inflammatory action, during the progress of a lesion which destroys the tissues affected.

4th. The continued and successful effort in both to remove the exudation by ulcerative action.

5th. The identity in both varieties of the final morbid changes, viz.—disease of the mucous membranes.

The distinguishing peculiarities of the varieties are :—

1st. The age at which disease invades: e. tuberculosa may commence soon after infancy; e. anæsthetica later, perhaps not before adult age.

2nd. The tissues primarily affected by the morbid deposit: in e. tuberculosa, the subcutaneous areolar tissue; in e. anæsthetica, the small bones of the feet and hands.

3rd. Manner of progress: e. tuberculosa goes through its stages uninterruptedly to a final termination; e. anæsthetica, after the completion of its primary series of changes, has frequently a period of quiescence, after which the disease may be renewed in other tissues, and cause death.

4th. Duration: that of e. tuberculosa rarely exceeds twelve years; while that of e. anæsthetica often extends to twenty years before the fatal result ensues.

In considering the pathological affinities and the diagnosis of leprous disease, I shall enumerate certain characters which it holds in common with cancerous and tuberculous affections, and then state others which distinguish it from cancer on the one hand, and ally it with tuberculosis on the other.

Those characters which it holds in common with cancerous and tuberculous diseases are :—

1st. Hereditary and transmissible predisposition.

2nd. Development of diseased action at certain ages.

3rd. Existence of an exudation, non-analogous to any of the healthy constituents of the body, over which the absorbents have no powers similar to those exercised on the products of simple inflammation, viz.—re-absorption and excretion by the emunctories.

4th. The efforts which are made to throw off the diseased growth by ulceration.

The series of characters which distinguish it from cancer and ally it with tubercle, are :—

1st. The confinement of the exudation and its results to certain tissues, without tendency to affect those adjacent or contiguous.

2nd. The mode of increase by successive stages of effusion, rather than by steady growth.

3rd. The effects of ordinary and assignable causes, such as disorder of the chylopoietic organs, in promoting fresh effusions.

4th. The absence of vascularity in the morbid deposit, and the consequent freedom from hæmorrhage during the ulcerative stage.

5th. The potency of the reparative process to remove the deposit when effused towards the surface of the body.

6th. Its inefficiency to do this when the effusion has fallen on internal tissues, and the consequent fatal tendency of the disease.

All these features of morbid action ally the two diseases, leprosy and tuberculosis; and the analogy between them may be drawn closer by a comparison of the series of organs most liable to become the seats of exudation in each disease.

Series of Organs.	The Seats of Tuberculous Exudations.	The Seats of Leprous Exudations.
Superficial organs.	The lymphatic glands.	The subcutaneous areolar tissue.
Organs of locomotion.	The ends of the large bones, and their joints	The small bones of the extremities and their joints.
Internal organs.	The air-cells of the lungs.	..
..	The submucous tissue, and the glands of intestines and mesentery.	The submucous tissue, and the glands of intestines and mesentery.
..	Subserous tissue in general.	Subserous tissue in general.
..	The substance of organs, as liver, brain, and uterus.	The sheaths of the nerves and great vessels.

It may be addeed, that phthisis is a very rare disease in Crete. If it existed there, it would not be expected to occur in the lowlands, where miasmatous fevers abound, but in the uplands and the mountainous districts, which are the "habitats" of leprous disease.

Cases of true malignant cancer occur, but they seem to be rare, since among many surgical diseases which have been under my notice, I remember to have seen but one case of it—a cancerous ulceration involving the penis and scrotum, which had been of rapid course, and which proved speedily fatal. The whole aspect of the sufferer was characteristic of the disease, and it contrasted strongly with that of leprous patients.

In these colonies of the diseased, there are found a few healthy natives, the offspring of diseased parents. They have not quitted the scenes of childhood, and are chiefly females. The males who have been equally fortunate in escaping disease, remove, at an early age, to other parts of

the island. Other women, who have accompanied diseased husbands, have remained, and become wives of two or three lepers in succession, without acquiring any taint. This fact is strongly opposed to the popular opinion of contagion, which leads to the exclusion from their homes of those that are afflicted with leprosy.

I am not prepared to state definitely the relation which obtains between the disease and the different sexes. My impression is, however, that it is more frequent in the male sex.

The name "satyriasis" has been given to this disease, on account of libidinous propensities imputed to lepers. I have seen nothing to convince me of the truth of the imputation.

It is stated by Mr. Robinson, ("Medico-Chirurgical Transactions," Vol. X., p. 35):—"It is in this species (e. tuberculosa) only, and in this only at its commencement, that the venereal passion is excessive, probably occasioned by the stimulating irritation of the skin; in the after stages the testicles are absorbed, and, if the disease comes on before, it often prevents puberty."

And again, in p. 36:—"In the first (e. anæsthetica) the venereal passion is unaltered, and I have seen many healthy families of children spring from fathers with scarcely a finger or toe remaining."

In the article, "Spedalskhed," quoted from the *Medical Times and Gazette*, it is said, that "In the anæsthetic form, the sexual power is lost, which is not the case in the knotted variety (e. tuberculosa)."

These statements are irreconcilable concerning diseases of which the identity is indubitable.

Some of the older lepers, on whose testimony I rely, have denied that excessive sexual appetite is an ordinary condition. They state, that women lose their fertility at an early period of the disease, and that males are rendered impotent soon after the establishment of the ulcerative stage.

They admit, however, that many of their numbers have hurried on their disease, in its early stage, by excesses of venery and errors of diet.

I have seen that, when the disease commences in early youth, puberty is retarded in both sexes, or may not be developed at all during life. And I imagine, that any abnormal endowment of nervous energy, in the organs of any special function, must be an unusual occurrence, in a disease characterised by a generally depressed tone of the nervous system, and a peculiar insensibility of the superficial nerves.

A very strongly-marked feature of the disease is its transmissibility from parent to offspring. In some families it has been inherited for several generations, and some are found of which no member has escaped the disease.

The majority of the children found in the leper villages are the offspring of healthy mothers by diseased fathers. Some of these children become diseased almost from the period of infancy, while others attain to puberty without any active development of the inherited disposition.

And it would appear that the age at which active disease develops itself in the child depends greatly on the stage of the disease in the father at the time of procreation, since those children in which the disease commences early in life, are those, for the most part, begotten by lepers in an advanced stage of the complaint; and such children are left fatherless while of tender years; but children begotten during the earlier stages will often attain to adult age, without showing any evidence of the disease. Instances are found in which the offspring have fallen victims many years before the parent, who, in these cases, has been the last to suffer from the active development of the inherited tendency transmitted through him. These instances seem to show, that the predisposition is itself transmissible before any actual disease has commenced in the parent, and that exciting causes must play an important part in arousing the cachectic habit, and in producing the disease.

Having admitted the paramount influence of hereditary predisposition in this disease, the circumstances must be sought, under which the cachectic habit becomes active. This inquiry is of greater interest, since many persons, the offspring of parents that died of the disease, have gone through life, giving no evidence of their having received the taint; while others, unable to trace back the tendency by inheritance, have fallen victims to the disease.

Our present knowledge of the exciting causes of this disease is comprised in the following observations on the climate, &c., of the islands; the dissimilar habits of different classes of the people; and their liability to, or immunity from, the disease, as the effect of their dissimilar habits and relative social condition.

The climate of Crete is very mild. The thermometer in the shade rarely exceeds 84° Fahr. in summer, or falls below 40° Fahr. in winter. The barometer is very equable in its undulations, the monthly means showing a regularity of the rise and fall, between the highest point, 30·30 inches in December and January; and the lowest, 29·90 inches in June and July.

Rain very seldom falls between April and September; but in the interval very heavy night-dues are deposited. When strong winds blow over the heated surface in summer, the hygrometic thermometer will show a difference of 13° in the temperatures of the dry and wet bulbs, which indicates an excessive evaporation. After the autumnal equinox, the rains fall in great abundance; and the winds, which have blown from the north and west during the summer months, change to the south and west, and maintain the mildness of the winter season. The mountain-peaks have a deep coating of snow from November to May, and the ravines contain large masses of it throughout the year. As this island does not exceed thirty miles in breadth from north to south, and has a range of mountains to 9000 feet in height on this narrow base line, it is evident that strong contrasts of temperature and seasons must be presented within its limits.

The central ridge is of compact limestone, which displays everywhere the solvent power of thawing snow; the lower ridges are of slate-rocks, or of sedimentary and shell limestones.

The supply of water to the inhabitants of the upper districts is very scanty in summer, and it contains much lime in solution. In these mountain districts calculus of the lithic and oxalic varieties is a frequent disease of youth.

The large towns, being on the coast, are supplied with water from the surrounding hills, care being taken to avoid that of the alluvial plains.

Elephantiasis is rare among the townsmen. The lepers, with very few exceptions, are peasants from the upper provinces. This feature of the natural history of the disease directs attention to the difference of condition of these two divisions of the population.

In the towns, there is ample evidence of expanding views of commerce, and of increasing wealth, and its concomitant changes in the personal habits as well as in the domestic arrangements of the inhabitants, who, by their frequent intercourse with the continent, have become more assimilated in manners to the people of Western Europe, and have, to a certain extent, given up their natural costume, and adopted that of the Frank.

In the rural districts, on the other hand, civilization has made very small progress during ages past. The peasantry are extremely impoverished; they are ignorant of all the modern appliances of agriculture; and they find that the comparatively scanty produce of the soil does not greatly exceed the demands of the landlord and tax-farmer, and the claims of the money-lender.

Their diet is of the poorest nature, and deficient in nutritious properties; and their blood is still further impoverished by annual periods of dearth, and by the long fasts enjoined by the Greek Church. In addition to the bad effects of food deficient in quantity and in quality, a want of attention to personal cleanliness prevails among them; and they still retain an antiquated costume, which is ill adapted to defend the person from atmospheric changes, and to protect it from the associated causes of disease.

The general history of civilization teaches us, that skin diseases were very prevalent, and that leper-houses were ordinary institutions in all the countries of Europe as long as the lower classes continued impoverished, ill-clothed, and ill-fed. Referring to the history of our own country, the age of the Plantagenets and the Tudors presented similar scenes, which, most probably, originated in like causes, and mainly in a deficiency and very irregular supply of a mixed diet of fresh animal and vegetable food.

That which is taught in the pages of history is exemplied within the narrow limits of the Island of Crete. Its peasantry are very far behind their compatriots of the towns in wealth and civilization; and they are afflicted with one of the most revolting diseases, from which the townsmen are exempt.

The lepers regard their malady as incurable; and an

opinion is entertained by the more intelligent of them that it is a Divine retribution for the sins of their progenitors; being, as they imagine, the direct result of fecundation during the catamenial period, by which the whole mass of the blood is polluted.

This may account for their want of faith in the possibility of a cure. They are so apathetic to their condition, or so hopeless of cure, that they do not even seek to learn the properties of the medicinal herbs which abound in their country.

I am not aware that they adopt any remedial means with the hope of suspending the morbid deposit; and the only treatment I have known them employ is of a surgical and palliative nature.

It consists of—

1st. Scarifications of the turgid parts, into which the morbid effusion has been poured during the transient periods of cachectic excitement. They are had recourse to in the tuberculous or skin variety; and in those cases, the face, the arms, and legs are often seen covered with minute cicatrices, like those left after the operation of cupping.

2ndly. Incisions to a deeper extent are commonly practised in the anæsthetic variety, to effect the immediate removal, or to facilitate the separation of the diseased bones. The lepers maintain that these scarifications and incisions do not cause pain.

The ulcerative action, whether on soft tissues or on the bones, produces very little inconvenience to them. They employ no healing unguents. Sometimes a green leaf is applied to ulcers on the limbs from which the crust has fallen; but those of the face and head are rarely supplied with any artificial covering.

The casual nature of my visits to these villages has precluded any endeavour on my part to try the effects of medicines; and therefore my remarks on the treatment of the disease will embody the results of the experience of the others, and contain but few suggestions of my own. They will be directed to the following points:—

1st. The influence of prohibitive measures in checking the disease in its origin or spread.

2ndly. The means of preventing the excitement of active disease in individuals predisposed to it by inheritance.

3rdly. The remedial agents employed in the developed disease, and their applicability to the leprosy of the Cretans.

The hygienic question of the prevention of the disease has been entertained from the earliest times, but no efficacious means of doing so have been devised. In the Levant, exclusion has been resorted to from a very remote date, without any good result. This practice is based on the fear of a contagiousness which is not proved to exist. It is an institution retained by the Greeks, through adherence to Levitical law, and it is entirely at variance with the religious tenets of the ruling people, the Turks. In Norway it has been proposed, by a Medical Committee, "to prohibit by law marriage in the first and second generations of the infected families." It would be impossible to deprive such a measure of its cruel and unjust nature, even if its success could be guaranteed; but I think that its complete success cannot be hoped for, as cases of the disease, especially of the anæsthetic variety, are often sporadic, without suspicion of hereditary transmission. Both those modes appear to me to be unequal to the extirpation of the malady.

I am of opinion, that greater public good may be effected by abandoning all these oppressive measures, and adopting the opposite course. Many children born of lepers retain health to a late period, and some go through life free from the disease. Of these, the males return, most probably, to the remote villages of their ancestors, and are exposed, personally, to the exciting causes which had formerly acted on their parents, while the females are, more frequently, compelled to remain in the leper villages, where they often become wives of leprous husbands. It ought not to excite surprise, that those who inherit the tendency, and are reared amid the exciting causes, afford numerous instances of disease; and less so, that the produce of such marriages as these should perpetuate the malady.

I am inclined to think, that if houses of reception were provided within the towns for these children, and a proper diet afforded them, the majority of them would escape the disease. Their presence, from an early age, among the townspeople, would gradually remove social prejudices. They might be educated to occupations which would render them residents of the town rather than of the country, and thus they would be removed permanently from amid the exciting causes, and transplanted where leprosy is scarcely known.

With regard to the improvement of the condition of the peasantry among whom the leprosy is indigenous, it would not be difficult to point out the disabilities they labour under; but to suggest the means of remedying these social evils is beyond my power. There are, however, minor points which appear to me to effect much in the perpetuation of the disease:—

1st. Deficiency of attention to the pasturage of cattle, which renders fresh animal food a rare, because too expensive an article of diet, to the impoverished peasant.

2ndly. A great scarcity of succulent vegetables throughout a great portion of the year; when beans, peas, barley, and rye form the staff of the peasant's food.

Progress in the art of agriculture would, doubtless, remedy these deficiencies; but the light of modern improvement in the arts has scarcely dawned on the peasantry of Crete. They possess none but the rudest implements; their crops are scanty; their garden-fruits scarcely excel the wild produce of their delightful climate; their vegetables are cultivated without any plan by which to maintain a continuous supply; and that valuable tuber—the potato—is only found in the kitchen-gardens of the opulent. I think, that the general use of this vegetable, which is unknown to, or neglected by, the peasants, would tend greatly to obviate one of the defects in their diet.

The second indication—that of preventing the excitement of diseased action in those hereditarily predisposed—would, it appears to me, be best fulfilled by the sanitary arrangements already proposed. In addition to which, professional attention must be directed to the constitutional disturbance which precedes the disease and accompanies each stage of exudation.

Danielssen (Traité de la Spedalskhed) has discovered, in the blood of patients suffering from each form of the disease, a "great number of irregular cellules," which he regards as imperfectly developed blood corpuscles. It is allowed, by all observers, that the use of improper food is common in the "habitats" of this disease.

I have seen, that gastro-enteric disorder is a feature of the constitutional disturbance; and I imagine that mal-assimilation and diseased nutrition are merely links in the chain of sequences.

Sir James Clark, in his "Treatise on Tubercular Phthisis," (p. 318, Vol. IV., "Cyclopædia of Practical Medicine,") has given his opinion, that "dyspepsia is the most fertile source of cachexia of every form;" and I cannot doubt, that if the term were deprived of its restricted application to disorders of the primary digestion in the alimentary canal, and extended to all morbid conditions in the conversion of food into the proximate animal principles, it might, then, be correctly said, that dyspepsia, arising from deficient and deleterious food, is the source of the malady under consideration; and, that its manifestations should become a chief object of study, in order to arrive at any efficacious treatment. I am decidedly of opinion, that a correct knowledge of those functional disorders, would be the guide to treatment, which might greatly modify the extent, if not the quality, of the exudation.

With regard to the therapeutical treatment of the disease very little of a satisfactory nature is known.

A gentleman practising in the island, has informed me, that he has tried, in vain, mercury, iodine, and the alkalis.

Mr. Robinson, in his paper on the "Elephantiasis of India," has made known the virtues of a plant—the asclepias, or calotropis gigantea, which, he states, possesses remarkable efficacy in the anæsthetic variety of the disease.

Acting as far as possible on his suggestions, and being unable to obtain any medicinal preparation from the same plant, I have advised, in those suffering that variety of the disease, the employment of the bark of the root of the "Nerium Oleander," which grows in every part of Crete, it being a plant of allied genus, known to possess very energetic properties.

To ascertain the results of this, or of any other medicinal treatment, in a disease so obstinate as this is, would require a long course of careful observation; and I cannot state, that in recommending the employment of this plant, I have felt very sanguine of success.

That variety of the disease in which the asclepias is said

to be beneficial, is of slower course, and of more chronic character, than the other variety; and I have seen that, after it has perfected its destroying effects on the small bones of the extremities, there may follow a lengthened period of freedom from any active disease, which, I apprehend, may sometimes be attributed to the remedial means employed. Until more is known of the nature of the diathesis which attends, and of the fault of nutrition that produces, the morbid effusion, we cannot hope to effect much in its prophylactic or curative treatment.

Under existing social circumstances, which render concealment the chief palliative of affliction, the opportunities are very rare that medical men have of treating the disease in its earliest stage. Hospitals appropriated to the malady can alone afford such opportunities.

In our days, the existence or absence of necessity to retain leper-houses, is not an unfair criterion of the relative progress of nations in civilization, as well as of the degree of social improvement, and increased material wealth, made by the lower orders in each. These institutions have existed, beneficially, in most of the countries of Europe, where there may be no further necessity for them, or where they have since given way to "hospitals for skin diseases."

In Crete the want has never been supplied, or the question perhaps never agitated, until very recently; and I have pleasure in mentioning, that Dr. Louis Hjorth, the Physician to the Board of Health of the island, has lately pointed out the necessity for such an institution on a limited scale,—viz., for the reception of lepers in the earliest stage; and, if the authorities should act on his suggestions, he would possess the means of studying the primary characters and symptoms, and the effects of treatment on them. He has explained to me, that it has often been his painful duty to decide on cases referred to the Central Board of Health, prior to exclusion; and he has often lamented that, in doubtful cases, he has been compelled to recommend the postponement of a decision; awaiting which, the sufferer has returned to his native village, and has been submitted again to the influence of all the exciting causes, until his symptoms have become unquestionable.

Such cases offer the most favourable opportunity of studying the earliest manifestations of organic change, and the functional derangements which precede it. I believe that Dr. Hjorth is fully capable of making the most of his position, for the benefit of medical science, as well as for that of the poor people who may be placed under his care; and I therefore wish him every success in his philanthropic effort.

H.M.S. Diamond, Sheerness.

ON THE TREATMENT OF CONTRACTIONS AND ANCHYLOSIS OF THE KNEE AND HIP JOINTS BY FORCED RUPTURE.

By PHILIP FRANK, M.D., of Manchester.

(Continued from page 136.)

Many patients are so content with this result, that they are not willing to submit to any further treatment. But the enlightened practitioner should not rest satisfied with merely remedying the deformity. His aim must be directed towards restoring the mobility which is the true life of the joint. To attain this, both patient and surgeon must be possessed of no small degree of patience and perseverance; for without these cardinal virtues the most favourable cases will prove failures. In those cases where a considerable degree of subluxation of tibia backwards exists, and in those where the straight position of the extremity cannot be maintained without the machine, we must, of course, abstain from making these attempts. Nor can we expect to restore the normal functions of the joint after the rupture of osseous anchylosis; for in these cases the joint has ceased to exist. If during the treatment of seemingly favourable cases a tendency to inflammation should become evident, it would be more judicious to surrender the joint to anchylosis in a position best adapted to the use of the extremity.

Passive motion methodically instituted by means of the screw of the apparatus forms the simple but efficacious proceeding for restoring the mobility of the joint.

At the commencement of the treatment, these movements are attended with considerable pain, which are, without exception, more painful when attempted by manual force, the machine having been laid aside.

As soon as the articular surfaces have become accustomed to mutual friction, the movements can be practised at shorter intervals, and be continued longer at a time.

The movements are only painful at the commencement. We have made the same observation when the patient begins to walk without wearing the machine, the first stage only of each daily promenade being attended with discomfort. It is also highly recommendable to institute forced movements of the joint at different intervals under chloroform. We are thus enabled, by producing a freer extent of motion, to rupture new-formed adhesions, thereby accelerating the cure. If the case was one of real anchylosis, and adhesions between the articular surfaces had to be ruptured by the operation, each movement of the joint was attended with more or less loud crepitation.

The roughness of the articular surfaces is smoothed away by the passive motion instituted in and out of the narcosis, and thus the crepitus which it gives rise to gradually ceases to be audible; and in one case where I paid particular attention to this phenomena, the pain attending movement receded, in proportion to the diminution of the crepitus.

During the whole course of the treatment the patient is permitted to walk about as much as he is able. As soon as it is considered judicious, the machine is dispensed with for some hours in the day. He is then directed to practise active motion of the joint. He is also enabled to institute passive motion, supporting himself by the back of a chair, and bending the joint by the weight of his body; as before-mentioned, these exercises must be practised with the greatest regularity.

Baths, the cold douche, and galvanic electricity, as well as friction, may be employed, as powerful coadjutors of the treatment.

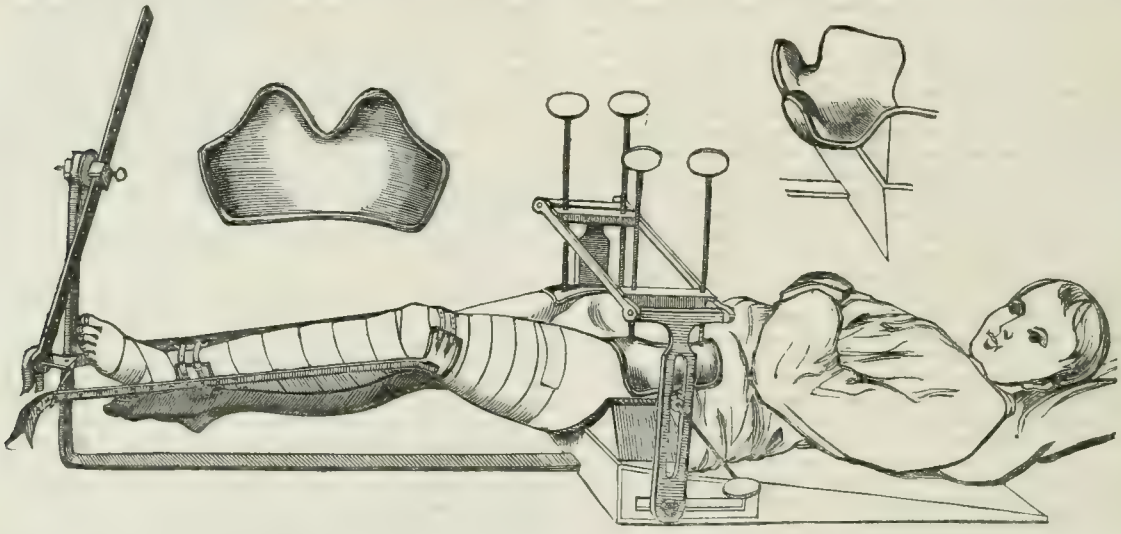
The treatment of contraction and anchylosis of the hip-joint is universally acknowledged to be one of the most difficult and laborious tasks imposed on the surgeon. In former times, when the pathology of the disease was obscure, and the idea of spontaneous luxation of the femur was constantly haunting the minds of practitioners, in cases where most generally but simple contraction or anchylosis existed, either no treatment at all was attempted, or the methods employed were as irrational as they were inefficacious. The pure orthopædists of modern times can only boast of success in cases of simple contraction without anchylosis.

Dieffenbach would have been undoubtedly more successful if his orthopædic treatment had been more judicious. Mr. Langenbeck and Mr. Bühring have succeeded by means of forced rupture and an orthopædic after-treatment, as ingeniously contrived as it was judiciously regulated, in obtaining results which the most sanguine could not have hoped to surpass.

In Mr. Langenbeck's Clinic we have only had occasion to observe cases where the femur stood in flexion, adduction, and rotation inwards. The difficulty of fixing the pelvis, the rigidity of the powerful flexor and adductor muscles of the femur,—the extension of which, even in the most profound narcosis, can only be effected by considerable force,—form great impediments to the practice of forced rupture of the anchylosis; in addition to which, great caution is necessary, to avoid fracturing the neck of the femur so often in a state of carious disease. But, in cases of firm, osseous anchylosis, if it should be found impracticable to obtain the melioration of a highly abnormal position of the femur by any other means, we are not inclined to regard this advantage as too dearly bought, even by a fracture of the neck of the femur. This deduction is not only based on theoretical views, the nature of which is obvious, but on unequivocal practical evidence. We particularly refer to the highly-interesting case described by Bühring, where the patient, dying of typhus two months after the forced rupture of the anchylosis, (the femur had stood in a high degree of flexion, adduction, and rotation inwards;) the *post-mortem* examination discovered the head of the femur united by osseous anchylosis to the acetabulum. The neck had been broken by the operation, and was entirely absorbed; but the upper end of the shaft of the femur formed a false articulation with the anchylosed head. The patient had been able to walk perfectly well, motion to the extent of forty degrees being practicable. We do not doubt that every one would prefer a simple subcutaneous fracture of this kind to

the dangerous practice of sawing through the neck of the femur, as proposed by Rheabarton, from which, even if successful, no better result could be expected.

We will now proceed to describe the method of treating contractions with anchylosis of the hip-joint, the femur standing in flexion and adduction, as we have seen it practised by Mr. Langenbeck. Forced extension, flexion, and adduction are practised under chloroform, the pelvis having been first firmly fixed by several assistants. The patient is then placed in the wire-frame of Bonnet, in order to maintain the normal position of the pelvis, and the degree of extension and abduction of the femur obtained by the extension. The patient is seldom able to remain long after the operation in the apparatus of Bonnet, particularly not, if any degree of extension is practised by the screws at the inferior end; generally the patient has to be taken out of the apparatus. The flexors and adductor muscles then re-contract, and the pelvis on the affected side again rises upwards. The best practice which can then be adopted is to fix the pelvis on a mattress by the means of towels fastened to the bed, and then to keep the healthy leg extended. This position is attended with no discomfort to the patient, and is highly effectual in maintaining the normal position of the pelvis. As soon as the irritable sensibility of the joint has subsided, the apparatus of Bonnet can be again had recourse to; and, if all adhesions were ruptured by the first operation, perfect extension can be attained by its instrumentality. In nearly all cases, a repetition of the forced rupture will be found necessary. The apparatus of Bonnet will, as before mentioned, generally suffice to attain the perfect extension of the femur. But it will be found insufficient to remedy the adduction, which is always the most difficult to overcome, as well as to maintain the fixed position of the pelvis. It was, therefore, necessary to devise an apparatus to supply these defects,—an apparatus which could effect and at the same time maintain the abduction as well as the extension of the femur, and also, by perfectly fixing the pelvis, to allow of active and passive motion of the joint being freely and effectually executed. The machine, constructed according to the directions of Mr. Langenbeck, has, by fulfilling both these indications, rendered invaluable services towards restoring the normal functions of the joint after forced rupture. The construction is as follows. The



pelvis rests with its inferior surface on a padded plate of sheet iron, moulded exactly to its form, after a model of plaster of Paris. This plate reaches on both sides up to the inferior margin of the large trochanter. Two concave beak-like processes stretch forwards and upwards from its anterior margin, to support the tubera ischii. This contrivance is fastened to a strong wooden board, which, at about three inches high in front, forms an oblique plain towards the head of the bed. The pelvis is fixed on this apparatus by means of two pellottes, made of sheet iron, and well padded. These embrace the superior and external part of the ossa ilii, and must be moulded according to a model of plaster of Paris or gutta percha. These pellottes are pressed against the pelvis above and on both sides, by screws sustained by an iron bridge, extending across the pelvis. An iron bar runs from the wooden framework to the foot of the bed, and is here bent at right angles. By the means of an iron lever attached to its upper extremity, the limb can be maintained in any position, and moved in any direction required.

That degree of pressure necessary to render the pelvis motionless is not tolerated by the patients without their being previously narcotised; but a moderate degree of pressure suffices to fix the pelvis so firmly that motion of the limb can be induced to a considerable extent without any dislocation of the pelvis ensuing. The patients can then pass three or four hours a-day in the machine without any discomfort, the limb remaining extended and abducted a part of this time, the remainder being occupied by passive and active motion. The patients are then allowed to get up and walk about as long as the strength of the limb permits; besides this, they lie several hours a-day, sometimes during the night, in the apparatus of Bonnet. Once a fortnight the patient is narcotised by chloroform, and the pelvis having been perfectly fixed in the machine above described, forced flexion, extension, and abduction, are instituted. Mr. Langenbeck has thus succeeded, in a great number of cases, not only in restoring the straight position of the limb, but also the normal functions of the joint. In one case it was necessary to divide the adductor longus muscle, as it obstinately resisted extension. The adductor muscles of the femur generally oppose a great resistance to extension under the influence of chloroform. Mr. Langenbeck relates a case where the adductor longus muscle snapped asunder on forced abduction being instituted. In the after part, two cases of contraction and anchylosis of the hip-joint are related, one of which we have selected on that account, because the limb had been subjected, during a course of ten months, in a celebrated orthopædic institution, without the least result being obtained. It was undoubtedly a case of true osseous anchylosis, and is now perfectly cured. Such a case is most adapted to testify to the superiority of Mr. Langenbeck's method. It would be well if the pure orthopædists would deign to take a lesson from it.

The following cases are selected from a great number at my disposal, and I hope that they may serve to illustrate the method employed, and the results to be expected therefrom:—

July, 1848. ——, wool-merchant in Glasgow, was attacked, a week after a gonorrhæic infection, by an inflammation of the knee-joint, which confined him to his bed during the space of four months, in consequence of which a contraction and spurious anchylosis intervened, so that the joint remained motionless at an angle of 140 degrees. In February, 1849, an apparatus was employed with the intent to produce gradual extension of the joint; but violent pains of the joint supervening, the attempt had to be relinquished. After this, repeated relapses of the inflammation took place, the limb became atrophic and so weak that the patient was

unable to walk half an hour at a time without pain and fatigue. After using the warm-baths of Wiesbaden without any advantage, the patient came to Berlin and put himself under the treatment of Mr. Langenbeck. The knee was bent at an angle of 140 degrees; the tibia stood at abduction and rotation outwards; the patella was firmly anchylosed in fossa inter-condylica near condylus externus; it was impossible to produce the least degree of motion in the joint, which was painful on pressure. On the 23rd of April, 1850, forced extension was practised, and after the rupture of seemingly strong fibrous adhesions, the limb was perfectly straightened; the patella, which had resumed its normal position, was now quite moveable, scarcely any reaction followed the operation, and the apparatus of Stromeyer was easily tolerated. A month afterwards, forced extension and flexion was again repeated. During the narcosis, free motion was practised in every direction. Out of the narcosis, flexion could be practised but to a small extent by the apparatus, without producing pain. The limb was quite straight, and the patient wearing the machine could walk with the greatest ease and facility. In the summer, he used the warm baths of Teplitz; in the autumn, the patient returned to the care of Mr. Langenbeck. Forced movements were repeatedly practised in the narcosis, and the exercise by means of the machine was practised daily with undeviating perseverance. The motion of the joint was thus rendered progressively freer, and, after the application of several moxas, free from pain. In November, the patient could walk perfectly well without the machine, and could also practise slight active motion of the joint. The muscular power of the limb gradually increased, so that, at the commencement of the year 1851, the patient could dance with ease and grace—an exercise which he continued to practise through the rest of the winter. In May he returned, perfectly cured, to England. A short time ago, I learned, on inquiry, that the patient still enjoys the perfect use of the limb.

Case 2.—Christian Rostock was attacked by an inflammation of the knee, during which, under violent pain, extending as far as the inferior half of the femur, a rectangular contraction of the joint was established. A great quantity of matter was discharged from an incision made just above the internal condyle of the femur; the opening assumed a fistulous nature, and small pieces of bone were frequently mixed with the secretion. On the 16th of June, 1852, the patient was admitted into the hospital; the right knee was bent at right angles; further extension was impossible; a slight degree of flexion, accompanied by crepitation, was practicable. The tibia was dislocated on to the external condyle of the femur, and slightly movable; the condyles of the femur were enlarged, and painful on pressure. A probe introduced through a fistulous ulceration just above the internal condyle, came in contact with the rough bone. Forced extension during the narcosis having been practised twice, the knee was rendered perfectly straight. The re-action was inconsiderable; on account of the subluxation of the tibia backwards, the machine of Bonnet was employed, and the re-position nearly perfectly effected; the fistula above the internal condyle of the femur was altogether closed a month and a-half after the operation. When the patient was dismissed, on the 23rd of September, passive motion could be practised by the means of the machine of Stromeyer to any extent without pain; and the patient, who, on being admitted to the hospital, was not able to move without the aid of two crutches, could now, wearing the apparatus, walk for any length of time with the greatest ease and facility. He continued to practise the exercises at home with the greatest perseverance, and, on presenting himself in the Clinic, in February, 1853, he affirmed, that he was able to make long tours without the machine, the normal functions of the joint being nearly perfectly restored.

Small-pox in Australia.—Sydney, August 11.—An American vessel having arrived from one of the South Sea Islands with the small-pox among the passengers, some of whom managed to land, warrants were issued for their apprehension, and they were again placed in quarantine. The disease is yet unknown to the Colony; but, from the large number of immigrants and foreign ships arriving, it is feared it may at some time be introduced with fatal results, as comparatively few of the whole population have been vaccinated. A Bill is about to be introduced, making vaccination compulsory.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE, GUY'S, THE LONDON, AND THE WESTMINSTER HOSPITALS.

CASES OF EPIDEMIC CHOLERA.

King's College.—One case of severe cholera is under the care of Dr. Todd in this hospital. The patient, a very destitute woman, lodging in a miserable alley in the neighbourhood, was admitted on Saturday, in a state of extreme collapse. The treatment pursued has, with the exception of a single opiate enema, consisted solely in the exhibition of emetics of table salt. These were continued at frequent intervals for about twenty hours, and with much apparent benefit. The patient is now recovering.

Guy's Hospital.—One case has been admitted during the week, and another has occurred among the patients in the hospital. The subject of the latter was a young woman in Patience Ward (foul); she neglected her diarrhœa for several days, then suddenly sank in collapse, and shortly afterwards died. Two of the cases mentioned last week have since died, the others are progressing favourably.

The London Hospital.—One case has been admitted during the week. A case admitted in the preceding one, under the care of Dr. Gibbon, is almost recovered.

The Westminster Hospital.—A severe case was taken in on Wednesday, under Dr. Kingston's care, and is now doing well.

No cases have been admitted into St. Bartholomew's or St. Thomas's Hospitals, and those previously reported are all now so far recovered as to be considered out of danger.

ST. GEORGE'S HOSPITAL.

POPLITEAL ANEURISM. — TREATMENT BY INTERRUPTED COMPRESSION. — CURE IN TEN WEEKS.

[Under the care of Mr. PRESCOTT HEWETT.]

Henry Jarman, aged 32, was admitted, on the 1st of August, 1853, with a large popliteal aneurism occupying the lower part of the right ham, and bulging downwards over the gastrocnemius muscle. All the signs of an aneurism were well marked. When compression was made on the femoral, the sac became perfectly soft and flaccid, so much so, that it could scarcely be felt; but, when filled, it appeared to be of the size of a large orange, and oval in shape. The tumour was excessively painful when touched; and darting pains every now and then started from the ham down the leg and ankle. Well-marked œdema existed about the limb, from the knee downwards.

This man had applied at the hospital as an out-patient, not knowing what was the matter with him. Five weeks previously, he had, for the first time, felt some stiffness in the right ham, and shortly afterwards he discovered a swelling there, which was "beating." This swelling had gone on increasing; and at times had caused him intense pain, especially at night. He had never met with any accident, but was often obliged to lift very heavy weights. A baker by trade. Although pale, and of a spare habit, with a careworn appearance and a trembling hand, he had not suffered from illness, and had always led a regular life. No disease was detected either about the heart or in the large vessels; but the pulse was very weak. Several large glands and a large irregular cicatrix of some years' standing existed in the right groin.

He was put on ordinary diet, and, as he suffered intense pain in the limb, he was ordered a composing draught every night.

For the first few days after his admission into the hospital, this patient was so nervous that it was thought advisable to delay doing anything until he had become accustomed to the ward and to the compressing instruments.

A weight was for the first time applied to the groin on the 7th of August; but this could be borne for two hours only, owing to the excessive pain which it caused in the sac and in the leg.

On the 8th, the pressure was resumed, and kept up between three and four hours consecutively in the groin; but he was then obliged to give it up again, on account of the great increase of the pain in the ham and in the ankle; there was little or no pain, however, at the point where compression had been made.

On the 9th, the clamp was applied to the thigh at Hunter's canal, and borne for some time; then the weight was applied to the groin; but, in whatever way the pressure was made, it always gave rise to a great increase of the pain, both in the sac and in all parts below it. On examining the tumour, it was found to be firmer already, for the sac could no longer be emptied. There was less

pain about the sac when it was handled, and the œdema of the limb was also much less. The man had now become accustomed to the use of the instruments; and, as he was found to be intelligent, and anxious to carry out the plan of treatment, he was left to regulate the pressure himself.

On the 20th, the tumour was decidedly less in size, and much more solid; there was but little pain remaining either in the sac or in the leg, and there was little or no œdema. The patient slept well, felt quite comfortable, and the opiate draught had been left off for two nights. During the preceding ten days, he had managed the apparatus for himself, having a "Carte's compressor" (a) fitted to the thigh, and alternating its use with that of the cylinder-weight applied in the groin. He much preferred the former, having been able to bear it with less pain, and for longer periods. Altogether the pressure had been kept up for about six hours daily, at different intervals, and often for two hours or more during the nights when he has been awake; but he had made a practice of always removing the instrument when going to sleep. The pressure had been applied so as to allow only of a feeble circulation through the sac. There was neither excoriation nor redness about the skin, the instrument having been shifted from place to place along the course of the artery.

On the 26th, the sac was firmer, and the pulsation less distinct; two small arteries were detected running over the back part of the sac, in a longitudinal direction. In the previous night, after having had the instrument on for several hours during the day, the patient had been suddenly seized with violent pain in the leg and foot; he was asleep at the time, and had left the instrument off for about three hours. The pain was so great that he was obliged to get up and rub the limb, when, to his surprise, he found that all pulsation had suddenly ceased in the sac; the pain continued for several hours, during which time he could feel no pulsation in the sac; but the latter afterwards gradually made its appearance again, and in the morning it was very evident.

By the middle of September the sac had become so much contracted, that it could scarcely be felt when the limb was flexed; the pulsation, although slight, could still be felt over a small space at the lower and outer part of the ham. The collateral vessels at the back of the sac were larger; there was no pain, and the parts could bear handling without any inconvenience. Compression had been kept up steadily for several hours daily, at different intervals, but the instruments had always been taken off during the night.

Being weak and languid, he was, on the 1st of October, ordered a pint of porter daily; and on the 8th, it was observed, that the pulsation still remaining in the sac could be readily controlled by direct pressure in the ham, and that without any pain. Under these circumstances an air-pad was placed in the ham, and the leg and knee were carefully bandaged; the ring-tourniquet was still applied to the femoral. A hard pad was subsequently made use of instead of the air-pad, and the knee was firmly bandaged, so as to check all pulsation in the sac. This plan of treatment was carried on for several days, and on the 18th, when the patient removed the pad for the night, as the tumour was very painful, no pulsation could be detected in the sac, but it re-appeared in a short time; it was very feeble, however, and there was great pain down the leg and in the ankle. The tourniquet and the pad in the ham were re-applied on the following morning, and compression kept up for several hours; and in the afternoon of the 19th all pulsation finally ceased in the sac.

The ring-tourniquet was kept lightly applied on the 20th, but all compression was removed on the 21st. For the last two weeks the patient has been up. The aneurismal sac is now very small, and quite solid. Several large collateral vessels can be detected running over the back of the sac, and over the inner condyle of the femur. The man is in good health.

ST. BARTHOLOMEW'S HOSPITAL.

POPLITEAL ANEURISM.—TREATMENT BY COMPRESSION, —CURE ON THE EIGHTH DAY.

[Under the care of Mr. LLOYD.]

The following case, which occurred during 1848, under Mr. Lloyd's care, has not as yet been published; it is of unusual interest, from the circumstance that sloughing of a small portion of the integument happened as a consequence of the pressure. The aneurism, however, was cured, and with the exception of the formation of the eschar, everything did very well.

(a) A ring-tourniquet with elastic bands. For description, and an engraving, see *Medical Times and Gazette*, Aug. 5, 1851, p. 155.

George Edwards, aged 24, a hostler, was admitted on May 4, suffering from periostitis of the tibia. He had been in the hospital under treatment for this disease nearly three weeks, when an aneurism was discovered in his left popliteal space, of which no history could be obtained. It was the size of a pullet's egg, pulsated forcibly, and presented all the usual symptoms of the disease. A preparatory treatment, which consisted in putting the patient on a sparing diet (without meat), and exhibiting a saline aperient mixture, containing the tincture of digitalis (m xv.), three times daily was adopted; and, on May 24, compression of the femoral trunk was commenced. The apparatus used was the ordinary clamp, which was applied at different parts of the thigh, and never with sufficient tightness to quite arrest the flow of blood through the tumour. Slow progress in solidification was made up to June 1 (the seventh day), on the morning of which day the compressing pad was re-adjusted, and screwed down with more tightness than before; still, however, not with so much as to entirely stop the pulsation of the tumour. The man, who had now become anxious for a speedy cure had determined, as it afterwards appeared, to bear the pain, and he allowed the pad to continue in the same place as it had been put for twelve consecutive hours. On the following morning, the tumour felt solid, and pulsation had entirely ceased, but there was a large dusky bulla over the part where the pad had pressed. Subsequently, a deep slough, of about the circumference of half-a-crown, formed, and was separated from the surrounding tissues. No further ill consequences attended the event; the sore shortly filled up and healed; the aneurism was permanently cured. The man left the hospital on July 10, quite well, the popliteal tumour having been reduced to very small dimensions.

LARGE POPLITEAL ANEURISM.—FAILURE OF TREATMENT BY COMPRESSION.—LIGATURE OF THE FEMORAL.—FAVOURABLE PROGRESS.

[Under the care of Mr. LLOYD.]

William Frudd, aged 34, a man in moderately good health was admitted July 7, 1853. The aneurism was in the left popliteal space, the size of a large orange, and pulsated very freely, with a distinct bruit. Pulse 96, full, and not easily compressible. The tumour was known to have existed for three months, and the man, whose employment as a clerk usually kept him sitting all day, referred it to a strain received four months ago on the skittle-ground, after which he had experienced considerable pain in the part. He was a temperate man, and had always before enjoyed excellent health. Feeble pulsations could be felt in the anterior and posterior tibial arteries. The circumference of the affected knee was two inches greater than that of the other. As preparatory measures, Mr. Lloyd directed the abstraction of sixteen ounces of blood, and the exhibition three times daily of a draught containing sulphate of magnesia, tincture of digitalis (m. xv.), and tincture of hops.

On the 8th, compression of the femoral was commenced, two clamps being applied, the one over the brim of the pelvis, and the other, in the upper part of the thigh, and the patient directed to alternate the employment of them. The pulsation of the tumour, though easily stopped, could not be arrested by the amount of pressure which he was able to bear, but it was considerably diminished. During the following night, the patient had but little sleep, and suffered severe pain; subsequently, however, it became somewhat more tolerable, and by the aid of a morphia pill (gr. ¼) every night, a little rest was obtained. On the second day, the pulse in the tibial vessels had become imperceptible, and, at the end of a week, the beating of the tumour was very decidedly diminished. Satisfactory progress appeared to be making up to the 18th inst. (10th day), when the œdema of the limb which had existed, to some extent, throughout almost the whole period of treatment, began to increase considerably. On the following day, the whole limb was so much swollen, that it was deemed absolutely necessary to abandon, for the present, all attempts at compression. At this time, the aneurism, although not pulsating so strongly as at first, was extended in size in all directions; its walls felt much more solid than before, but it was tense, and very tender. The circumference of the knee measured two inches and a-half more than the other. During the eleven days that compression had been tried, the man had been, notwithstanding the pain, in fair health, and had taken his food well. His diet had consisted of farina with some broth; no restriction had been placed on his consumption of fluids, but not being very thirsty, he had not drunk more than about a pint and a-half per diem. The digitalis draught had been regularly continued, and the bowels had been kept relaxed. On laying aside the pressure, Mr. Lloyd prescribed a saline effervescing draught, three times daily, and ordered cold lead lotion to be constantly applied to the knee.

During the five weeks which intervened between the suspension

of the compression treatment and application of the ligature, the temperature of the entire limb remained somewhat augmented, the leg œdematous, and the parts about the knee swollen, tense, and tender. There was much numbness complained of in the foot and toes, often to such a degree that he could not distinguish which of the latter were touched. During the greater part of the time, however, the pulsations in the tumour were so feeble that Mr. Lloyd was led to hope that a spontaneous cure was in progress; on several occasions, indeed, the beating could but just be distinguished. Repeated relays of leeches were applied about the joint, and opiates and sedatives were exhibited, under which the patient gradually improved in health.

On August 24, the propriety of the measure having been determined in consultation, Mr. Lloyd applied a ligature to the lower part of the upper third of the femoral artery, in the usual manner. The reasons which induced this alternative were, that notwithstanding the feebleness of the pulsations, the tumour remained for the most part fluid, and was gradually increasing in size, it having so filled the popliteal space, and distended its sides, that there was much fear that the aneurism might either burst externally or become diffused. During the previous three days, indeed, the condition of things had been becoming urgently threatening from the great tumefaction of the entire limb, which involved even a considerable extent of the thigh. The question as to amputating the limb was discussed, but, on the whole, it was determined to give the man the chance afforded by ligature of the femoral trunk. There was at this time, no evidence of the establishment of a collateral circulation, but the tibial vessels remained pulseless.

Since the application of the ligature, uninterruptedly favourable progress has been made. All pain ceased at once; pulsation has been ever since completely absent, and, even so early as the second day afterwards, the knee measured in circumference an inch and a quarter less than it had done previously. The ligature came away safely on the twelfth day, and the wound has since healed. There remained, for a few weeks, much numbness in the toes, but, coincidently with the decrease in size of the tumour, this symptom, together with the œdema of the leg, has gradually diminished.

November 4.—*Present Condition.*—The swelling in the ham has now gravitated to the outer side, on account of the man being in the habit of lying with his leg turned over. The quantity of fluid blood contained is still very considerable, but it is steadily piminishing, and the superjacent skin is sound. The man is in good health, and free from pain.

We are indebted for most of the above particulars of this case to the daily notes taken by Mr. Jowers, one of Mr. Lloyd's dressers.

ST. THOMAS'S HOSPITAL.

LARGE POPLITEAL ANEURISM.—FAILURE OF TREATMENT BY COMPRESSION.—LIGATURE OF THE FEMORAL.—RECOVERY.

[Under the care of Mr. LE GROS CLARK.]

THE particulars of the following case are from the notes taken by Mr. R. S. Bateson, the dresser of the patient.

Daniel Wrighten, aged 41, a cabinet maker, admitted into Isaac's Ward, July 5, 1853, suffering from popliteal aneurism of the left extremity, states that he was quite well until three months ago, when, for the first time, he perceived a stiffness behind his left knee, which increasing disabled him from walking properly. About a month later, he discovered a small, soft, throbbing tumour at the back of the joint. The stiffness increased as the swelling enlarged, but he has not hitherto been under any medical treatment for it.

On examination, the popliteal space is found completely occupied by a large aneurismal tumour, and the leg is considerably swollen. The patient's constitution is good, and his general appearance healthy.

July 7.—Ordered the limb to be kept slightly flexed, ice to the swelling, and pressure to be made over the femoral artery. To have meat diet, with half-pint of beer daily. Castor-oil occasionally. Compression was made on the vessel alternately in two parts of its course, at the commencement of the middle third, and where it crosses over the brim of the pelvis. The apparatus used was a Bigg's compressor, and a cylinder weight. (See last week's report.)

The pressure treatment was continued, altogether for twenty-five days; and although, during the greater part of that time, the force employed was not quite sufficient to arrest the pulsations of the tumour, yet it caused such severe pain, that the man seldom got much sleep, his appetite failed, and towards the end of the time it was evident that his health was materially giving way. No permanent alteration was effected in the condition of the tumour, which at times felt as if more solid, and then again became softer; on the whole, however, it rather increased in size, and the limb below it became considerably more swollen.

On the twenty-sixth day, (August 2,) Mr. Clark apprehending danger of the sac giving way, as portended by a blush of redness which had appeared on the most prominent part of the tumour, decided on immediate ligature of the artery, which he performed at half-past two in the afternoon, the patient being under the influence of chloroform. In the evening of the same day, the patient was free from pain, the aneurism quite pulseless, and the extremity warm. The first night after the operation was a good one, by far the best the man had had since his admission. On the following day the tumour was examined carefully, but no pulsation could be detected. On the 4th inst., however, it pulsated slightly, though very perceptibly. On the 5th the pulsation had ceased, and never again recurred; it was not, however, until the 8th or 9th, that any appreciable diminution in the size of the tumour began to take place. From that time forward the progress to recovery was uninterrupted; the ligature came away on the 27th inst. (twenty-fifth day), and the wound shortly afterwards healed. On Sept. 5, the patient returned home in good health, the aneurism being painless, quite firm, and very much diminished in size.

THE LONDON HOSPITAL.

POPLITEAL ANEURISM—FAILURE OF COMPRESSION—LIGATURE OF THE FEMORAL—SUPPURATION OF THE SAC EXTENDING INTO THE JOINT—DEATH.

[Under the care of Mr. LUKE.]

James Haggetts, aged 60, an Irish labourer, employed in a timber-yard, was admitted on account of a popliteal aneurism on Oct. 28, 1852. He was a large-built, stout man, but rather pale; of very intractable temper; pulse 84, of good power. The tumour was in the left extremity, about the size of an orange, and pulsated forcibly. The history of the swelling given by the patient was, that four years ago he had been struct violently in front of the left knee, by a swinging piece of timber, after which, he was for some time an in-patient at the London Hospital, and almost immediately after his discharge he noticed a beating swelling in the part now affected. He gave a very clear account, and stated himself, as quite certain, that from that time forwards there had always been this small lump about the size of a nut in the part mentioned, which nine months ago had begun to increase. During the whole of that period he had walked with a limp, but had nevertheless been able to continue at his laborious occupation until quite lately. For several weeks he had been suffering severe pain in the swelling, which had often kept him awake at night.

The trial of the compression treatment was commenced on Oct. 31, and extended over the space of a fortnight, during the greater part of which the pulsations in the tumour were very much diminished, but not quite arrested. When it was abandoned on Nov. 13th, the tumour was rather larger than before, very tense, and not at all more solid; and, on account of the pain caused, and the great œdema of the leg and excoriation of the thigh which had been produced, the plan was of necessity laid aside. The apparatus which had been used was one made especially to Mr. Luke's direction, and consisted in a strong elastic strap, which passed round the limb, was fixed behind to a broad leathern splint, and in front held in place the bridge apparatus, in which the compressing screw-pad worked. It had the advantage of being extremely light. Two of these were in use—one fitted to the thigh, and the other around the pelvis, to compress the vessel just below Poupart's ligament; they were employed alternately. The man, during the treatment, was on ordinary meat diet, and regularly took an opiate pill every night.

On the 17th, Mr. Luke placed a ligature on the femoral artery, and during the week following some progress seemed to be made; the man was relieved from pain; the tumour ceased to pulsate, and its size a little diminished; it did not, however, become firm. The limb had been enveloped in flannel, and the swelling of the leg had much subsided. On the 24th, an attack of severe diarrhœa came on, and although shortly checked by medicine, materially diminished the patient's strength, and, subsequently, the tumour became softer still, and the sense of fluctuation was felt more superficially. A week or two later, guided in his opinion by the progress towards the surface which the contained fluid was evidently making, Mr. Luke expressed to the dressers and students his belief, that the tumour would have to open externally, but stated that he should not puncture it, as it seemed desirable to delay the opening as long as possible, to allow the blood to solidify

as much as might be. On the twenty-fourth day the ligature came away, and the wound was closing favourably. On the 24th of December, the skin over the middle of the tumour gave way, and a copious gush of fluid blood followed. It was thought, at the time, that there was more bleeding than the emptying of the sac would account for, and to prevent further loss, the house-surgeon in attendance had the cavity stuffed with lint. On the following morning, Mr. Luke removed the lint, and with his finger turned out of the sac a large quantity of soft coagula, after which gentle support was applied to the walls of the cyst, by means of a compress and bandage. Inflammation of the sac followed, and involved also the knee joint, into which an ulceration had extended. Under the severe constitutional irritation induced, the man rapidly sank, and having steadily refused to accede to Mr. Luke's proposal for the amputation of the limb, he died about a month afterwards. At the autopsy there was found complete disorganisation of the entire joint; the anterior half of the aneurismal sac was converted into a pulpy mass; the femoral artery below the ligature was obliterated. The unfortunate result of this case cannot be considered as affording any evidence unfavourable to either of the plans of treatment adopted, being, in all probability, attributable simply to want of constitutional stamina on the part of the patient. Under the continued compression, alike as after the ligature of the femoral, the blood showed little or no disposition to coagulate; and when the tumour had burst, the want of vis conservatrix was again manifested by the ease with which the ulcerative action was allowed to involve the joint. It does not appear that the operation was very materially prejudiced in its hopefulness by the previous treatment, although it must be confessed, that the patient was to some extent weakened by the restlessness and constitutional disturbance it had occasioned. Even if the ligature treatment had been primarily adopted, it is not improbable that the same result might have followed.

TRAUMATIC ANEURISM OF THE FEMORAL OF TWENTY YEARS' DURATION—TREATMENT BY COMPRESSION—SUBSEQUENT LIGATURE—CONTINUED PULSATION IN THE TUMOUR.

[Under the care of Mr. CURLING.]

The following case, whether we regard its history, or the course and event of its treatment, is one of extraordinary interest; its particulars we abstract from the notes kept by Mr. Brownfield, the dresser of the patient. James Davidson, aged 43, a florid, stout, and very robust man, of middle height, a sea captain, was admitted on Feb. 2, 1853, on account of a large aneurism over the middle third of his right femoral artery. He was an intelligent man, and gave his history of the complaint with great clearness, and it seemed to make it all but certain that he had had an aneurism in his thigh for *twenty years*, during which time he had been engaged in very active duties on ship board. He stated, that in 1833, while at sea, he had one day, cutting a piece of wood, let his knife accidentally slip and inflict a deep wound in his thigh. "The blood spouted out in a large stream almost across the ship's cabin." The surgeon on board, with some difficulty, controlled the bleeding by means of compresses and a tight bandage, and for the next five weeks the man was confined to his hammock. Very soon after he got up again he discovered that there was "a beating lump the size of a hen's egg," in his thigh beneath the scar of the wound, and before the end of the voyage he attracted the surgeon's attention to it, who then expressed his regret that he had not tied the wounded vessel at the time of the accident. Until quite lately the tumour occasioned no pain or inconvenience, and did not perceptibly increase in size. About ten weeks ago, however, while suffering great hardship in a voyage from Montreal it became painful, and rapidly developed to three times its former bulk.

Feb. 2.—The tumour is now very prominent in a thick fleshy thigh, so much so, that its pulsations are readily visible. Its lateral boundaries are so ill marked, that it is not easy to estimate its size, but it cannot be less than a very large fist. The thigh measures over it twenty inches, whereas the circumference of the opposite one, at the same part, is only seventeen. The pulsations are equal in all directions, attended with a perceptible thrill, and very forcible; the walls appear to be the thinnest immediately in front. The man has a very powerful circulatory system; his pulse is full, bounding, and incompressible, and the heart's impulse heavy. He is in good health, and has an excellent appetite. By way of preparatory treatment, Mr. Curling ordered him to be confined to bed, and to take a draught containing a drachm of the acetate of potash three times daily, and a purgative draught every other morning.

9th.—Pressure by means of a clamp apparatus and cylinder (of 7lbs. weight) is this morning commenced. During the past week the size of the tumour has decidedly increased, and the circumference of the thigh is now 22 inches. The medicines are to be continued, and a morphia pill (gr. ¼) to be given every night. In removing the hair from the inside of the groin and thigh, dusting the parts with French chalk, fixing the mattrass firmly, and fastening a pillow as a *point d'appui* for the foot, every care has been used that can conduce to success.

10th.—By alternating the instruments, constant pressure has been kept up without material inconvenience to the patient, who has passed a comfortable night; the compressing force is not, however, nearly sufficient to control the pulsations, which, although diminished, are still very vigorous.

17th (9th day.)—Pressure has been kept up, and the patient has had fair nights. The tumour certainly feels more solid, and though the pulsations are yet very forcible, the thrill which was so evident, is now all but absent. A full diet, with mutton chop, has been allowed, and the diuretic medicine continued.

18th (10th day.)—Pulsations are decidedly diminished. To take 20 minims of the tincture of sesquichloride of iron three times daily. Purgatives have been frequently given during the past week. The whole leg is considerably œdematous. On careful examination, no enlarged collateral vessels can be discovered.

March 3 (24th day.)—During the past fortnight there has been irregular improvement in the condition of things. On some days the sac has felt very markedly firmer, and on others it has seemed to have again softened; on the whole, however, it is decidedly harder, and the pulsations, never absent, have decreased in force. The enlarged trunk of the external circumflex artery has been plainly felt.

March 5.—In consequence of an acute attack of erysipelatous inflammation of the foot and leg, which commenced on the 4th, the compression has of necessity been laid aside. The man is suffering sharp constitutional fever. (Several patients in the same ward are suffering from erysipelas.)

In consequence of the inflammation alluded to in the last note, free incisions had to be practised in the foot and leg, and some sloughing occurred. Under the use of stimulants, etc., and after an illness of two months' duration, during the first week or two of which his condition was seriously alarming, the man at length recovered, and, the swelling of the leg having subsided, and the wounds healed, he was allowed, on May 5, to leave the hospital in order to recruit his health at the sea-side. At this time the condition of the aneurismal tumour, in respect to size, force of pulsation, was very much as when first admitted.

On June 4, the man was re-admitted in good health and spirits. The tumour evidently larger than before; pulsations yet more distinct; thrill felt very plainly; pulse 92, full and soft, intermittent once in every seven or twelve beats. After much consideration, and after consultation with his colleagues, Mr. Curling determined not again to resort to pressure, but to at once place a ligature on the femoral artery. To this proposal the patient willingly acceded, and the operation was accordingly performed on June 9. The ligature was placed about two inches below Poupart's ligament, and three inches above the upper boundary of the tumour. Chloroform was not employed, and, before the man was removed from the table, it was ascertained that the pulsation in the tumour had entirely ceased. About an hour and a half after the operation, however, it was found, on examination, that the mass was again feebly beating, and, during the evening, the pulsations gradually gained force. The man recovered well from the effects of the operation; the temperature of the limb never fell; the ligature came away on the fifteenth day, and by that time, although its size was somewhat diminished, yet the pulsation of the tumour, which had been progressively increasing, had become almost as powerful as it was previous to the application. Repeated examinations of the limb were made, and although it was found impossible, in so fleshy a thigh, to make out distinctly any of the large collateral channels, yet it appeared evident that the tumour was fed from below, and not by an unusual distribution of the femoral (double trunk, &c.). By pressure on the popliteal, the pulsations could at times be arrested, and, on one occasion, it was determined to tie the artery in that position. On the morning fixed for the operation, however, Mr. Curling was unable to satisfy himself that pressure here did completely arrest the pulsation, and the procedure was accordingly postponed. The propriety of ligature of the external iliac has since been discussed, but the patient, being averse to any further operation at present, has since been allowed to leave the hospital for a time.

It is customary to hear the compression treatment spoken of favourably as a preparatory measure, in order to the establishment of a collateral circulation even in cases in which the ligature may be ultimately necessary. Now, at first sight, the preceding case appears to show that compression may occasionally be more successful, in this respect, than is desirable. To avoid the risk

involved in suddenly cutting off the supply of blood to a part, is certainly to be wished; but if the security is obtainable only by running into an opposite danger, the question becomes a very different one. To have the collateral circulation, and the free intercommunication between large branches so well established prior to the solidification of the contents of the aneurism, that the stream of blood through the latter may be efficiently kept up either from above or below, is certainly one of the occurrences least of all to be hoped for. Such was evidently the state of things in the above case, and the important query suggests itself, was it due to the compression. At first glance, such a conclusion appears very probable, and it is supported by the facts that, the compression had been long continued, and the patient's arterial system was noted to be unusually powerful. It must be remembered, however, that aneurisms have been known to pulsate after the ligature of the main trunk, in cases in which no compression had ever been tried, and that the gradual establishment of a collateral circulation, is one means by which nature occasionally provides for the spontaneous cure of such tumours. If to this be added, that the probability of the establishment of such efforts of cure is in exact ratio to the duration of the disease, and that, in the present instance, the duration had been for the extraordinary period of twenty years, it will appear as not so very unlikely that the condition of the arteries of the limb might have been nearly the same prior to the compression treatment, as it was found to be afterwards; and that, had a ligature been applied in the first instance, the result would not have been different. Another circumstance yet, must not be forgotten: the man stated, that the original wound of the artery had been treated by means of a plug placed on the part, bound tightly down and retained for some time. Now this measure was one very likely to drive the blood into collateral channels, and in powerful support of the idea that it had actually done so, is the fact, that a traumatic aneurism in the trunk of the femoral artery of a muscular and very active man had remained passive for nearly twenty years. The latter fact is easily comprehensible, under the supposition that half the circulation of the limb was during that time carried on, not by the diseased main trunk, but by the supplementary branches, while it is with great difficulty so under any other. That the influence of a three weeks' treatment by pressure would tend very considerably to promote the further efficiency of the collateral channels, cannot be denied; but, from the considerations just suggested, it seems fair to claim that the result of the case be not considered as in any sense conclusively militating against the adoption of that method. Mr. Curling will, in all probability, re-admit the man before long; and, should anything of interest transpire, or any further operation be performed, we shall not fail to bring the case again before our readers. In leaving it for the present, we may add, that Mr. Curling informs us, that he has recently seen the patient, who is able to walk considerable distances; and as the tumour is not now increasing in size, Mr. Curling does not feel himself warranted in urging an operation involving great risk.

THE WESTMINSTER HOSPITAL.

ANEURISM OF THE RIGHT RADIAL ARTERY.—FAILURE OF COMPRESSION TREATMENT.—LIGATURE OF THE BRACHIAL.—FAVOURABLE PROGRESS.

[Under the care of Mr. BARNARD HOLT.]

Of the following very interesting case, the subjoined particulars have been kindly furnished to us by Mr. Cockerill, the House-Surgeon of the hospital.

John Taylor, aged 30, a brewer's dray-man, was admitted on September 28, with a large aneurismal tumour just below the bend of his right elbow. It had apparently resulted from a sudden laceration of the arterial coats; for the man stated, that, a month previously, he had, while lifting a heavy weight, felt a sudden pain in the part, and that, shortly afterwards, the whole forearm had become so painful, that he was obliged to give up work, and have some leeches applied. A perceptible swelling appeared almost immediately afterwards; and, the pain increasing, in the course of a week he put himself under the care of a surgeon, under whose treatment he continued during the three weeks preceding his admission, but without any benefit. When admitted, the whole forearm, from the elbow to the wrist, was much swollen; and, commencing just below the bend of the elbow, and extending three inches downwards, in the direction of the radial trunk, was a large, oval, firm, and strongly-pulsating tumour. Both arteries at the wrist beat with natural force, and synchronously with the aneurism. In the latter a loud bruit was audible. By compressing the brachial, all pulsation in the tumour was arrested.

On October 1, Mr. Holt commenced the treatment by pressure, the œdema of the fore-arm having in the meantime somewhat subsided. A well-padded splint having been applied to the back of the upper-arm, two circular steel tourniquets were fitted to it, at distances of about three inches, each of them having a thumb-screw and pad arranged to impinge upon the course of the vessel. These the patient was instructed to tighten alternately at intervals of about an hour long. It was afterwards found almost impossible to secure the continued adaptation of the compressing pads since the slightest motion of the patient's arm, even the movement of a finger, sufficed to roll the vessel from beneath them. Mr. Holt tried the ingenious plan of having the pads made concave, instead of convex, in the hope that thus they might grasp the bone and be more easily fixed; in practice, however, they were not found to succeed much better than the others. Mr. Holt next tried a common Santorini's tourniquet, the large pad of which was more easily regulated. This the patient bore without movement, on one occasion, for twenty-four hours, but it was directly afterwards obliged to be laid aside for two days, on account of the pain produced. These interrupted attempts at pressure were kept up during a space of ten days.

On the morning of the 10th instant, the patient stated, that five minutes after the tourniquet had been taken off on the previous night, he had felt a peculiar sensation in the fore-arm, as if of blood rushing out. The arm was much swollen and hot, but not discoloured; the fingers very numb; and the brachial region so sore that he could not bear the compression any longer. The fore-arm measured fifteen inches in circumference round the tumour, and the bruit and pulsations of the latter were very distinct. At noon, a consultation was held on the case, and the immediate ligature of the brachial decided on. Mr. Holt accordingly at once performed that operation in the middle third of the arm, and in the usual manner, the patient not being under the influence of chloroform. Pulsation and bruit in the tumour ceased after the ligature, and never returned; during the night following the operation the patient slept fairly. Within forty-eight hours the circumference of the fore-arm over the tumour had decreased an inch and a quarter as compared with what it was before the operation; and, when the ligature came away, on the seventeenth day, a further diminution of one inch had been achieved. The patient had been free from pain during the interval, and was in every respect progressing well. One singular circumstance we must not omit to note respecting the renewal of the circulation in the fore-arm, which is, that, on the morning succeeding the ligature, a slight pulsation was felt in the radial at the wrist, which, on the next day, had become very distinct; on the third day, was again diminished; on the fourth, quite absent. It gradually returned afterwards, and, at the end of a fortnight, the pulse, in both radial and ulnar arteries was as strong as in the opposite limb.

November 3.—*Present Condition.*—The tumour is steadily decreasing in size, and becoming firmer. The man is in good health, and Mr. Holt this day permits him to leave his bed. There is every prospect that the blood will, in a short time, be absorbed, and the cure complete.

It is important to note, that immediately prior to this patient's admission, a fortnight's attempt at cure of the aneurism by compression had been made by a surgeon whom he consulted, and that it had failed from the same reason as that made by Mr. Holt,—viz., the impracticability of fixing the compressing instruments so as to command the vessel.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

NOTTINGHAM GENERAL HOSPITAL.

POPLITEAL ANEURISM.—TREATMENT BY COMPRESSION.—CURE IN SIXTY HOURS.

[Under the care of Mr. THOMAS WRIGHT.]

THE following case, for the particulars of which we are indebted to the kindness of Dr. Sloane, is one of the most triumphant in our series. Even it, however, is outdone by one treated by Dr. Bellingham, and recorded in Vol. XXXIV. of the "Medico-Chirurgical Transactions," in which, if we read it right, a popliteal aneurism, the size of an orange, became permanently solid from the effect of somewhat less than twenty-two hours' compression of the femoral.

William Presgrove, aged 36, a healthy and very muscular farm-labourer, was admitted August 4, 1853. In his right popliteal space was a strongly beating tumour, the pulsations of which could

be felt for an extent of two inches in length and one and a-half in breadth, and over which a short bellows-murmur was audible. Its margins could not be very distinctly felt. By pressure over the vessel at the pubes all pulsation could be arrested. There was no numbness in the affected leg, but it was œdematous to a considerable extent. The man stated, that with the exception of a single attack of rheumatic fever, he had always enjoyed excellent health. About eleven months ago, while hauling a large boat out of a lake, he had felt something suddenly give way in his ham, and afterwards considerable pain in the part ensued. He, however, continued at work during the following five weeks, after which he placed himself under medical care in the country.

August 12.—Compression of the femoral commenced; two clamps being applied, the one over the pelvis, the other in the upper third of thigh, and alternately tightened. The leg up to the knee has been carefully bandaged. The patient is on low diet, without restriction as to the amount of fluid.

13th.—Owing to the stupidity of the patient, who cannot be made to understand the management of the clamps, the pressure has been much interrupted during the night. The pulsation in the tumour is not diminished. No pain is complained of; there are no feverish symptoms, and the temperature of the two limbs is equal. Pulse, 88. The thigh being very fat, it is necessary to screw the clamps very tight, in order to arrest the flow of blood.

15th.—Last night, a little before twelve, the patient discovered, while adjusting the apparatus, that the tumour had become quite solid and pulseless. This morning there is not the slightest impulse to be felt on firm pressure, and the mass is circumscribed and hard. He "feels as well as ever he did in his life;" has passed two very tolerable nights during the compression; has not required a single opiate, and has complained of but little inconvenience. He is directed to remain in bed, and, as a precautionary measure, to keep up gentle pressure for a day or two longer.

September 13.—Discharged from the hospital in every respect quite well, the aneurismal tumour being small and hard. He has been kept under care for the last ten days solely on account of an attack of urticaria febrilis, which has yielded to the ordinary treatment.

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Medical Times & Gazette.

SATURDAY, NOVEMBER 5, 1853.

CLERGY *VERSUS* CHOLERA.

CHOLERA, though subsided at Newcastle, is spreading in London. Propositions have been made to meet it, by the appointment of a day for general national fasting. The Presbytery of Edinburgh have written to Lord Palmerston on the subject, and have received a reply from that practical statesman to the effect that no national fast would be appointed by Royal authority, and that, in his opinion, if all the existing causes of disease be allowed to remain, they will infallibly "be fruitful in death, in spite of all the prayers and fastings of a united but inactive nation." He adds:—"When man has done his utmost for his own safety, then is the time to invoke the blessing of Heaven to give effect to his exertions."

The Church of England has not been behind the Presbytery of Edinburgh in calling for a national fast-day, or in appointing religious services for the purpose of imploring Divine interference in arresting the spread of the cholera. We have no fault to find with this. Pious Churchmen may be edified by some special service; but, if prayers and fastings are to be a cloak for indolence, we cordially concur with Lord Palmerston in his opinion that they should be postponed until the Nation has exerted to the utmost the faculties which Providence has given to man to provide for his own safety.

The Clergy in many instances have been active in the cause of sanitary improvement; but it is much to be regretted, that, when the interests, not of the Church, but of the Clergy themselves, are concerned, the health of the people becomes a secondary consideration, which must yield to the higher claims of the pockets of bishops, priests, and deacons. On several occasions we have had to notice the interested opposition of the Clergy to the abolition of town graveyards, and of the practice of burial in churches, and perhaps may do so again, but we must now confine our attention to one case which calls for special exposure.

The low-level regions of dirt and poverty on the south side of the Thames are the favoured seats of cholera now, as they were in both our former epidemics. One spot in particular in this district has been especially deadly. This spot is the property of the Bishop of Winchester,—the Bishop who has taken the lead in authorising special religious services to be held throughout his diocese to pray that the cholera may be arrested.

Three-fifths of the deaths from cholera in the present attack have been on the south side of the Thames. One-third of these has been in the St. Saviour's district, and almost the whole of them (says the *Daily News*) in what is called the "Clink Liberty," the property of the Bishop of Winchester. This estate yields a princely income to the Bishop, and has done to his predecessors; yet it is one of the foulest of all the filthy haunts of pestilence in the Metropolis. There are no sewers. The refuse is conveyed to the river in open gutters or ditches. Last week the flow of the tide up these ditches flooded the houses to the depth of upwards of two feet; and this is not an unusual occurrence. Beneath the flooring of the lower rooms the black slimy filth evolves its deadly emanations, and poisons the inhabitants. This is where the Bishop of Winchester manufactures the pestilence he implores the Divine aid to arrest!

The property in this district is leased on such terms that it is not improved, because it would not pay to expend money on it. It is leased on three lives; and, when one life falls, another name is inserted, on payment of a large sum to the Bishop of Winchester. In 1808, he received 14,000*l.* for the renewal of the lease of a portion of the estate held by Mr. Pott. Six years ago, 17,000*l.* was received as a fine for renewal, and 40,000*l.* more is expected to be received by the Bishop when other lives fall in. As tenants can claim no right of renewal, all inducement to improve the property by the tenant is removed. Increase in the value of the property by improvement would only lead to increase of the fine paid to the Bishop at the next renewal.

In 1851, an Act was passed, which removed all the legal difficulties which impeded the granting of leases of Church property on a satisfactory tenure, and the Bishop might extend the provisions of this Act to the estates of his see. He has been asked to do so, but has refused, because, he says, it would not be consistent with the interests of the Church. He lives in hopes that lives may fall in before he is summoned to give an account of his stewardship, and that he may clutch another 40,000*l.* from his see for his family. The

miserable tenantry may be carried off by typhus or cholera amid the accumulated filth; the Bishop will give no practical assistance, but he sets an awful example of miserable mockery, by offering up prayer for Divine assistance to avert the evils his own selfishness creates.

THE STAFF OF THE METROPOLITAN HOSPITALS.

One of the most esteemed and experienced of our hospital Physicians, Dr. Latham, has emphatically recorded the result of his observations of hospital management. In his lectures on subjects connected with Clinical Medicine, he says, "I have always thought that hospitals are not converted to half the good they are calculated to serve as schools of medicine; and I think so still. I have always thought, that in hospitals knowledge is perpetually running to waste for want of labourers to gather it, and I think so still." It is nearly twenty years since these sentiments were uttered and published, yet there is the same want of labourers to gather up the knowledge perpetually running to waste in our Metropolitan Hospitals.

The duties of an Hospital Medical officer are threefold. He should exert all his powers in alleviating the sufferings of the sick poor placed under his charge. He should endeavour to supply the wants of a future generation, by teaching the pupils who surround him that mode of practice which experience has shown to be the most beneficial. He should deliver to his professional brethren an account of that peculiar class of disease in which he has had the greatest experience, and to which he has devoted the chief amount of his attention. But to do this satisfactorily he requires, with unlimited range of observation, a limited amount of duty. He should not be overwhelmed by the multitude of his patients. No more beds should be allotted to him than he could conscientiously attend to.

Now let us turn to the present aspect of affairs; let us examine the manner in which patients are seen at the largest London Hospitals. As an illustration we will use that of St. Bartholomew's, referring more particularly to the surgical wards of that venerable pile, because in them we find the evils complained of more glaringly developed.

We are informed that 420 beds are allotted to the three Surgeons of St. Bartholomew's Hospital,—that each has unlimited power over 140 beds. Now gentlemen are not as a rule appointed surgeons to any hospital until they have attained to a certain age, and when the care of a large private practice devolves upon them. Thus, their day is chiefly occupied with their lucrative practice abroad, and they, in consequence, can bestow but the most rapid attention upon their hospital patients. The surgeon arrives about one o'clock, and leaves at three, or half-past. In that time he is expected to examine the symptoms of the malady of each patient, and to deliver clinical remarks thereupon to the surrounding students. Moreover, out of the 150 minutes spent within the walls of the hospital, a great many are expended in traversing the staircases and passages which intervene between the wards of that vast establishment. Old surgeons come up from the country, and there is much conversation carried on in consequence; reminiscences of Abernethy are called up, and thus the hours gently glide away. We ask, what time is left for the investigation of disease? what time for the instruction of the pupils?

Another evil must be noticed. A certain amount of attention is paid to any rare form of disease; the Surgeon will spend much of his time over a case of elephantiasis, for example,—a disease that most of the surrounding students will never see again, and if they do see it, they will be unable to cure it. But the common, every-day malady, is passed almost without remark; the treatment of the broken limb, the ulcerated leg, which every professional man is called daily to attend, is scarcely described. We do not say that the Surgeons do not do their work well, but that they would do it much better if they had but half the patients to attend to. It is absolutely absurd to suppose that proper regard can be paid to the wants of the sick or the requirements of the student, when the Surgeon has 140 patients to prescribe for in two hours. In order to perform the chirurgical work of St. Bartholomew's efficiently, the number of Surgeons should be more than doubled.

One of the most crying evils connected with the present system of keeping a small establishment of Medical Officers is, that the younger members of the Profession connected with a London hospital are kept in the background, while elderly gentlemen retain office long after all the energy of youth is lost. The junior officers spend that portion of their life in which the powers of mind are strongest in subordinate situations; and when they become soured by disappointment, or careless by success, they are placed in the situation they ought to have held twenty years before. But this is not peculiar to the Medical Profession in this country. It is the rule throughout England. Gouty Generals are sent forth to conquer the Burmese; and bishops are set over the Church when age has rendered them infirm. "They order these matters better abroad."

Why is it that we are indebted for so much of the Scientific Surgery taught in the British Schools to the Medical Institutions of Germany? Why are our works on Physiology and Organic Chemistry so little better than translations? Why is our Pathology only just beginning to be anything more than a tame following after Rokitansky? The answer is simple. The continental field is open to youth. The man of talent and industry is not condemned to pass the best days of his life in the dissecting-room, going over the same daily routine of dull demonstration, till his hair is grey, and the tottering trembling octogenarian resigns the operating knife to one who cannot long retain the ability to use it.

THE ALBERT PARK, FINSBURY.

We are happy to find that a Memorial has been drawn up, and is in course of signature by Physicians and Surgeons practising in London, urging upon Government the importance of forming the long-promised Park for the Northern part of the Metropolis.

The Memorial very properly states that the Park is required to assist in securing the health and welfare of the inhabitants. Most of the open spaces which, a few years ago, were available to the population of this part of London, as places of exercise and recreation in the open air, have become rapidly covered by houses; aud it is certain that the same fate will soon overtake the site of the proposed Albert Park, unless immediate steps be taken to preserve it for the public.

The population of the Borough of Finsbury is about half a million, a very large proportion of these inhabitants being members of the industrial classes, who cannot spare the time to go far from home in search of fresh air, yet who have most need of it to support the bodily strength upon which their existence depends.

In 1850 the Government of Lord John Russell prepared a Bill authorising the formation of the Park, and it was about to be brought before Parliament when a change of

Ministry took place. Similar good intentions, notified by Lord Derby's Government in the *Gazette*, were set aside by a second Ministerial change. This year a Memorial was agreed to at a great Public Meeting, very properly representing to Lord Aberdeen, that "changes of Ministry ought not to be allowed to set aside an acknowledged PUBLIC necessity." The Memorial was presented by Lord Robert Grosvenor and many Members of Parliament, and the most satisfactory assurances were received from Lord Aberdeen; yet, while the schemes for Battersea Park and Kennington Common were adopted, no steps were taken in Parliament to forward the formation of the Albert Park.

If the ensuing session be allowed to pass with similar neglect, the rapid increase of new houses will remove the only available space now left for the Albert Park. This must not be allowed, and we trust that the Memorial of the Physicians and Surgeons will be numerously signed. It must have considerable effect with Government, as no class of men have so many opportunities of observing the ill effects of crowding and impure air upon the working classes.

We have much pleasure in adding to the above, that in the short space of six days, nearly 1300 signatures have been attached to the Memorial to Her Majesty's Government on the subject.

THE CHOLERA.

PAROCHIAL MEDICAL OFFICERS AND THE REQUIREMENTS OF THE BOARD OF HEALTH.

Hitherto resident medical gentlemen have been exposed to considerable obloquy, and the risk of injury to their professional prospects when called upon occasionally to certify the existence of nuisances on the premises of the inhabitants, or to make complaints on the unwholesomeness of many dwellings, the property it may be of an influential parishioner. But these inconveniences are of course at once got rid of when it is understood that these gentlemen have no option left them in the discharge of duties officially imposed upon them, and which are no longer merely voluntary or permissive, but imperative and compulsory. Independently of being constituted the sanitary inspectors of their respective parishes or districts, the Medical Officers are required to act as health officers at the same time, by maintaining a vigilant *surveillance* over the health of the poorer classes, so as to detect at once, and bring under immediate treatment, all cases of epidemic disease, from their first development. Should any considerable increase of sickness take place, so that they cannot efficiently undertake the additional duties required of them, they are without delay to apply to the board of guardians for such assistance as may be necessary.

The defective, and otherwise very faulty, state of the sewerage in many parts of London is represented as a serious impediment in the way of sanitary improvement; with the view of giving greater efficiency to the labours of the local authorities in carrying out the regulations and directions of the General Board of Health, issued under the recent Order in Council, the Boards of Guardians in both parishes, after hearing the explanations given by Dr. Milroy, unanimously adopted the following Resolutions:—

"That the Medical Officers be directed to act forthwith as sanitary inspectors, each in his own district, in pursuance of the directions of the Board of Health now in force.

"That this Board will be ready hereafter to consider the extra remuneration of the Medical Officers, when the nature and amount of such extra services shall have been ascertained.

"That the clerk do forward a copy of this Resolution to the Medical Officers severally."

The very responsible duties of active sanitary inspection, in conjunction with those of vigilant supervision of the health of the different districts, are thus devolved upon those who, by their local knowledge, and their Professional avocations, can most efficiently discharge them; thus making a first, but most important, step towards the formation of a health police.—*Times.*

METROPOLIS.

The epidemic of cholera, whose progress has been recorded during the last two months, has now attacked many parts of the Metropolis, widely distant, between Hammersmith and Whitechapel. The deaths from cholera, which were about 16 weekly in the beginning of September, rose last week to 96. 54 males and 42 females sank under the disease; 32 died under 15 years of age, 49 between 15 and 60 years, and 15 at 60 years and upwards, The 96 deaths occurred in the five metropolitan divisions as follow:—In the West Districts 16, in the North 3, in the Central 1, in the East 24, on the South side of the Thames 52.

The following Table shows the progressive advance of cholera since August, together with the deaths from all causes, and typhus and diarrhœa, with the temperature of each week.

Week ending	Aug. 6.	Aug. 13.	Aug. 20.	Aug. 27.	Sept. 3.	Sept. 10.	Sept. 17.	Sept. 24.	Oct. 1.	Oct. 8.	Oct. 15.	Oct. 22.	Oct. 29.
Deaths (except from Violence)	978	956	1043	1002	988	1003	915	951	1065	996	1026	1029	1125
Typhus	42	60	48	37	48	37	39	49	57	49	52	47	50
Diarrhœa and Dysentery ..	115	141	131	144	157	137	80	94	71	72	55	48	43
Cholera	4	19	10	18	16	7	16	29	47	66	45	83	96
Mean Temperature	° 61·6	° 61·2	° 60·4	° 58·6	° 55·7	° 56·1	° 57·6	° 54·6	° 52·4	° 48·6	° 52·0	° 48·6	° 55·5

A view of the comparative progress of cholera in the Metropolis in 1848 and 1853, in corresponding periods up to the present time, shows, that in 1848, in the 13 weeks ending October the 29th, the deaths numbered 261, while in 1853, in the corresponding weeks, the deaths numbered 457; and that, in the four weeks ending the 29th of October, the deaths in 1848 were 174, and in 1853 they were 290.

PROVINCIAL.

The following are the latest Board of Health Returns, for Oct. 31 and May 1:—

Arbroath.—Oct. 29 to 31, cholera, 3.
Ayton (Berwickshire).—Cholera, 1.
Cockermouth (Maryport District).—Oct. 29, cholera, 2.
Dundee.—Oct. 29 to 31, cholera, 9; diarrhœa, 2: total, 16.
Easington Union.—Oct. 16, cholera, 1.
Edinburgh.—Oct. 29, cholera, 1.
Edrom (Berwickshire).—Oct. 27, cholera, 1.
Farth-Carnwath (Lanarkshire).—Oct. 28, cholera, 1.
Great Waltham (Chelmsford).—Nov. 1, cholera, 1.
Luton.—Oct. 29 to 31, cholera, 2.
Morpeth.—Oct. 28 to 31.—Cases: Cholera, 1; diarrhœa, 86.
Newcastle-on-Tyne.—Oct. 29 to 31, cholera, 2; diarrhœa, 2.
Portobello (Duddingston).—Oct. 28, cholera, 1.
Rye Union.—Oct. 28, cholera, 1.
Soham (Cambridgeshire).—Since Oct. 21, deaths—cholera, 10; diarrhœa, 2; 120 to 130 cases.
South Shields.—Oct. 24 to 29, cholera, 6; diarrhœa, 1: total, 67.
Tendring (St. Osyth).—Oct. 29, diarrhœa, 2.
Tenterden Union (Appledore).—Oct. 30, cholera, 1.
Thorne Union.—Oct. 29 to 30, cholera, 2.
Wolstanton.—Oct. 29, diarrhœa, 2.

NEWCASTLE.—The total number of cases of choleraic disease discovered by the house to-house system of visitation, and the total number of deaths resulting in the whole town during the five weeks ending the 25th of October, were as follow:—

Total cases discovered	10,490
Cases passed from diarrhœa to approaching cholera ..	16
Cases passed from approaching cholera to cholera ..	13
Total number of deaths in the town	664

The proportion of deaths to cases was, in the

First week ..	1 death	in 10	cases.
Second week ..	1 „	in 19·5	„
Third week ..	1 „	in 32·7	„
Fourth week ..	1 „	in 30·7	„
Fifth week ..	1 „	in 52·7	„

This table exhibits a progressive diminution in the proportion of deaths to attacks as the house-to-house visitation proceeded and came into full operation, which is in accordance with general experience.

THE RUSSIAN TROOPS.—A private letter from Jassy, of the 14th inst., confirms the accounts of the cholera having appeared in the Russian camp. The disease had not yet arrived at a high degree of virulence; nevertheless, great apprehension was enter-

tained of its progress. The reports from the Principalities also state, that not only do seventeen hospitals already exist, but ten more are about to be opened. The most costly-furnished palaces and dwelling-houses of the natives are taken without remorse by the Russians for the purposes of accommodating their sick, who multiply so fast on their hands, that they have already adopted the expedient of removing such as can bear it further northwards.

REVIEWS.

Memoir of John Abernethy, F.R.S.; with a View of his Lectures, Writings, and Character. By G. Macilwain, F.R.C.S. 2 Vols., 8vo. London. 1853.

There are very few new facts about Abernethy in these memoirs. We know but little more of his personal history, of his school life, of his early professional career, or of his gradual progress towards success, than was generally known before. Nor do the commentaries of Mr. Macilwain upon the doctrines of Abernethy convince us that those doctrines have been misunderstood or misinterpreted. Abernethy has always had the credit of drawing especial attention to the constitutional origin and treatment of local diseases. It was his great merit that, by his mode of enforcing the general truth he had comprehended, he contributed materially to the advancement of surgery as a science. This merit has not been denied him even by those who assert that the practical sum of all his teaching was, that whatever the local disease, or the constitutional ailment, or the derangement of the stomach and bowels, blue pill, senna, and gentian, constituted the one method of treatment applicable under all circumstances.

The most successful portions of the book are those in which Mr. Macilwain describes Abernethy from personal recollection, his manner and character, his style of lecturing, his eccentricities, and the reminiscences of some of his old pupils. The most unsuccessful are his own discursive commentaries on the works of his master, and the ill-advised revival of the unfortunate differences with Mr. Lawrence and Mr. Stanley. We select the following extracts as a sample of the best parts of the book :—

ABERNETHY'S SUCCESSFUL MANNER AS A LECTURER.

"He had just got the 'cheerfully, not too fast' expression, that we sometimes see at the head of a musical composition. His manner was so good, that it is difficult to convey any idea of it. It was easy without being negligent; cheerful without being excited; humorous, often witty, without being vulgar; expeditious without being in bustle; and he usually took care that you should learn the thing before he gave the name of it, and understand it before he expatiated on the beauty or perfection of its adaptation to the ends it seemed designed to serve.

* * * * *

"I give one example. He is speaking of cartilage, or gristle, which covers the ends of the bones where they form joints, and has explained its great elasticity, the use of it in preventing jarring; and contrasted the *springiness* of youth with the easily jarred frame of age. 'Well,' he adds, 'this cartilage is fibrous, and they say that the fibres are arranged vertically; so that the body may be said to be supported on '*myriads of elastic columns.*' "

HIS ROUGH MANNER, BUT REAL KINDNESS.

One day a pupil wished to consult him, and found him, about ten minutes before lecture, in the museum, looking over his preparations for lecture,—rather a dangerous time, we should have said, for consultation. "I am afraid, Sir," said the pupil, "that I have a polypus in my nose, and I want you to look at it." No answer; but when he had sorted his preparations, he said, "Eh? what?" The pupil repeated his request. "Then stand upon your head; don't you see that all the light here comes from a skylight? How am I to look up your nose? Where do you live?" "Bartholomew-close." "What time do you get up?" "At eight." "That can't be, then." "What, Sir?" "You cannot be at Bedford-row at nine." "Yes, Sir, I will." "To-morrow morning, then." The pupil was punctual. Mr. Abernethy made a most careful examination of his nose, entered into the causes and nature of polypi, assured him that there was nothing of the sort, and exacted from him a promise, that he would never look into his nose again. The gentleman, in his letter to me, adds, "This I have never done, and I am happy to say, that there has never been anything the matter."

HIS IMPRESSIVE WAY OF TEACHING ANATOMY.

He is speaking of the course of a large artery. "Ah," said he, "there is no saying too much on the importance of recollecting the course of large arteries; but I will tell you a case. There was an officer in the navy, and as brave a fellow as ever stepped, who, in a sea-fight, received a severe wound in the shoulder, which opened his axillary artery. He lost a large quantity of blood, but the wound was staunched for the moment, and he was taken below. As he was an officer, the surgeon, who saw he was wounded severely, was about to attend to him, before a seaman who had been just brought down. But the officer, though evidently in great pain, said: 'Attend to that man, Sir, if you please; I can wait.' Well, his turn came, the surgeon made up his mind that a large artery had been wounded; but as there was no bleeding, dressed the wound, and went on with his business. The officer lay very faint and exhausted for some time, and at length began to rally again, when the bleeding returned; the surgeon was immediately called, and not knowing where to find the artery, or what else to do, told the officer he must amputate his arm at the shoulder-joint. The officer at once calmly submitted to this additional, but unnecessary suffering; and as the operator proceeded, asked if it would be long. The surgeon replied, that it would soon be over. The officer rejoined 'Sir, I thank-fire-fifteen' of the class, Abernethy calmly concluded, "I hope you will never forget the course of the axillary artery."

GENERAL CORRESPONDENCE.

MR. WILDE IN ANSWER TO THE CHARGES OF DR. KRAMER.

[To the Editor of the Medical Times and Gazette.]

Sir,—When two writers disagree, and claim public or professional opinion upon the merits of their respective rights through the medium of the press, a certain latitude of expression is usually permitted; but there is, or there ought to be, a limit, beyond which such statements and such expressions should not be allowed. Three objects usually induce appeals of this nature;—an egotistical desire to appear in print, which brings many a man into trouble; a laudable wish to advance science by discussing in a fair spirit questions of a theoretical or practical nature; or in order to correct mis-statements or misconceptions which may have been wilfully put forward, or inadvertently fallen into. The first is generally a foolish pretext, and founded upon an egregious vanity, or is the result of that sort of literary tenesmus which in certain atmospheres is, I presume, contagious and irresistible. It is difficult to say whether this peculiar affection is best cured by contemptuous silence, or ridicule and exposure. The second object is really useful, as, without discussion or diversity of opinion, the onward progress of science may be retarded, and the tide of observation become stagnant. The third is a mere question of veracity, which can only be carried on to a certain point with that amount of courtesy and gentlemanly bearing which should always characterise professional writing; beyond that it becomes personal, and, involving as it does the truth or falsehood of one of the discutants, often requires editorial interference to decide, and set right the readers of the periodical in which the discussion may have taken place. This latter case, it would appear to me, is the predicament in which Dr. Kramer, of Berlin, has lately placed himself. Your readers must, no doubt, remember that he published some cross-grained letters against Mr. Toynbee and myself in the *Medical Times and Gazette* during the past year. These I replied to, as they appeared; and, in the volume of "Aural Surgery" which I have lately published, I discussed the opinions and practice of Dr. Kramer with, I trust, moderation, fairness, and candour. In reply to my criticisms upon his opinions, he has written the very ill-tempered letter which has just appeared in your periodical; and it is for your readers to judge in which of the three particular characters of the claimants for fame which I have just detailed he at present figures, or in how much of the first and last, and in how little of the second phase, he now appears.

With reference to that effusion, I cannot but say, Dr. Kramer is very ungrateful; he must have been, when writing his letter, suffering under an acute attack of dyspeptic egotism, or he has

lately sustained some impairment of those analytical faculties for which in former times he got credit.

Dr. Kramer says,—Mr. Wilde "did not even scruple to alter my words, and to distort their meaning as often as he refers to my work. I shall therefore confine myself to an energetical protestation against such unfair proceedings, and to the quotations of the passages which have been mutilated by Mr. Wilde." Again,—"We have here a remarkable instance of Mr. Wilde's deception." And, in another place,—"Mr. Wilde endeavours to lead his readers into a gross error, as regards the meaning of certain passages." Further on, we read,—"Mr. Wilde intentionally omitted taking any notice," etc. And, finally, he concludes by saying:—Mr. Wilde "did not scruple to attack my writings in a malevolent and unjustifiable way."

In reply to these verbose assertions, allow me to insert the following passages, expressive of my opinion of Dr. Kramer, extracted from my "Aural Surgery." Speaking of the first edition of his book, translated by Dr. J. R. Bennett, I say, it "is decidedly the best treatise upon the subject which has yet appeared in this country, where it exercised a most salutary influence upon the diagnosis and treatment of diseases of the ear."—P. 28. Again, after alluding to his *Ohrenheilkunde in den Jahren*, 1849 *und* 1850, the reader will find the following notice:—"Independent of the luminous descriptions, the critical acumen, and practical observations, and the consequent absence of quackery, with which all Dr. Kramer's writings abound."—P. 28. And, at page 383, I say:—"Now, this work of Dr. Kramer's having gained for him considerable [illegible] I am free to acknowledge, effected much and so forth, in the same strain; and in several other instances I have complimented him upon his writings, although I have ventured to differ from him in opinion, and to review in a calm, and, I trust, philosophic spirit, his theories and his practice. But what chance is there of convincing an author whose overweening vanity leads him to preface each work which he writes, even every letter which he indites, with—"Guided by a twenty years' practice;" and who, in alluding to his book published in 1849, has the modesty to assert, "There is nothing to be added to, nor to be deducted from, the whole of the doctrines contained in this second edition of my work"? Therefore neither Dr. Kramer himself, nor any other observer, no matter how laborious, or during whatever advance of science may be made, shall ever be able to amend or improve the treatment of aural surgery laid down in the great system of his "second edition."

But it is not only in his own person, and in defence of his own school, that his insufferable egotism appears so transparent. Dr. Kramer, whose writings have been so favourably received in England, has never failed, even though it cost him a digression from the direct course of his narrative, to vilify English surgery, and to apply the most opprobrious epithets to men of character and education in this country, and, in particular, to slander the time-honoured name of the late Mr. Saunders;—a reiteration of all which, and in terms equally harsh and inapplicable, he takes the opportunity of the permission lately granted through your columns to supply. Permit me, in reply to such, to insert here and re-affirm an opinion upon this subject, contained at page 29 of my "Aural Surgery." Alluding to the new edition of his book on "The Nature and Treatment of Diseases of the Ear," I say:—"We are not a little surprised at the style of his language, so uncourteous and unsuited to a scientific subject. For myself, I cannot but feel complimented by having so large a portion of the insertions in the new edition of this work devoted to the consideration and review of my writings and opinions; but, for the sake of literature and science, and the friendly feeling which has so long existed between the Irish and German Schools of Medicine, I cannot but regret that my friend did not discuss the questions at issue in a calmer and more philosophic mood." The work of Mr. Saunders, first published in 1806, is as far in advance of the state of knowledge of its day as that of Kramer is now behind that of its own.

Now, as regards the second position, it is really to be regretted that Dr. Kramer has not advanced anything which, by giving rise to a pathological or a surgical discussion, could advance that branch of science which we are all so anxious to improve. And yet there are, as he must know very well, (and, if he does not, I would in particular refer him to the notes at page 383 to page 386,) many topics in dispute between us, which I should really be very glad to have his calm, dispassionate opinion upon. But he says, he "shall never enter into any discussion with" me, because "there is no reasoning, no coming to a satisfactory explanation, with an author who, for instance, has never observed polypus growing from the external surface of the membrana tympani," etc. Whereas the redoubted German "not only observed, but completely destroyed, 143" of these growths. But, most cogent of all reasons,—it is, he says, "impossible to come to an understanding with Mr. Wilde, who attaches great importance to Mr. Toynbee's dissections of the ears." This latter will, no doubt, be considered a very heinous offence, and a valid reason for Dr. Kramer's withdrawing from the contest by my brethren in England, and, in particular, the members of the Medico-Chirurgical Society, who had the hardihood to publish—in defiance of the results of Dr. Kramer's twenty years' practice—the dissections made by Mr. Toynbee.

I fear it would occupy more space than the subject is worth to follow out in detail each of the cruxes and quiddits contained in Dr. Kramer's letter. I will, however, briefly allude to them, before I come to that part of the subject which is really of grave importance as concerns medical or any other literature, engaging, as it does, a question of veracity on one side, and misquotation upon the other. I wish one of your printer's devils would teach Dr. Kramer the exact meaning applied to a quotation in English, and also point out to him the position which inverted commas ought to occupy in print. A knowledge of these two subjects would greatly facilitate any discussions which he may in future have with his medical brethren, and enable the readers of his writings to know where the quoted passage begins: and which is his own opinion, or that of the author which he is reviewing. As an example of this, I beg to refer to the misquotation he has given from page 28 of the "Aural Surgery."

Dr. Kramer has for some years past published several books, besides that translated by Dr. Bennett; and he may not, perhaps, be aware, that most of these are in my possession, and that, in [illegible] I have referred to the works, in which those opinions are most distinctly and prominently put forward. It is quite useless for me to refer to the various portions of Dr. Kramer's writings in which the cure of nervous deafness, so called, by the introduction of vapours of different kinds into the cavity of the tympanum, is enforced. The fact *is* established, that such has been the chief new theory which he advanced many years ago, (in 1837,) and has continued to uphold ever since. It *is* a fact, for which I refer to Dr. Bennett's translation, that he did recommend etherous vapour as the most suitable for this purpose. I am aware that he has since modified his opinions in that second edition to which there is nothing now to be added, and from which there is nothing to be deducted, and does, in it recommend "to begin the treatment of nervous deafness by vapours of pure lukewarm water, or of a thin mucilaginous fluid, combined with one-eighth to one-half grain of extract of hyoscyamus," introduced into the cavity of the tympanum, in order to pass through—by, I presume, endosmose—"the thin membranes of the round and oval foramina, etc.;" and thus, either by mixing with, or replacing the perilymph, to stimulate the dormant faculties of the acoustic nerve! But I really thought this too ludicrous to impose upon my English readers; and here in Ireland we have a far more efficacious remedy, and one much more easily employed,—being the rubbing of the left elbow with a brick-bat every second morning, fasting. We have received many good things from Germany, some bad ones, and not a few popular delusions; among the last of which may be mentioned the more than Hahnemannic dilution of the one-eighth of a grain of henbane in some quarts of water, the vapour arising from which is, when passed into the middle ear, to cure impairment of the function of the portio mollis of the seventh pair of nerves!

It *is* a fact, that, in the English translation of Dr. Kramer's book, he denies, at page 144, the possibility of elevating the membrana tympani, or pressing it outwards towards the external meatus.

It is not quite true, I acknowledge, that, in the first edition of his book, Dr. Kramer devoted but four pages to the description of acute inflammation of the membrana tympani, as I rather too leniently gave him credit for; but it *is* a fact, as you may perceive by referring to the work at this moment, that in Dr. Bennett's translation, the description of acute inflammation of the membrana tympani commences at page 150, of which it occupies four lines, passes through 151, and all 152, except one line, where the subject of polypus growths commences; at page 154 there are seventeen lines on the same subject; two pages and a quarter are occupied with the details of cases, and the rest of the section is occupied with the subject of perforation, etc.

All I asserted about Dr. Kramer's criticism upon Willis, with respect to the effect of loud noises improving certain forms of deafness, is perfectly correct, of which the reader may assure himself by comparing page 140 with the end of page 259 of Bennett's translation.

With respect to Dr. Kramer's statistics, I have already occupied your space upon former occasions, (see the Number for Nov. 20, 1852, in particular,) and I have no desire to enter upon that subject again; but I would now call the serious attention of your

readers, and that of every professional writer in Europe, to what is, perhaps, one of the most audacious instances of a man denying his own productions which has ever presented, and which should, I think, make all editors of periodicals consult the authorities referred to by Dr. Kramer, before they insert his tergiversations. The passage in Dr. Kramer's letter runs thus :—

"('Aural Surgery,' page 105.)—'Kramer says, the catheter is the only means by blowing, or by the introduction of a catgut-string, or a small whalebone or ivory probe, to learn the condition of the Eustachian tube, and the cavity of the tympanum, and thereby, in the cases in question, to judge of the condition of the auditory nerve.' And page 391—'The proposition of Dr. Kramer, to judge of the state of the auditory nerve by the introduction of a catgut-string, an ivory or a whalebone bougie, into the cavity of the tympanum,' etc.

"Again, I never recommended or made use of a whalebone or ivory probe or bougie to be introduced into the Eustachian tube, still less into the cavity of the tympanum. (Of my works, English Translation, pp. 201, 226; Second Edition, page 499.)"

It is quite true that in neither the first nor second edition of his work, on "The Nature and Treatment of Diseases of the Ear," will this advice about the ivory probe or whalebone bougie be found, although, at page 202 of the English translation, we do read, under the head of "Mucous Accumulation of the Middle Ear," something about the mode of passing a harp-string or piece of catgut through the Eustachian tube into the tympanum, when we are told that it may "be thrust still further forwards, so as to pass between the handle of the malleus and the incus."

This, it must be confessed, is rather heroic practice to be recommended by an author who subsequently advocated the twenty-millionth of a grain of hyoscyamus for fumigating the middle ear. Now it is strange, that, although Dr. Kramer has gainsaid many of my interpretations of his views, in only one instance has he objected to a quotation from his written descriptions, and that is in the case above alluded to. Fortunately, however, I am in possession of the work in which this diagnostic of poking a piece of ivory or whalebone into the middle ear, in order "to judge of the condition of the auditory nerve," is advanced; and I forward it to you, that the printers may make no mistake in printing the original, and that you may be convinced of the correctness of the text, and the fairness of the translation. The passage will be found, commencing with the last line of page 25, of the "*Beiträge zur Ohrenheilkunde. Von Dr. Wilhelm Kramer, Sanitäts-Rath. Berlin*, 1845;" and the denial of its authenticity is the more reprehensible, from my having referred to the very work from which I gave the quotation. It runs thus :—

"*Hier ist die Anwendung des Ohrenkatheters das einzige Mittel, um durch Einblasen, durch Einströmen von verdichteter Luft aus der Luftpresse, durch Einführen einer Darmsaite, eines Fischbein oder Elfenbein-Stäbchens sich von dem Zustande der Eustachischen Trompete und der Trommel-höhle Kenntniss zu verschaffen, und davon in den betreffenden Fällen auf den Zustand des Gehörnerven zu schliessen.*"

Litera scripta manet.

Dublin, Oct. 25. I am, &c. W. R. Wilde.

P.S. In last Saturday's *Lancet*, the Editor does me the honour to say, that he is not very likely ever to look into my book upon "Aural Surgery," but that he intends to publish Dr. Kramer's letter in the next issue of that periodical. I neither ask nor expect courtesy at the hands of Mr. Wakley; but, in justice to the Medical Profession in England and to the readers of the *Lancet*, he will, I presume, also publish my answer to the charges of Dr. Kramer. If he does not, I shall take the liberty of telling my readers the reason thereof. W. R. W.

November 2.

THE LATE DEATHS FROM CHLOROFORM.

[To the Editor of the Medical Times and Gazette.]

Sir,—The late deaths from chloroform, occurring nearly at the same time in different public institutions, have naturally attracted considerable attention; and they seem to call for some inquiry, whether means may not be adopted to prevent such accidents, or, at all events, render them of more rare occurrence. In concluding his account of the late fatal case at St. Bartholomew's Hospital, your reporter says:—"It is mournful, indeed, to consider, that, from cases such as the last three or four which it has been our lot to record, the practical surgeon gains no knowledge calculated to authorise the hope, that in future the like tragedies will be of less frequent occurrence." The case at St. Bartholomew's Hospital might at first sight seem to justify and require these observations, for the chloroform was administered by a medical man of eminence appointed to the duty, and in the constant habit of performing it. The vital organs of the patient were all sound, and she had taken the chloroform before without ill effects. There are circumstances, however, which lead me to a different conclusion from that of your reporter.

When the air a person breathes does not contain more than 4 or 5 per cent. of vapour of chloroform, insensibility is induced very gradually; and I have found in numerous experiments on animals, that when vapour of this strength is continued till they are destroyed, death takes place very slowly. The breathing first becomes embarrassed, and then ceases; but the heart continues to beat for one or two minutes afterwards. During this interval, the animal can be easily restored by artificial respiration; and it often happens that, when the action of the heart is about to cease, the animal makes a gasping inspiration or two, which renew the circulation and cause spontaneous recovery if the chloroform is not continued. On the other hand, when animals are made to breathe air containing 8 or 10 per cent. or upwards of chloroform, death takes place very quickly, and the circulation of the blood is arrested at the same time as the breathing, and, indeed, in some cases, before the breathing. A very few inspirations of air, containing 10 per cent. of vapour of chloroform, have the effect of paralysing the heart, as I ascertained by giving chloroform to rabbits, by means of artificial respiration, after the chest was laid open.(a)

Now, on examining the history of all the recorded cases of death from chloroform, it is ascertained, that the fatal event did not arise, in any instance, from the too long administration of vapour sufficiently diluted with air. In all the cases, the circulation has been arrested by the immediate action of the chloroform, owing to the circumstance, that the air which the patient was breathing just before he died or became moribund, has been too highly charged with vapour. It is evident, therefore, that the first consideration in giving chloroform should be, to take care that the vapour contained in the air which the patient is breathing shall at no time much exceed five per cent. So far from this being the case, however, it is seldom that any thought is taken of the quantity of vapour in the air breathed by the patient. It is generally considered sufficient to know that the patient has enough air to support respiration; and, indeed, the choloroform is usually given in such a manner that no knowledge is obtained, and no command exercised over the proportion of vapour in the air. This is certainly the state of matters when the chloroform is given on a handkerchief, or piece of lint; and I believe that the kind of inhaler used at St. Bartholomew's Hospital affords no means of either knowing or regulating, even approximately, the proportion of vapour in the air which the patient inhales. The chloroform may appear to be administered with it exactly in the same manner, when the process is, in fact, very different. So far, therefore, from having no hope that accidents from chloroform will be of less frequent occurrence, we have every reason to conclude that, with additional pains and attention, they may be almost, if not altogether, prevented.

Some persons direct their attention too exclusively to the pulse while giviug chloroform. If the vapour were sufficiently diluted with air it would exert no great influence over the pulse, even if it were continued till the breathing should cease; and if it were not sufficiently diluted it might stop the pulse suddenly, without previous warning, when the information would come too late. The pulse is, therefore, but of secondary importance, as an indication of the effects of chloroform. The breathing, and the state of the eyes and eyelids, afford the best indications of the condition of a patient under chloroform; but there is no particular occasion for going into detail on this subject at present; for it does not appear that any accident has happened from the practitioner misunderstanding the state of the patient, and going on too long. The cause of accident has always been, that the vapour, being too strong, has acted so quickly, that there was not time to judge of its effects.

While I do not participate in the melancholy forebodings of the writer who has reported the case in last week's *Medical Times and Gazette*, I cannot concur in the opinion of those who think that giving chloroform for a surgical operation is a very trifling matter, requiring no particular skill; and that it is merely necessary to spill a quantity of the agent on a towel or handkerchief, and make the patient quickly insensible. It is quite true, that this mode of proceeding answers in a great number of cases without any ill result; but it is attended all the time with some amount of risk, and the patients should be considered rather to escape from danger than not to incur any. In certain patients, the amount of chloroform which must be absorbed at one time, to prevent pain, and keep them from struggling during an operation, is not very far short of what would cause death; and, in nearly all cases, a larger

(a) See *London Journal of Medicine*, April, 1852.

amount of chloroform must be used than would be fatal, if it were taken too quickly. It is obvious, therefore, that the exhibition of chloroform in operations must always be a process of some delicacy, and requiring care. With due skill and attention, however, there is every reason to conclude that the danger from chloroform may either be altogether abolished, or reduced to an amount too small to be estimated.

All the chief organs were found to be in a healthy state in the patient who died in the Royal Infirmary of Edinburgh, as well as in the patient at St. Bartholomew's. In the case at University College Hospital there was fatty degeneration of the heart. This, however, is a very common affection; and many patients who have all the signs of it, as far as they are known, undergo the effects of chloroform without ill consequences. On reviewing the recorded cases of death from chloroform, now between thirty and forty in number, the patients appear to have possessed an amount of health and strength quite on an average with the multitude who have taken chloroform for operations with the best results. Consequently, the condition of the patient has not been the chief cause of accident. It should still, however, be a matter of attention, not so much in order to prohibit the chloroform, as to use, if possible, additional care; for a patient with diseased heart, would undoubtedly have a less chance than others to recover from an overdose of chloroform, should he unfortunately be submitted to it. When a patient liable to syncope, with weak or intermitting pulse, and arcus senilis of the cornea, requires to undergo an operation of any consequence, there would probably be as much danger from the pain and mental disturbance accompanying it, as from chloroform carefully administered. In such cases, I take care to carry the effect of the vapour no further, and to keep it up no longer, than is imperatively necessary; and if the operation, on account of its being about the mouth, require to be performed in the sitting posture, I have the patient placed horizontally immediately afterwards.

I am, &c.

18, Sackville-street, Oct. 31. JOHN SNOW.

ALTERED CONDITION OF THE BLOOD NOT ESSENTIAL IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—While the pestilence is yet brooding over us—and past experience teaches that we have reason to anticipate its increased prevalence at no distant date—it seems to me of importance to call attention to any facts which may tend in any way to throw light upon the true character of the epidemic. Observations made during its existence in 1849 led physicians generally to believe that it was of the nature of a blood poison; chiefly, I suppose, because of the circumstance, that altered condition of blood after death was one of the most invariable phenomena that attended fatal cases of the disease.

This theory was also undoubtedly found most consonant with the symptoms and progress of the epidemic during life; and it by no means follows that the absence of sensible changes in the blood after death is sufficient to cause the abandonment of the only one which seemed to meet the requirements of the case. At the same time, in order that just conclusions may be arrived at, the exceptional cases deserve more especial notice, because they become the test of the absolute value of any hypothesis drawn from appearances common to the majority of cases.

We have not yet received the Report of the College of Physicians, which will be a valuable adjunct to the Reports of the Registrar-General and of the Board of Health, in showing the results of large numbers of *post-mortem* examinations and various modes of treatment; and therefore I may be wrong in assigning any importance to the case which recently occurred at St. George's Hospital; but in this respect especially it differed from those occurring in the summer of 1849.

I am therefore anxious to appeal to the readers of your Journal who are even now daily returning to the registrar certificates of death by cholera in this Metropolis, whether they have made any similar observation in the present year; or whether on previous occasions, before any serious outburst of cholera in a given locality had occurred, the occasional and solitary cases which gave warning of its approach were similarly characterised.

The patient, who was admitted on Oct. 5, was a maid-servant, rather beyond the middle period of life, who had only a week previously gone into service in a house in Grosvenor-street. She had not mentioned to any one her having been ailing until the evening before her admission, when she was attacked by vomiting; she then stated, that she had suffered from diarrhœa for three or four days. A neighbouring practitioner was called in, and her case at this time, though a severe one, does not appear to have been very serious, for he simply prescribed three grains of calomel every three hours, and an effervescing saline, and directed that he should be sent for if she were worse in the course of the night. It appears she did not wish to disturb the family, who were strangers to her, and continued purging and vomiting throughout the night; and, at an early hour next morning, she was found suffering from cramps, and in a state of collapse.

When brought to the hospital, at 9 a.m., she presented the general features of the collapse of cholera, although not in a very marked degree; the livid colour was not so pronounced, the eyes scarcely so sunken, and the tongue and breath not so sensibly cold as they are often observed; she had no sensation of heat, but rather felt chilly, and complained of some pain in the abdomen. There was some doubt as to the pulse at the wrist being quite imperceptible, one or two persons believing they felt it, others denying its existence. So deceptive altogether were the appearances, that, within two hours of her death, it was pronounced not to be a very formidable or hopeless case. By the application of external warmth, some degree of heat was restored to the lower extremities, but her hands remained cold and clammy. She did not vomit at all, and no evacuation was passed until four hours after her admission, when there was a small white, muddy, and slightly fetid stool. The bowels only acted once more during life. She complained of cramp only in one leg, and that was not very severe. She died at four o'clock the same afternoon.

At the *post-mortem* examination, no local congestions of any organs were found; they presented all the appearance of health, except that they were rather bloodless; the intestines were particularly pale and bloodless, and just at the termination of the small intestine several prominent Peyer's patches were seen, and a good many projecting solitary glands. The upper part of the small intestine contained white muddy fluid, of a creamy consistence; lower down it was pinkish; and the larger intestine contained a mixture of decomposed calomel in the form of black oxide. In the heart, large, firm coagula existed, and on the right side a large yellow clot. The blood throughout the body was perfectly coagulated, just as it is found in a state of health. The examination was made about twenty-two hours after death. No urine existed in the bladder, and none had been passed in the hospital.

The *post-mortem* examination was regarded by all present who had witnessed those made in the same place in 1849 as a remarkable one, and probably the facts may be interesting to many of your readers.—I am, &c. A. WHYTE BARCLAY, M.D.

Bruton-street, Berkeley-square.

ST. BARTHOLOMEW'S HOSPITAL AND ITS SERVANTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—Although the present age abounds with statements that stagger the faith of the most credulous, we do not think that any of your readers have heard a more extraordinary account than that which we here present in its naked simplicity and truth.

A widow, a "sister" of St. Bartholomew's Hospital, while faithfully fulfilling her duties to the sick placed under her charge, was fatally attacked by that fell disease which threatens once more to spread its ravages over this land. She died in harness, respected by all as a conscientiously hard-working attendant upon the patients of the hospital. She left one child, totally unprovided for. Will it be believed that no recognition of the services of the mother is to be afforded to the orphan by the wealthy Smithfield corporation; and that, by express direction of the Treasurer, a subscription list is being handed among the needy students of the hospital, in order that a fitting maintenance may be provided for the infant? We need not add, that the appeal meets with a generous response.

If the proverbial riches of this institution are insufficient to provide for the fatherless child of a woman who perished while engaged in its service, we respectfully beg to recommend an improvement upon the plan of operation now adopted, of sending the hat round among those whose sympathy may compel them to give, but whose means, already lessened by the crushing expenses of an hospital education, oblige them to subscribe with difficulty and at great self-sacrifice. Let one of the yearly turtle and venison dinners in which the potentates of this charitable building rejoice, be discontinued, and let the price of those viands which annually swell out the sufficiently expanded waistcoats of those magnates be given, in order that the child of their departed faithful servant may receive a fitting education, and the wherewithal to commence the battle of life honestly and respectably.

We are, Sir, &c.

STUDENTS OF ST. BARTHOLOMEW'S.

CONGENITAL DISLOCATION OF BOTH KNEES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Cases of congenital dislocation of the hip are occasionally recorded, and I have seen cases of imperfect development of the ankle-joints of infants, though without much displacement; but I do not remember to have heard, or read, of any case similar to the following, which occurred in my practice:—

In a first labour, somewhat tedious, but natural, and at the full period, the child was born with both legs bent forwards and upwards along the anterior surface of the thighs, the toes impinging upon each inguinal region; the patellæ opposite the upper part of the lower third of the thighs, and the anterior aspect of the knees, when the legs were partially straightened, bearing several transverse sulci, such as are usually seen in the posterior. The luxations were easily reduced, and the right leg remained in its proper position, but the left was pulled up to its old place, by the rectus femoris, the moment the restraining force was removed. A light paste-board splint, and a loose roller, sufficed, however, to keep the limb slightly flexed naturally for a week, after which the unnatural position was not resumed. The infant was otherwise well developed, but small, and walked soon after the usual period, with its limbs perfect and straight. I should be glad to learn if any similar case has been recorded.

I am, &c.

Hawkshead, October 24, 1853. A. CRAIG GIBSON.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 1.

W. FERGUSSON, Esq., F.R.S., in the Chair.

Mr. Nathaniel Ward exhibited a

CASE OF DISLOCATION OF THE HIP-JOINT.

The patient was brought into the London Hospital, having been injured by a fall of timber. He had received injuries in several parts, especially about the hip-joint and in the chest. He was in a state of collapse, three of the ribs were fractured, and there seemed to be other internal mischief. The head of the femur had every appearance of a dislocation into the thyroid foramen; but, on a subsequent examination, the dislocation had vanished, and the man, on recovering himself, was surprised to hear of anything being the matter with his hip, as he had complete power of motion of the joint. He died of pleuro-pneumonia. On examination, the capsular ligament was found extensively ruptured, the ligamentum teres was divided, and the head of the femur was readily movable from its position. There was some effusion of blood, but none of the muscles were injured, except a few fibres of the adductor-magnus which were ruptured. Mr. Ward remarked, that we rarely have an opportunity of examining so recent a specimen of this species of injury. Dislocations of the hip-joint are common at the London Hospital, where as many as four cases have occurred in one month. They are generally reduced by means of the pully.

Dr. Ogier Ward exhibited preparations from

A CASE OF RUPTURE OF THE UTERUS.

After long-continued pains, the os uteri very slowly dilating, the patient had an attack of peculiarly acute pain, followed by collapse. On examination per vaginam, the os was not found to be more dilated than previously. A fissure was detected extending from the os uteri; its extent could not be ascertained. A dead child was extracted by the forceps, but the mother did not survive the operation. At the *post-mortem*, the rupture was found on the left side, about four inches in length, and reaching to the placenta, which was lower than usual, and partially detached. Effusion of blood had taken place. In the right ovary was found a small cyst; and, in the left one, about the size of a child's head, which, by preventing the descent of the head, had evidently given rise to the rupture. There was no rupture of the peritoneum.

Mr. R. R. Robinson exhibited

THE LIVER AND KIDNEYS OF A MAN WHO HAD REACHED THE NINETY-THIRD YEAR OF HIS AGE.

He was a man temperate in his habits, and who had, for the greater part of his life, entirely abstained from the use of fermented liquors. He had been in the habit of eating largely, and walking great distances immediately after his meals. The only attacks of illness that he had suffered from had been one of hæmatemesis, about twenty-nine years before his death, and one of paralysis fourteen years later, since which time he had been almost entirely confined to bed on account of symptoms of an imperfect supply of blood to the brain. He was latterly quite imbecile, and vegetated rather than lived. He died somewhat suddenly, and, on examination, most of the organs were found healthy; some of the arteries were more or less ossified, the kidneys had small cysts in them, and the liver was found to be fissured. Mr. Robinson thought that this might be owing to the pressure against it of an over-distended stomach, and that there was some analogy between this case and the effects produced by tight lacing. There were also some prominences on the base of the brain which might have had some connexion with the irritability of his temper.

Dr. Ward mentioned the case of an old woman who died suddenly, and in whom after death no disease could be found except an apoplectic clot and a peculiar softness of the tissue of all the other organs.

Mr. Barwell exhibited

AN UNUSUAL STATE OF THE PARTS AFTER AMPUTATION.

The patient had had both legs amputated on account of gangrene from frost bite. He was discharged from St. Thomas's Hospital about fifteen months back, having then recovered from the effects of the operation. He afterwards died in a workhouse, and was brought to the hospital for dissection. The end of the bone was still rough as it had been left by the saw, and not, as usual, rounded by absorption. The arteries gave off from their extremities a leash of vessels, and each nerve terminated in a neuromatous swelling, one of which lay on the end of the bone.

Mr. Solly said, the man had recovered well; the gangrene had been the effect of cold on a constitution enfeebled by intemperance. He had no neuralgia when he left the hospital, and it is not known whether he had suffered from it after he was discharged. The exact cause of death had not transpired, the thorax not having yet been opened.

Mr. Fergusson observed, that it would be interesting if we could connect neuralgia with the history of the case, though it did not appear that pain was always a necessary consequence of neuroma.

Mr. Simon exhibited

A BILIARY CALCULUS DISCHARGED THROUGH THE PARIETES OF THE ABDOMEN.

The patient, a woman, aged 60, applied as an out-patient at St. Thomas's Hospital, with an ulcerated and extensively-indurated opening at the navel, which she had been troubled with for fifteen months. There was a yellow discharge, staining the clothes. She had had jaundice twenty-two years previously. Carcinoma was suspected, and she was ordered to be received as an in-patient. On presenting herself next day, this calculus had been discharged from the opening. She expressed herself much relieved; and three weeks after left the hospital quite well, the swelling and induration having completely disappeared. Mr. Simon remarked, that this was rather a rare case. In the museum of the hospital there is an instance of a calculus encysted in the neighbourhood of the fundus of the gall-bladder, as if on its way to be discharged through the parietes of the abdomen; and another case is mentioned in the *post-mortem* book, of which no preparation had been made. Andral also mentions a case where the galt-bladder was found to be obliterated after a discharge of biliary calculi through a similar opening.

Dr. Quain mentioned a case which had given trouble in diagnosis, the swelling being apparently too low for the liver, and too high for an ovarian dropsy. After a time, bile and several calculi came away from an opening which formed, and the patient's general health did not appear to suffer much. Perhaps the gall-bladder had ulcerated.

Mr. Robinson and Mr. Langmore had seen similar cases. In the lady mentioned by the latter, the opening had remained permanent.

Dr. Markham showed a case of

CANCER IN THE BRAIN.

It was situated at the back and side of the right hemisphere. The patient had been affected with numbness and finally paralysis of the right side. Microscopic examination demonstrated the cancerous nature of the tumour.

Dr. Semple exhibited a case of

BRIGHT'S DISEASE OF THE KIDNEY.

It was much enlarged, and congested, and had not yet passed into the stage of atrophy. It was from a scrofulous patient, who

had also recently had an attack of fever. Dropsy and albuminuria were prominent features in this case, which appeared to be progressing favourably, under the use of hydragogue purgatives, when the man died somewhat suddenly, without having previously presented any alarming symptoms. No conclusion as to the immediate cause of death was arrived at by the *post-mortem* examination.

Dr. Sieveking exhibited

A MALFORMED HEART.

The most remarkable point was the absence of communication between the right auricle and the right ventricle. The foramen ovale was very large, and there was a communication between the two ventricles. The lungs were perfectly healthy. The child had been subject to violent suffocative attacks, and loud systolic murmurs had been heard all over the chest. There had been no appearance whatever of cyanosis.

Dr. Peacock said, that cases of the absence of the right auriculo-ventricular aperture, though very rare, were on record, and that there was one example in the museum at St. Thomas's Hospital.

MEDICAL SOCIETY OF LONDON.

October 29, 1853.

Dr. Forbes Winslow, President, in the Chair.

Many gentlemen were proposed, elected, and admitted.

CYSTORRHŒA PRODUCED BY A VASCULAR GROWTH AT THE EXTERNAL ORIFICE OF THE URETHRA.

Mr. Coulson related the case of a lady, aged 40, who had suffered for two years from a burning pain at the orifice of the urethra, constant desire to make water, with almost continual escape of that fluid in drops. She had lately been compelled to rise every half-hour in the course of the night, and a strong ammoniacal odour exhaled from her person, making it necessary for her to avoid society. The urine was of a dark brown colour, strongly ammoniacal, containing a large quantity of tenacious, viscid mucus, and deposited considerable fragments of friable phosphates. This patient was thus suffering from all the symptoms of stone, and, in addition, the tenderness of the inflamed vulvæ, from the constant dripping of urine, was so intense, as to render walking extremely painful, and any attempt at sexual intercourse produced great agony. On examining the orifice of the urethra, it was found surrounded by vascular growths, exceedingly sensitive to the touch. Dr. Golding Bird, under whose care the patient was, considering that the vascular growth at the orifice of the urethra was the exciting cause of all her symptoms, (providing a calculus did not exist,) requested Mr. Coulson to see the patient. Two or three cases had previously occurred to Dr. Bird, in which all the symptoms of calculus existed, where, after careful sounding, no stone could be detected, and where, after removing some vascular growths from the orifice of the urethra, the bladder symptoms completely disappeared. Mr. Coulson examined the patient, and ascertained that no calculus existed. He applied the potassa fusa to the growth, and, after four applications, the vascular tumour nearly, but not quite, disappeared. This treatment occupied about three weeks. The effect was most remarkable; the urine became acid and clear, the mucus rapidly decreased, the phosphatic deposits disappeared, she was not called upon to rise more than once in the night, and could bear exercise with comfort. Just at this period, a sudden attack of menorrhagia occurred, which prevented the destruction of the growth from being completed. In a short time, the vascular excrescence returned, all her old urinary distress appeared, the urine was again fetid and ammoniacal, and contained blood and mucus. Mr. Coulson then removed these growths completely with a pair of scissors, and afterwards applied nitric acid freely to the bleeding surface. The result of this operation was most successful. The urine soon recovered its healthy character; she could retain it a considerale time, and had perfect control over the bladder. Her general health, which had been much impaired, was completely restored. Soon after this she became pregnant, and miscarried at two months. She has, since this, (now at the end of six months) remained in perfect health.

Mr. Coulson said, that he was indebted to Dr. Golding Bird for having pointed out to him these growths as a cause of cystorrhœa. The rationale is at once found in the obstruction offered by the growths in question to complete evacuation of the bladder. Some ounces of urine are always retained, and, becoming ammoniacal and fetid, act as an irritant on the mucous membrane, producing excessive secretion of ropy mucus, and all the symptoms of calculus. Hence, in these cases, as in those lately described by the same distinguished Physician of prolapsus of the bladder into the vagina, causing the anterior wall of the canal to project between the labia, the cause of the painful symptoms is retention of a portion of the urine, and its decomposition in the bladder.

Mr. Thomas Wakley exhibited a patient for whom he had formed a new nose, by transplantation of skin from the forehead.

Dr. Robert Barnes then read a paper on

THE MANAGEMENT OF LABOUR CHARACTERISED BY DEFECTIVE UTERINE ACTION, AND THE COMPARATIVE VALUE OF ERGOT OF RYE AND GALVANISM IN OBSTETRIC PRACTICE.

The author opened his subject by stating, that in the range of obstetric practice there occurred a large class of cases charaterised by defective uterine action. Two questions immediately arose. 1st. What are the conditions of uterine inaction which call for interference; 2nd. What are the agents to be selected for the purpose of evoking the dormant energy of the organ. The first question was necessarily passed over, in order to direct special attention to the second. He adverted, however, so far to the first question as to point out the extreme difficulty of determining, in many cases, the causes of the existing inertia, and the consequent danger of misapplying the agents in use for inducing contraction. He then explained the peculiarities of the action of ergot, insisting upon its dangerous properties. He enumerated the bad effects it might produce upon the mother—rupture of the uterus and perinæum, laceration and consequent mischief of the os and cervix uteri, prolapsus of the uterus and bladder, the depressing effect upon the pulse, etc. Then the injurious effects upon the child—the frequency of still-born children in ergot labours. He related an interesting case in which he had had the opportunity of observing the effect of continued contraction in arresting the fœtal circulation. The author doubted whether the restrictions upon the use of ergot commonly recognised were sufficient. He urged the necessity of no longer employing an agent so uncertain, so uncontrollable, and so dangerous, the more especially as we possessed in galvanism a safe and efficient power adapted to every case in which ergot was considered to be necessary. The author then adverted to the various isolated writings upon the use of galvanism in obstetrics. He enlarged upon the advantages attending its use for the induction of premature labour, citing two original cases in illustration. He then considered its application in inertia-uteri accompanying the first and second stages of labour; then its use in the third stage in retention of the placenta and in hæmorrhage, citing cases of its successful employment. He next pointed out a variety of other cases in which galvanism might be most usefully resorted to, —in paralysis of the bladder following delivery, in arrested uterine action from chloroformisation, in the excitation of respiration in still-born children, in the expulsion of uterine polypi, in the evacuation of the uterus in case of hydatiginous placenta. The author then described the mode which he preferred in the administration of galvanism. He observed, that it was certainly inconvenient, and seldom necessary to adopt, the usual practice of applying one pole of the battery to the spine and one to the cervix uteri. The application of the discs, one on either side of the uterus, was sufficient. He observed that galvanism did not act by primary excitation of the spinal centre, but by direct stimulation of the muscular fibre. This effect was thoroughly obtained by passing the shocks through the uterus, by applying the poles one on either side of the abdomen, and no obvious advantage was gained by passing the shocks through the uterus by the spine. The electro-magnetic apparatus, constructed on the principles in ordinary use for medical purposes, was the best suited for obstetric use. He explained, that the efficacy of this form of apparatus was owing to the production of a rapid succession of shocks. The author concluded his paper by enumerating some of the principal advantages of galvanism as an agent for producing uterine contraction, adverting to the extensive range of cases admitting of its employment,—its perfectly manageable character, and its easy graduation and intermission,— its certainty and efficiency, its safety, the possibility of employing it successfully in cases of exhaustion where no other remedy could be used, and the fact that it did not preclude the resort to other means.

The leading point in the discussion was the degree of danger which attached to the exhibition of the ergot.

Dr. Mackenzie addressed himself chiefly to a consideration of the advantages of galvanism, both in obstetrics and in many uterine diseases depending upon general atonia, such as leucorrhœa and menorrhagia, in both of which classes of cases he had applied it with great benefit. He referred to four classes of obstetric cases to which it is applicable, two of which had been illustrated in Dr. Barnes's paper, by cases which had occurred in Dr. Mackenzie's practice, 1st to induce premature labour; 2ndly, in lingering labour; 3rdly, in cases of placenta prævia, when it stimulates the uterine action, and at the same time arrests the hæmorrhage; 4thly, in cases of hæmorrhage following parturition, and resulting from inactive uterus. He then gave the particulars of an interesting case, in which hæmorrhage having returned eighteen days after parturition, was effectually arrested by two applications of the galvanic battery.

Dr. Winn did not agree in Dr. Barnes's strictures on the use of ergot, since he believed that in many cases its exhibition is very proper. Moreover, since galvanism acts powerfully as a uterine stimulant, it is possible that it may be open to the same objection as ergot of rye, with the addition, that the introduction of the galvanic apparatus would excite alarm in the minds of many patients. Galvanism, however, had not been so successful in exciting uterine action as Dr. Barnes had intimated, since Dr. Simpson had found it to fail in eight successive cases.

Mr. Robarts, in a long experience of the use of ergot of rye, had come to the conclusion, that it has an injurious effect upon the life of the child, and therefore should be less frequently employed. He had, however, never observed any injurious effects produced upon the mother. He had not had any experience in the use of galvanism.

Mr. I. B. Browne had seen almost every kind of injury to the soft parts resulting from the improper administration of ergot of rye, but yet did not approve of the object of the author in seeking to remove it from the list of remedies. He believed that the surgeon had frequently administered it rather with a view of saving his own time, than of benefiting the mother, and, as a consequence, had destroyed the life of the child, induced sloughing of the soft parts, and brought on contraction of the uterus, with retention of the placenta. He would prefer the use of the forceps in cases requiring such a remedy as the ergot; but whenever he believed it right to employ the ergot, he preferred to give the etherial tincture. He believed that the introduction of galvanism was a step in the right direction.

Dr. Camps did not coincide in the views of the author with regard to the exclusion of ergot from practice, and believed it to be a proper remedy in many cases. Since nature had endowed it with specific properties, cases would no doubt occur in which those properties would be useful. With respect to the modus operandi of galvanism in exciting uterine action, he believed that it must be through the nerves, and not directly upon the muscular fibre.

Dr. Crisp recommended that galvanism should be, as ergot had been, submitted to the test of experience, when it would probably be found to have injurious as well beneficial powers. He thought that the case of premature labour, in which the membranes had been ruptured for some days, was no evidence of the action of galvanism, since, under such circumstances, labour would inevitably follow.

Dr. Chowne agreed with Dr. Crisp in reference to the case of premature labour, and in general considered that the ergot ought not to be banished from obstetric practice. He believed that its exhibition was open to many objections, and ought never to take place when the obstruction to the birth of the child was anterior to the child itself; yet it had retained its place as a valuable remedy, while others, equally recommended, had long since been forgotten. The only class of cases in which it should be used, are such as depend simply and purely upon defective uterine action; and even in such cases it would be well to follow Dr. Denman's advice, and exercise patience. As a rule, ergot ceases to excite the womb when the child has been expelled. He approved of the use of galvanism as an adjunct to other remedies, and especially in cases of hæmorrhage with flaccid uterus, but was not certain that so powerful a remedy would not be capable of yielding occasionally, injurious results.

Dr. Barnes, in reply, inferred from the discussion, that the use of ergot in practice is really diminishing, and that all had admitted the evils which have followed its administration. He had never known the galvanic battery to fail in exciting uterine action, and believed, that although it is a powerful remedy, it is one quite under our control. In explanation of its action in the case of premature labour referred to, he said that no pains had followed the rupture of the membranes, although two or three days had been suffered to elapse; but whenever the galvanic poles were applied, an immediate action of the uterus followed.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

Dr. James Arthur Wilson, President, in the Chair.

October 21, 1853.

The first ordinary meeting for the present session was held this evening. There was a considerable attendance of members, and several visiters.

CHOLERA AND THE RANELAGH SEWER.

The Committee appointed at the special meeting of the Society on the 7th inst. to memorialize the Home Secretary on the evils resulting to the district, in a sanitary point of view, from the disgraceful state of this sewer, reported that they had drawn up a Memorial, in compliance with their instructions, which had been signed by the President, on behalf of the Society, and forwarded to Lord Palmerston. A letter was read from the Hon. H. Fitzroy, acknowledging the receipt of the Memorial. These documents were ordered to be inserted on the minutes.

Dr. Fuller read a paper on

THORACIC ANEURISM, MORE ESPECIALLY IN REFERENCE TO DIAGNOSIS.

Its object was to show, that, when the disease does not show itself externally, the physical signs so commouly relied on are comparatively seldom present, and when present are apt to be fallacious; whereas certain general symptoms, though of a negative character, and hardly sufficient when taken separately to excite suspicion of aneurism, together afford almost conclusive evidence of its existence. Dr. Fuller began by directing attention to the physical diagnostic marks of the disease as laid down by Dr. Hope and other writers, and then proceeded to show by statistical reference to 23 cases (12 of which have been recorded by Dr. Greene, of Dublin, and 11 of which Dr. Fuller has himself had the opportunity of observing in St. George's Hospital) that the existence of those marks are by no means so constant and obvious as was asserted by Dr. Hope. In 6 only out of Dr. Fuller's 11 cases was a pulsation perceptible; in 4 only was there the slightest purring tremor, and in 7 only was there any murmur; while 4 of Dr. Greene's cases presented no pulsation, and six were unattended by murmur. In all these cases, the existence of aneurism was suspected during life, and most careful and repeated stethoscopic examinations were made by many gentlemen well versed in the use of the stethoscope with the view of obtaining some confirmation of the diagnosis, so that the non-discovery of pulsation or murmur was not attributable to any want of zeal in searching for its existence. The general symptoms on which Dr. Fuller laid most stress are cough, with occasional hæmoptysis, dyspnœa, wheezing, alteration of the voice, difficulty in swallowing, hæmatamesis, pain in the back, and modification of the arterial pulse. The peculiarities presented by each of these symptoms were referable to aneurism, and the combinations in which they occur were clearly pointed out; and it was shown, that when carefully watched from day to day, they afford almost irresistible evidence of the existence of the disease in question. The paroxysmal character of the cough, dyspnœa, and wheezing,—the strange and rapid variations in the degree of dysphagia, and in the character of the voice,—the intensity of the pain in the back, the relief afforded to all these symptoms by free venesection, by copious hæmorrhage, and by change of posture,—their occurrence without any obvious exciting cause, their independence of external agencies, and their existence without any mark of malignant or scrofulous disease, were the points most insisted on by Dr. Fuller as indicating their dependence on some pressure from within the chest, and on aneurismal rather than on any other sort of pressure. The phenomena arising from obstructed thoracic circulation, turgescence of the superficial thoracic veins, or of the veins of one or both upper extremities, accompanied by œdema, and more rarely by paralysis, were glanced at, but not discussed; nor were the signs obtained by percussion, and by the non-expansion, or by the imperfect or irregular expansion of certain portions of the chest walls. These were omitted, as simply indicating the presence of some foreign matter within the chest, but affording no precise information as to its nature. The phenomena connected with disturbance in the centre of circulation, and those referable to interference with the cerebral circulation—the sudden startings at night—the frightful dreams—the occasional syncope, though valuable as accessory to, and confirmative of, other more characteristic symptoms, were not considered sufficient of themselves to excite suspicion as to the real nature of the mischief, and were, therefore, dismissed with a brief notice. A case was quoted, in which a mass

of malignant disease pressing behind upon the aorta, and pointing in front between the second and third ribs, on the right side of the sternum, gave rise to an imperfectly-defined tumour, pulsation, a distinct purring tremor, and a loud murmur, and was mistaken by all who saw it for an aneurism. Dr. Fuller fully admitted the value of the physical signs of the disease, but quoted this case as one of several which he had met with, to show, that, when viewed irrespectively of the general symptoms, the physical signs are apt to be fallacious. In this case none of the usual general symptoms of aneurism were altogether absent. Dr. Fuller concluded by admitting the extreme value of the stethoscopic signs of the disease, and expressing a fear, that their very importance sometimes leads to the neglect of the general symptoms, which, under certain circumstances and in certain instances, afford information the stethoscope cannot. This error statistical reports can alone correct, and the object of Dr. Fuller's paper was to assist in doing so.

Dr. Aldis related the particulars of a case, which bore out Dr. Fuller's statement, that the absence of stethoscopic signs in cases of thoracic aneurism occasionally occurred. In this instance the aneurismal sac was very large. He also remarked, that other diseases, as bronchitis, might, and did, mask the proper stethoscopic signs of aneurismal disease.

Dr. Cumming, Dr. Murphy, and the President, made observations on many of the points alluded to in Dr. Fuller's Paper.

The Society adjourned, at ten o'clock, to Friday, November 4, when Dr. Murphy will read a Paper "On Convulsions."

UNIVERSITY OF ST. ANDREWS.

MEDICAL EXAMINATION PAPERS.

OCTOBER, 1853.

EXAMINATION.

TRANSLATE FROM LATIN.

CHEMISTRY AND MATERIA MEDICA.

1. What compounds would result from mixing solutions of the following substances:—Nitrate of barytes and sulphate of soda; nitrate of silver and chloride of sodium; oxalate of ammonia and chloride of calcium?—2. What are the natures of the vinous and acetous fermentations?—3. What are the latest views of the chemical nature of bile, and what is the best chemical test for bile?—4. Name and state the chemical composition of the substances commonly employed as caustics. For what purposes is this class of preparations employed?—5. What preparations of potash are employed in medicine? State their respective uses and doses.—6. In what form does mercury exist in calomel, corrosive sublimate, white precipitate, blue pill, and grey powder? Describe the principal uses of mercurial medicines. 7. Write a Latin prescription, without using abbreviations, for a tonic draught or mixture containing the tincture of muriate of iron and some vegetable bitter.

SECOND EXAMINATION.

ANATOMY AND PHYSIOLOGY.

1. Describe the anatomy of the skin.—2. Describe the knee-joint.—3. What is the arrangement of the arteries in the palm of the hand?—4. Describe the origin and distribution of the different bloodvessels that enter and leave the liver.—5. What is the average weight of the brain in each sex? When is it supposed to attain its maximum? Name the parts forming the boundaries of the lateral ventricles.—6. What are the functions of the saliva, gastric juice, pancreatic fluid, and bile, in relation to digestion? Describe the glands which secrete the gastric juice.

THIRD EXAMINATION.

[N.B.—In answering the practical questions, the Examiners require every candidate to specify the mode of treatment he is in the habit of adopting, and the doses of the medicines which he prescribes.]

PATHOLOGY AND THE PRACTICE OF PHYSIC.

1. What are the different modes of dying? Specify the symptoms that present themselves in each case, and give one or more examples of each mode of death.—2. What is meant by fatty degeneration? What organs are most liable to this change, and what is the general line of treatment that is indicated in such cases?—3. Describe the causes, symptoms, and treatment of amaurosis. In what cases would you form a favourable, and in what an unfavourable prognosis?—4. What is meant by meningitis, and what by encephalitis? Describe their symptoms, treatment, and anatomical characters.—5. Describe the symptoms and treatment of aneurism of the thoracic aorta.—6. How do you distinguish ovarian dropsy from ascites? What are the leading principles of treatment in the former affection?—7. Describe the symptoms of epidemic cholera; and state the mode of treatment you would adopt.

FOURTH EXAMINATION.

SURGERY.

1. Describe the different dislocations of the hip-joint, and the treatment appropriate to each.—2. Enumerate the various fractures of the radius, and the causes of displacement to be guarded against in each.—3. Give an account of the mode of performing resection of the elbow-joint.

MIDWIFERY.

4. Give a full account of the diagnosis, the dangers, and the entire management of the different breech presentations.—5. Enumerate the different diseases, febrile, inflammatory, or nervous, which have been confounded under the name of puerperal fever, with the diagnosis and principles of treatment proper to each.

MEDICAL NEWS.

OXFORD UNIVERSITY.—The Ashmolean Society held a meeting at the Museum, on Monday, when a communication on the arrangement of the air-cells in aquatic plants was made to the Society by Mr. Masters, Curator of the Fielden Herbarium.—In a Convocation held on the 27th ult., the degree of M.A. was conferred on Mr. John Phillips, the Deputy-Reader in Geology designate.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 28th ult.:—

BOND, F. T., Hon. East India Company's Service, Bombay.
COLEMAN, JOHN MAJOR, Wolverhampton.
DUNCAN, THOMAS, Chelsea.
EUSTACE, RICHARD, Royal Navy.
HALL, THOMAS PRIOR, Knaresborough, Yorkshire.
PACKARD, JOSEPH, Yoxford, Suffolk.
POWELL, THOMAS JOSEPH COOKSON, Bristol.
THOMAS, WILLIAM WILLIAMS, Fishguard, Pembrokeshire.
WRIGHT, JOHN, Mountsorrell, Leicestershire.

At the same meeting of the Court, Mr. CHARLES HARPER passed his examination for naval surgeon; this gentleman had previously been admitted a member of the College, his diploma bearing date July 2, 1849.

THE FELLOWSHIP.—The following are copies of the questions submitted to the candidates who presented themselves for examination at the College of Surgeons on Tuesday and Thursday: Senior candidates Anatomy:—1. Describe the ankle-joint, and the tendons and arteries which pass exteriorly to it, with their relative positions. 2. Describe the process of inspiration and expiration, and the means by which they are respectively performed. 3. Trace the femoral artery throughout its course; mention its relation to surrounding parts, the branches which it distributes, and their communications. 4. Describe the nerves which are distributed to the face, and mention their functions. 5. Describe the form, connexions, and structure of the male urethra. 6. Describe the structures of the parts which lie in front of the elbow-joint, with their relations to each other. Junior candidates:—1. State what changes take place in the food during the several processes of digestion, and the means by which they are produced. 2. Describe the minute anatomical structure of the skin, and give an account of its functions. 3. State the relations to each other of the structures between the ramus of the lower jaw and ear, and between the skin and pharynx. 4. Describe the lachrymal apparatus, together with the muscles, arteries, veins, and nerves which are within the orbit. 5. Describe the upper opening of the chest, and the relations to each other of the structures which pass through it. Describe also the origin, course, and distribution of the nerves which supply the heart. 6. Describe the minute anatomical structure of the different parts which compose the knee-joint. The following are the questions in Surgery and Pathology. No. 1 for senior candidates:—1. To what injuries are the intestines liable; and by what symptoms are the injuries severally distinguished? Describe the proper treatment of each kind of injury, both when attended and not attended by division of the abdominal parietes. 2. Describe the various tumours met with in the nose. State their characters and treatment. 3. Describe the consequences liable to ensue from various kinds of wounds of the knee-joint. Explain the modifications of treatment that may be required at the commencement, or in the progress of a case. 4. What are the pathological conditions which precede or attend senile gangrene? 5. Explain the processes by which simple and compound fractures of the bones are united, and the causes which retard or prevent osseous union. 6. Describe the operations which may be required in different cases to relieve obstructed respiration, and the pathological conditions which are produced by such obstruction. No. 2 for junior candidates:—1. Describe the processes by which

wounds are healed. 2. What are the ascertained pathological conditions which attend traumatic tetanus? 3. State the reasons which may be adduced for or against opening the sac in operations for the relief of strangulated hernia. 4. Describe the effects liable to occur from exposure of the body, or parts of the body, to low degrees of temperature, and what treatment is proper to prevent death or local mortification from taking place. 5. Describe the nature and treatment of the various injuries which are liable to occur at or near to the ankle-joint. 6. Explain the symptoms and treatment proper to be pursued in diseases of the hip-joint.

MARISCHAL COLLEGE AND UNIVERSITY, ABERDEEN.—On the 20th inst, Medical Degrees were conferred on the following candidates, after the usual examinations, viz., the degree of Doctor of Medicine on James Valentine Browne, Professor in Queen's College, Galway; William Lindsey Emmerson, Northumberland; Samuel Palmer Goddard, Staffordshire; George Ireland Russell, Kent; Courtland Skinner Shaw, Cheltenham; John Henry Walker, Kent. The Degree of Bachelor of Medicine on Pierre Eloy Bachelet, London; Charles William Whitby, Devonshire. At the same time, the degree of Doctor of Medicine was conferred on William Stewart, Mull, Argyleshire, M.B. of this University. And the following were declared to have undergone and passed part of their examinations for Medical degrees:—John Charles Campbell, Aberdeen; William Milne Troup, Aberdeen.

APPOINTMENTS.

MEDICAL.—John Hilton, Esq., F.R.S. and F.R.C.S., Surgeon to Guy's Hospital, etc., has been appointed Consulting-Surgeon to the St. Pancras Royal General Dispensary, vacant by the decease of the late Bransby B. Cooper, Esq.

MILITARY.—West Indies: The undernamed Medical Officers, at Chatham Garrison, were under orders to embark on the 2nd inst. for the West Indies:—Staff Assistant-Surgeon W. B. Wallis, J. Polson, and Mr. R. Ross; Assistant-Surgeon Tobin, 36th Foot, to join his corps at Trinidad; Surgeon White, 47th Foot, for Malta; and Assistant-Surgeon Frazer, 2nd W.I. Regiment, to proceed to Demerara.—22nd Foot: Assistant-Surgeon James Coghlan, from the 86th Foot, to be Surgeon, vice Currie, appointed to the 70th Foot; 70th Foot: Surgeon Samuel Currie, M.D., from the 22nd Foot, to be Surgeon, vice Harvey, deceased; 86th Foot: Assistant-Surgeon Francis Lewis Fitzgerald, from the Staff, to be Assistant-Surgeon, vice Coghlan, promoted in the 22nd Foot; 1st West India Regiment: Humphry John Gillett Atkinson, gent., to be Assistant-Surgeon, vice Harris, deceased; 3rd West India Regiment: Frederick William Moore, gent., to be Assistant-Surgeon, vice Griffith, deceased. Hospital Staff: Duncan Alexander Campbell Fraser, M.D., to be Assistant-Surgeon to the Forces, vice Fitzgerald, appointed to the 86th Foot; John Eldon Young, M.D., to be Assistant-Surgeon to the Forces, vice Davidson, appointed to the 87th Foot.

NAVAL.—Surgeon Philip Toms, M.D. (1834) to the Royal George, 120, screw steam-ship, at Sheerness. Surgeon John J. D. Burns, M.D. (1842), Surgeon of the Unité convict hospital-ship at Woolwich, has rejoined from leave of absence, having proceeded to Edinburgh to pass the Royal College of Physicians after the usual examination, which was satisfactory, and he passed accordingly. Surgeon James C. Walsh (1848), to the Frolic, 16, sloop, at Portsmouth. Assistant-Surgeon George B. Newton (1852), acting in the Bittern, 12, sloop, on the East India station, is confirmed as Assistant-Surgeon to that vessel. Assistant-Surgeons: Herbert H. Mackarsie (1839), to the Rifleman steamsloop, at Woolwich; Charles B. Wood (1847), from the Royal Hospital, Plymouth, to the Juno, 26, at Chatham; and Charles E. Playfair (1851), to the Royal Hospital, Plymouth, vice Wood. Surgeon Philip Toms, M.D. (1834), to the Royal George, 120, screw steam-ship, at Sheerness.

BEQUEST.

KING'S COLLEGE HOSPITAL.—William Pain, Esq., of Feltham, Middlesex, has bequeathed the sum of 1500*l.* to this charity.

DEATHS.

RENWICK.—Oct. 24, aged 31, J. J. Renwick, Esq., late Surgeon of the Royal West India Mail Company's ship, the Dee, son of the late W. H. Renwick, Esq., of Canterbury.

ATTWOOD.—April 7, on board the Albemarle, on her passage to Sydney, N.S.W., John Attwood, Esq., Surgeon, son of the late Abraham Attwood, Esq., of Southampton.

M. ARAGO.—A Committee is in course of formation in France to promote the erection of a statue to this distinguished *savant*.

THE LATE B. B. COOPER, ESQ.—The personal effects of this distinguished surgeon have been sworn under 6,000*l.*

THE LATE DR. MACGILLIVRAY.—A MS. work on the Natural History of Balmoral and its Neighbourhood, by the above lamented gentleman, has been purchased from the executors by Prince Albert.

THE LIBRARY OF DR. WRIGHT, of Birmingham, is to be sold in London by auction, on November 14, by Messrs. Sotheby and Wilkinson.

AT THE ENTOMOLOGICAL SOCIETY, Oct. 3, Dr. Lankester exhibited some aphides from Newcastle, which had been sent to Dr. M'William, and by him referred to the Epidemiological Society. The aphides were accompanied by a letter from a medical man at Newcastle, who stated that they abounded in Newcastle previous to the appearance of the cholera in that town. The President and members present were not acquainted with the species. (On examination, subsequent to the meeting, these were found to be *aphis pumicis*, one of the commonest species, feeding upon a great variety of plants, and having no particular connexion with Newcastle, nor could it be supposed for a moment with the cholera. At this period of the year the winged females migrate often in large swarms; and the hot, humid, and stagnant state of the atmosphere noticed at Newcastle at the time of the cholera would afford favourable conditions for their development, and being observed. Swarms of aphides have often been seen in various parts of the country, and brought under the notice of the Society.)

SCARLET FEVER has been very rife of late at Holmfirth, particularly at Underbank.

WEST INDIES.—At Jamaica, the yellow fever had disappeared. At Montserrat, yellow fever was still prevalent, although not so bad in effect. At British Guiana the weather was extremely hot, and fever pretty general, but in its worst type, yellow fever, it was almost altogether confined to the shipping and to the Colonial Hospital. Small-pox has been prevalent, but its ravages have only in rare cases destroyed life or disfigured the complexion.

BAVARIA.—MUNICH, Oct. 23.—The subjects of the Pacha of Egypt, who study medicine, surgery, and military sciences at Munich, have been recalled by order of the Pacha.

CAUTION TO UNQUALIFIED MEDICAL PRACTITIONERS.—On Monday an inquest was concluded on a child named Castle, aged 10 years, whose death was attributed to severe chastisement at the hands of a teacher. She became so ill that the mother applied to a neighbouring chemist, who prescribed for deceased. Deceased continued to get worse, when the mother, becoming alarmed, called in Mr. Hutchinson, surgeon, who, upon his arrival, found it a hopeless case, as he was called in too late, and deceased died from inflammation of the brain. The Coroner, in summing up, observed, that, according to evidence, there was not the slightest charge of unnecessary violence towards the deceased; but he considered that a chemist who undertook the responsibility of prescribing was guilty of a very grave social offence.

KITCHEN CONDIMENTS.—A servant girl at Edinburgh has been poisoned by tasting some "Quintessence of Ratafia" used by her mistress for flavouring a shape of arrowroot. The *post-mortem* revealed that she had taken prussic acid under the above dangerous designation.

SUICIDE DEFEATED BY A DRUGGIST.—A woman, in an excited state, went into the shop of Mr. Entwisle, druggist, Darwen, and asked for some prussic acid. Suspecting her object, the druggist gave her some carbonate of soda, which the woman swallowed on reaching home. She then bade her children good bye, told them she had swallowed poison,—and lived.

ZOOLOGICAL GARDENS.—A murrain appears to have seized the snakes in this collection. Day after day have the noble specimens of pythons, boas, and others, succumbed to a disease in the mouth, which seems to have affected nearly all of them.

PROCURING ABORTION.—Henry Scott, *alias* Hamilton, was convicted on Monday of an indecent assault upon a young woman who had applied to him for advice. Mr. Parry, for the prosecution, called the notice of the Court to the fact, that the prisoner was a complete impostor; the advertisements put forward by him were a false pretence, as he styled himself "Dr. Hamilton, of the Royal College of Surgeons," when he was not a surgeon, and neither was that his name. In cross-examination, the witnesses to character all admitted they did not know he was an advertising surgeon. The prisoner said the reason he practised under the name of Hamilton was because Dr. Hamilton was formerly his partner, and the firm was known by that name. He had studied medicine and had walked the hospitals, but had not sufficiently completed his studies to entitle him to his diploma. He was sentenced to twelve months' imprisonment in the House of Correction.

MORTALITY NOTABILIA.—The number of deaths from all causes registered in the week that ended on Saturday, October 29, was 1144, exhibiting an increase of about a hundred on the first three weeks of October. In ten corresponding weeks of the years 1843-52 the average number was 974, which, if raised in proportion to increase of population, becomes 1071. There is, therefore, an excess of 73 in the present return on the corrected average, arising chiefly from cholera.

Births.—Last week the births of 817 boys and 800 girls, in all 1617 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1400.

DEATHS *in the Metropolis for the week ending Saturday, October 29, 1853.*

Causes of Death.	Oct. 29.				Sum of Ten Weeks.
		15	60	All Ages.	
All Causes	579	382	170	1144	9744
Specified Causes	575	382	170	1129	9676
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	225	91	28	344	2427
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	1	33	11	45	457
3. Tubercular Diseases	61	105	3	169	1069
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	47	39	22	108	1075
5. Diseases of the Heart and Blood-vessels	7	17	10	34	352
6. Diseases of the Lungs and of the other Organs of Respiration ...	130	35	34	200	1527
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	18	26	8	52	570
8. Diseases of the Kidneys, etc. ...	...	7	5	12	101
9. Childbirth, Diseases of the Uterus ...	...	8	...	8	127
10. Rheumatism Diseases of the Bones, Joints, etc.	1	3	3	7	76
11. Diseases of the Skin, Cellular Tissue, etc.	...	...	...	...	18
12. Malformations	4	1	...	5	34
13. Premature Birth and Debility ...	35	3	...	38	232
14. Atrophy	30	...	5	35	212
15. Age	...	...	36	36	464
16. Sudden	2	3	...	5	95
17. Violence, Privation, Cold, and Intemperance	14	11	5	31	240
Causes not Specified	4	...	...	15	68

BOOKS RECEIVED.

The Science and Art of Surgery. By John Erichsen, Professor of Surgery in University College, &c. Pp. 952. London. 1853.

Statistical Report of the Epidemic Cholera in Jamaica. By John Parkin, M.D. London: Allen. 1852.

De l'Emploi du Cuivre comme Moyen Preservatif et Curatif dans le Cholera Asiatique. Par le Dr. Escallier. Paris. 1853. [A homœopathic publication, unworthy of notice.]

The Prevention and Treatment of Disease in the Potato and other Crops. By John Parkin, M.D. London. 1847.

The Remote Cause of Epidemic Diseases. By John Parkin, M.D. Part II. London. 1853.

The Cause of Blight and Pestilence in the Vegetable Creation. By John Parkin, M.D. London. 1846.

A Lecture Delivered in the School-Room at Stratford. By W. Hawes, Esq. London. 1853.

Observations on the Promotion of Institutions of Science and Art. By H. Cole, C.B. London. 1853.

Asiatic Cholera: the Symptoms, Pathology, and Treatment, &c. By Richard Barwell, F.R.C.S.E. Pp. 219. London. 1853.

Wittstein's Practical Pharmaceutical Chemistry. By Stephen Darby. Pp. 624. London. 1853.

Introductory Lecture at the Charing-cross Hospital. By F. W. Headland, B.A., &c. Pp. 22. London. 1853.

The Pharmaceutical Journal. No. V.

An Expository Lexicon of Terms in Medical and General Science. By R. S. Mayne, M.D. Part I. London. 1853.

Highley's Library of Science and Art.—The Microscope. By Dr. Hermann Schaeht. Pp. 182. London. 1853.

The National Temperance Chronicle. No. 29. London.

Transactions of the Pathological Society of London. Vol. IV. Pp. 286. London. 1853.

A Manual of Obstetrics. By T. F. Cock, M.D. New York.

The Clergy and Homœopathy. Four Letters by a Member of the Royal College of Physicians. London. 1853.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

Sir,—The enclosed placard is posted all over the town, and the railway terminus, and there is a similar notice from Mr. Hearne. Can you tell us what is the meaning of half of the letters in the alphabet after these cholera doctors' names?

Your notice of these gentlemen will oblige.

Southampton, October 30, 1853. I am, &c. Quack.

"Just published! Sold here!

"CHOLERA; Its Causes, Prevention, Non-Contagiousness, and Treatment, Showing the Effect of Electricity on the Animal Economy, as productive of Epidemics generally.

"By M. J. MAC CORMACK,

"A.B., M.B., T.C.D., M.R.C.S.L.,

"Shirley, Southampton.

"Price 1s.; by Post, 1s. 6d. Printed and Published by M. H. Devenish, 18, Above Bar, Southampton. Sold by all Booksellers."

[To the Editor of the Medical Times and Gazette.]

Sir,—I shall esteem it a favour if you will inform me in your "Notices to Correspondents," of the exact curriculum of study required by the University of Leyden for the Doctorate in Philosophy; also of the length of the examination, which I believe is conducted in Latin, and the length of residence and probable cost; or, if you cannot, perhaps you can put me in communication with a party who will inform me. I applied to Dr. Cooke, of the Institute, some time ago, but he declined to tell me, except I engaged to study with him for the degree. This I did not like to do until I was in a position to judge the likelihood of my having time to prosecute the course of study necessary, as I am a Surgeon in active practice. Please also to tell me which is the most respectable University next to Leyden for the same degree. I am, &c. A Subscriber.

22nd Oct., 1853.

All foreign degrees will be equally worthless when the new Medical Reform Bill passes.

[To the Editor of the Medical Times and Gazette.]

Sir,—In order that Surgeons in the Militia may not be deprived of the valuable services of the Assistant-Surgeons in their respective regiments, I beg to refer them and the Militia Surgeon (whose letter appears in your Number, Oct. 22) to page 6, paragraph 6, in the "Queen's Regulations."

(Copy.)

"In instances where the Assistant Surgeons of the Militia or Fencible Corps hold at the same time commissions as subaltern officers, they are required to do duty only in their Medical capacity."

This information is intended to be equally useful to the Assistant-Surgeons themselves. I am, &c., An Officer of Militia.

Oct. 29, 1853.

"*A Wretched Sinner, age* 18," should apply to any medical man of respectability in his neighbourhood. If unable to pay a medical man, he had better apply at the nearest hospital. By all means avoid the advertising quacks.

James T.—We have not yet heard of a Society which exactly furnishes what you require.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have only just seen the announcement in your Journal of the 1st inst., that Mr. T. M. Stone, so long known as the efficient and zealous Librarian of our College, has been removed from that department to another in the same Institution, after "more than twenty years' faithful services." I will not presume to criticise the object of the Council in making this alteration, but I think the visiters to the excellent library of that Institution will be glad of this opportunity to present Mr. Stone with some testimonial of their approbation of his conduct, which I have on several occasions heard spoken of in terms of deserved commendation; and I beg to remind you, that, some years since, the following just tribute was paid to this gentleman in Vol. VI., p. 170, of your greatly-improved Journal:—"We feel, however, less sympathy for him, than for the mild, unassuming, gentlemanly, and well-informed assistant, Mr. Stone, jun. This intelligent young man is a universal favourite. A little courtesy more than common walks into men's hearts, without knocking at the door." This opinion of the "Medical Times," in 1842, is equally deserved by Mr. Stone at the present time; and I shall be most happy to co-operate with any gentleman to receive subscriptions for the desired object, or at once to forward mine to you, if you will take upon yourself the trouble.

I am, &c. Joseph Luke, M.R.C.S.E.

Claremont-square, Pentonville, October 31, 1853.

Mr. Bransby Francis, of Norwich, has forwarded us a beautiful photographic picture of an enlarged prostate, and a bladder containing 14 calculi, or rather 3 whole ones and 3 broken into several pieces, and much worn away since fracture. We have great pleasure in calling the attention of the Profession to this simple means of taking and multiplying drawings of disease.

Mr. Hinder can obtain the instrument he requires from Pillischer, New Bond-street, or Bland and Long, Fleet-street. We shall be happy to receive the other papers. The first has arrived safely.

Mr. Webb's case of Tracheotomy shall be published shortly.

A Surrey Subscriber will find the investigations he speaks of on chloroform in the works of Dr. Snow and Dr. Simpson.

A Student.—We heard the report, that the College of Surgeons of Edinburgh had refused to receive certificates from Dr. Knox, and that they have written to the London College on the subject. We have also heard that certain false certificates have been the reason for the conduct of the Edinburgh College. The Course to be adopted by the London College has not yet been made known.

S. L.—We have seen the violent attack in the "Morning Chronicle" upon the medical officers of the Middlesex Hospital, but do not notice it until we have some medical report of the case of the man whose treatment was complained of.

S. D. W.—We shall be happy to hear again from our Correspondent at Bermuda, although we were unable to publish his last letter.

The continuation of *Dr. Ranking's* paper has been received.

Mr. Pretty's letter on Sulphuric Acid in Cholera has been unavoidably delayed until next week.

COMMUNICATIONS have been received from—

Secretary of Geological Society; Dr. Holland, Cork; Dr. Duncan; J. Parkin, Esq.; Secretaries of Royal Medical and Chirurgical Society; Messrs. Brown and Gibb, Newcastle, two communications; Henry Cole, Esq., C.B.; General Committee of Baths and Wash-houses; Dr. Moriarty, Dieppe; Messrs. Trubner; Messrs. S. and W. Wood, New York; Secretary of Pathological Society; Dr. Borrett, Yarmouth; John Wiblin, Esq.; Honorary Secretaries of Epidemiological Society; W. R. Wilde, Esq., Dublin; Dr. Holland, Cork; Dr. Collier; Dr. Seaton; Dr. Priestley; Quack; A Subscriber; An Officer of Militia; A Wretched Sinner; James T.; Mr. Bransby Francis, of Norwich; Mr. Luke, of Pentonville, &c.

ORIGINAL LECTURES.

CLINICAL LECTURES
ON THE
RELATION OF RENAL DISORDERS TO DISORDERS OF THE STOMACH, AND TO OTHER ACUTE AND CHRONIC DISEASES.

By H. BENCE JONES, M.D., F.R.S.
Physician to St. George's Hospital.

Lecture III.

ON SO-CALLED CHYLOUS URINE.

In the two preceding lectures I have pointed out the effect of some acute diseases upon the renal secretion, chiefly illustrating the causes and consequences of congestion of the kidney. In cholera, scarlet fever, delirium tremens, and injury of the spinal cord, the effect on the urine was produced by these diseases affecting in different ways the circulation of the blood in the kidney. To say that the congestion arises from an effort to throw out a poison by the kidneys, is not to me more satisfactory than it would be to assert that the inflamed eye or ear, after scarlet fever, is caused by scarlet fever poison passing off by these organs. I am more satisfied with the explanation, that a state of blood prone to congestion and inflammation (excess of fibrin and diminished blood-globules) exists, and that, whether the congestion begins here or there, is determined by the slightest causes; thus, even in injury of the spinal cord, in which any poison is out of the question, the congestion may begin in the kidneys, the bladder, the bowels, the lungs, or the skin, and it may pass into violent inflammation of this or that organ; while, in a few cases, no congestion of any organ may occur.

In chronic diseases, also, it appears to me certain that an altered condition of the capillaries of the kidney gives a better explanation of the phenomena observed in the urine than is obtained by the doctrine of the elimination of a hypothetical poison. The disease which gives rise to the phenomenon of so-called chylous urine, in its causes, effects, and treatment, is, perhaps, the best example of the results of chronic congestion that can be brought before you; and, though it is but rarely met with, yet it will form, with the diseases which I have already brought before you, the best introduction to the causes and symptoms of Bright's disease.

Here is a specimen of the so-called chylous urine, given to me by a patient yesterday, who for twenty-five years has passed this milky fluid, containing even more albumen than is ordinarily met with in Bright's disease, and yet she has long ceased from trying to obtain medical relief. The close examination of such cases clearly proves that, except in the presence of the minutely divided fatty matter, which appears only when the chyle passes into the blood, there is no connexion between this disease and chyle, but that it depends on congestion of the kidney, which causes albumen, fibrin, and blood-globules to pass out in the urine, and reduces considerably the specific gravity of the secretion, by preventing the elimination of other substances. Hitherto I have not been able to make any microscopic examination of the kidney in this disease, nor am I able to refer you to any published account of the exact state of the kidney; still the remarkable variations of the disease, the medicines which make it better, and the causes which make it worse, point to a slight but decided change in the capillaries of the kidney (perhaps in the capillaries of the mammary processes), whereby, as in a filter, when the weight of fluid is too great, some substances are allowed to pass through which would be retained if the filter were stronger.

Of the four cases which I have seen of this disease, two have been under the most careful observation. You see here the records of the appearance of the urine each time it was passed day and night for three years, during which all kinds of diet, exercise, and medicine were tried. In the "Philosophical Transactions" for 1850, and in the "Medico-Chirurgical Transactions" for the same year, you will find a detailed account of this case. My object now is to show you, 1st, that congestion takes place and causes albumen to pass off in the urine before any food has been eaten; 2ndly, that the effect of this congestion is also to diminish the specific gravity of the urine; and, thirdly, to dwell on the remedies for the disease.

If you look at these Tables, you will find that the urine first passed each day is always the clearest, least like the specimen on the table. Very frequently, before getting up, no trace of albumen could be found by any chemical test, nor by the most minute microscopical examination could the urine be distinguished from perfectly healthy secretion. By causing the patient to get up before he had taken anything to eat, the urine became highly albuminous, and sometimes fibrinous to such a degree that the liquid gelatinized on standing, while, by the microscope, blood globules could be detected in considerable quantity. At the same time, the specific gravity was reduced eight or even twelve degrees.

The amount of albumen was comparatively determined by precipitating the urine by alcohol. This does not give the albumen directly, because the sulphates are at the same time precipitated.

The following examples of the state of the urine before food will show the increase of the albumen and the decrease of the specific gravity:—

Urine passed at	Precipitate with Alcohol. Per 1000 grs. urine.	Specific Gravity.
7.15 a.m., on getting up, gave scarcely a trace of albumen	0·8 grs.	1027·
9.50 a.m., just before breakfast, opalescent; coagulated to solid	14·1 ,,	1015·6
11 a.m, after breakfast, perfectly milky	14·5 ,,	1013·4
Another day—		
6 a.m., on getting up, urine clear; no trace of albumen	1·6 ,,	1026·4
7.30 a.m., before breakfast, opalescent	11·9 ,,	1018·8
Another day—		
6·35 a.m., on getting up, yellow, milky	3·6 ,,	1026·6
8·10 a.m., before breakfast, more milky, with large pinkish coagula	16·58 ,,	1016·4

I frequently determined beforehand whether the urine before breakfast should be albuminous or free from albumen, by directing the patient to get up and move about early, or to keep very quiet in bed; and by keeping him in bed all the day, the urine throughout the whole day was very slightly albuminous.

The following conclusions are given in the "Philosophical Transactions":—

1. That so-called chylous urine may contain fat, albumen, fibrin, and healthy blood globules.

2. That although the fat passes off in the urine after food is taken, yet the albumen, fibrin, and blood globules are thrown out before any food has been taken. During perfect rest the albumen ceases to be excreted, and it does not appear in quantity in the urine even after food is taken, provided there is perfect rest. A short time after rising early, the urine may coagulate spontaneously, although no fat is present in perceptible quantity, and this may happen previous to any food.

3. Though the urine made just before and a short time after bleeding was as milky as usual in the afternoon, yet the serum of the blood was not milky. It did not contain a larger quantity of fat than healthy blood does.

In another case, in which I have a record of the appearance of the urine each time it has been passed from the 13th of May to April 26, the urine has been clear without exception in the morning of every day. It has become more or less frequently thick at noon, and very thick in the afternoon and at bed-time. No trace of albumen has been present in the morning; while much albumen, and even blood-globules, have been perceptible in the water passed at other periods of the day.

In neither of these cases have I detected any fibrinous casts of the tubes; and hence I have conjectured, that the congestion affects the mammary processes of the kidney, rather than the cortical structure.

I pass on now to the effect of remedies on this congestion. In the "Medico-Chirurgical Transactions," the following

table of the effect of remedies in the first case is given in 1000 observations :—

	Chylous and Albuminous in different degrees.	Healthy.
1. On animal food	968 times.	32 times.
2. On vegetable food	910 ,,	90 ,,
3. Pressure by a loose belt	667 ,,	333 ,,
4. Pressure by tight belt	638 ,,	362 ,,
5. While taking matico	474 ,,	526 ,,
6. While taking gallic acid	17 ,,	983 ,,
7. After gallic acid	0 ,,	1000 ,,

The gallic acid was taken for twenty-four days in drachm doses, and decreased during the next twenty-nine days; it was diminished to fifteen grains, after which it was left off. The patient remained perfectly well for six months, with the exception of two days. The congestion then returned for a week, but again yielded to gallic acid; and for eight months the urine was perfectly healthy every time it was passed. A most intractable relapse then occurred, which lasted nearly five months. The gallic and tannic acids were taken; the first to the amount of twenty-five ounces in six months, the latter to the amount of two ounces. Two drachms of gallic acid in the day caused no unpleasant symptoms, while half a drachm of tannic acid caused nausea and headache. Ultimately, the albumen entirely disappeared. The urine remained healthy for six months, when the record ceased, in consequence of the patient's departure to the West Indies.(a)

In the other case, which has for nearly a year been under my observation, a drachm of gallic acid was at first taken daily; this was soon increased to a drachm and a-half, and then two drachms daily, and after about two months three drachms of gallic acid were taken each day. The urine was occasionally for a day or two made healthy; no inconvenience was experienced from this dose; on changing it for a drachm of tannic acid daily, the patient was made "exceedingly uncomfortable," "painfully sick at the stomach," and he could not continue taking more than half a drachm in the course of the day. The tannic acid also occasionally made the urine healthy for a day, but after about three weeks the gallic acid was resumed in three drachm doses on account of the nausea produced by the tannin. It was continued for a fortnight without improvement, when tannate of alumina was given, about a scruple dissolved in very dilute sulphuric acid,—about three drops of acid in an ounce and a half of water. Here is this mixture, in which, as you see, the tannate of alumina is by no means perfectly dissolved. It had, however, a very decided effect on the urine on the fourth day. On the eighth it was perfectly clear. Afterwards, by dissolving a drachm of tannic acid and a drachm of alum, in three ounces of distilled water, a very much clearer and equally efficacious mixture was obtained; this was diluted with water, and taken daily in decreasing doses for three months, with scarcely a return of the disease. Since the 18th of February, the medicine has been stopped, and the unhealthy urine has not re-appeared. In less than five months more than thirty-three ounces of gallic acid were taken.

From these cases it is evident that gallic acid may be given in very large doses, for a considerable time, without any ill effect. The appearance of the acid in the urine may readily be detected; how rapidly I have not determined, but probably in the course of a few minutes, judging from the rate at which other soluble substances can be found. Thus, in some late experiments, even one grain of iodide of potassium, dissolved in an ounce of water, taken on an empty stomach, I have found in twelve minutes, and very distinctly in fourteen minutes. When seven grains of the sulphate of protoxide of iron, in two ounces of water, were taken on an empty stomach, I found a portion in the urine in ten minutes, and very plainly in fifteen minutes.

Even in hæmoptysis you may give gallic acid in drachm doses with great benefit and without risk. I have never seen any bad symptoms from its use. Certainly the patient who passed the chylous urine now before you, said, that a single dose of ten grains of gallic acid caused giddiness of the head and uneasiness of the stomach, in consequence of which she would take no more; but I do not consider that this is to be weighed in opposition to the cases I have related.

I may remind you, that this medicine has been recommended in Bright's disease. In the hospital and in private I have tested it most carefully. I have never seen small doses stop the escape of the albumen into the urine, and in larger doses I have seen severe epilepsy follow its employment. Thus a painter, aged 39, had dropsy one month. The urine was highly albuminous; specific gravity 1013. As he did not improve by using vapour-baths and compound jalap-powder, gallic acid was given in ten-grain doses four times a day. The day but one following the quantity was increased to twenty grains thrice daily. He took only two doses, when he complained of severe pain in the head, and in half an hour he had a violent epileptic fit, which left him perfectly insensible. In twenty-four hours he had nine similar fits; for two days he was comatose. He remained in the house four months after this, during which time he had no more epilepsy.

The chemical relation of gallic acid to tannic acid is seen in the formulæ :—

$$\left.\begin{array}{l} 1\text{ eq. tan. acid} = C_{18}H_8O_{12} \\ 8\text{ eq. oxygen} = O_8 \\ \hline C_{18}H_8O_{20} \end{array}\right\} = \left\{\begin{array}{l} C_{14}H_6O_{10} = 2\text{ eq. gal. acid} \\ H_2O_2 = 2\text{ eq. water} \\ C_4O_8 = 4\text{ eq. car. acid} \\ \hline C_{18}H_8O_{20} \end{array}\right.$$

So that tannic acid, when oxidised, gives rise to gallic acid, carbonic acid, and water. This happens when tannic acid is taken as medicine, for then gallic acid may be found in the urine. The chemical composition does not at all account for the more astringent action of tannic acid on the stomach. Judging by the cases I have mentioned, I consider that tannic acid is at least three times as astringent as gallic acid; and, from the comparative solubilities of the substances, I think that generally, as well as locally, there is no superiority in gallic acid.

The combination of tannate of alumina, and the mixture of tannic acid with alum, used locally for leucorrhœa, I have found very efficacious; and the former substance, Mr. Morson tells me, is much used. From its insolubility in water, it is probably less active than the solution of tannic acid and alum.

Here is another astringent substance, for which I am indebted to Mr. Morson. These fine crystals are iron alum; that is, alum in which the potassa is replaced by oxide of iron. It is soluble in water, and, in doses of five to ten grains, highly tonic and astringent. In anæmic patients with leucorrhœa, it is most useful.

I must conclude this lecture by a few remarks on two substances frequently used as astringents in urinary disorders, —uva ursi and matico.

The leaves of the uva ursi contain 36·4 per cent. of tannic acid, also gallic acid, and a bitter extractive matter. The tannic acid is by far the most important agent which is present. It is this which makes the infusion of uva ursi incompatible with metals and cinchona bark. Forty-five minutes after the infusion has been taken, the tannic acid has been detected in the urine. In menorrhagia, cystorrhœa, diabetes, and in other fluxes, the infusion has been found useful. It has been recommended in consumption. The dose of the leaves powdered is from ten grains to forty grains, in which there are from 3·6 grains to 14·5 grains of tannic acid. The decoction is made by boiling an ounce of leaves in twenty ounces of water, or 48 grains of the leaves to 2 ounces of water; that quantity of liquid should, therefore, contain about 17 grains of tannic acid. For clearness, then, the decoction of uva ursi may be considered as a solution of tannic acid, containing 17 grains in 2 ounces of the liquid. Possibly the other constituents of the uva ursi leaves have some medicinal virtue, but I have no certain knowledge to give you on this point.

The astringent properties of matico have also been highly spoken of. As a remedy in hæmaturia I have found it useful. The dose of the powder is from 10 to 30 grains. An infusion of the leaves, in the proportion of an ounce to a pint of water, may be used. The matico, in its composition and mode of action, has nothing in common with the remedies I have mentioned in this lecture. It contains no trace of tannic or gallic acid. It belongs to the family of Piperaceæ. It more closely resembles cubebs than any other substance. Its astringent properties are due to a volatile oil, and hence its action may be classed with that of oil of turpentine;

(a) While in the West Indies, he continued the record, which shows that the disease did not return. See Medico-Chirurgical "Transactions," 1853.

whether it possess more astringent virtue than this last-mentioned remedy I have not been able as yet to determine.

The nature, then, of so-called chylous urine is placed beyond all doubt. The action in this disease of gallic acid, tannic acid, tannate of alumina, and tannic acid with alum, conjoined with the remarkable fact, that the urine becomes albuminous after exertion, before any food whatever has been taken, shows that congestion of the kidney is the cause of the symptoms. We have seen to day, that this congestion may last more or less constantly for a quarter of a century, and that the mere loss of albumen in the urine is not of such serious import as from Bright's disease you might be led to suppose. We have seen, that the congestion may be kept off by rest, or be much increased by exercise, and be even stopped by perseverance in the use of the most powerful astringents. Lastly, we have seen, that not only does albumen in the urine appear daily, but that the specific gravity of the urine may be reduced by the congestion far below the specific gravity, where no congestion existed. It appears from this to be very probable that close examination may detect this disease more frequently than has hitherto been the case.

Having thus brought before you the effects of congestion of the kidney in some acute and chronic diseases,—and if time had permitted, I might have taken many more, as, for example, acute pneumonia, or chronic disease of the heart,—I purpose, in my next lecture, to take as my subject Bright's disease.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. IX.

EXTRACTS FROM REPORTS ON THE CHOLERA AND SMALL-POX IN THE ISLAND OF CEYLON IN 1852.

By ANDREW FERGUSSON, M.D.
Deputy Inspector-General of Hospitals.

Between the 1st January and 31st December, 1852, there occurred among the native population in Ceylon 4306 cases of cholera. Of these, 2647 died, and 1657 recovered. Two remained on the 31st December.

During the same period there were 292 cases of small-pox, 146 of modified small-pox, and 215 of chicken-pox. Of these, 56 cases of small-pox and 1 of chicken-pox proved fatal. The remainder recovered. It is supposed that the fatal cases of chicken-pox must have died from some other disease.

HISTORY OF AN EPIDEMIC INFLUENZA WHICH PREVAILED AT AUCKLAND, NEW ZEALAND, DURING THE MONTHS OF JANUARY AND FEBRUARY, 1853.

By ARTHUR S. THOMSON, M.D.
Surgeon 58th Regiment.

I have witnessed two epidemics of influenza in the Northern hemisphere, but neither of these was so universally prevalent as the one whose history I am now about to relate. There was scarcely a man, woman, or child in the district who escaped without some slight symptom of the disease. The number of soldiers affected was so great, that the sentries were reduced, and all parades, except those absolutely necessary, discontinued.

Most persons affected, both among the civil and military population managed to crawl about, but others were obliged to take to bed. An idea of the numbers who were obliged to lay up among the adult civil population, may be drawn from the fact, that out of 459 soldiers, 45 were admitted into hospital with influenza, or about 10 per cent. were obliged to lay up for a few days.

Mode of Attack.—In almost all cases the invasion was sudden, but the premonitory symptoms were different in different individuals. There were sometimes rigors or chills, catarrhal symptoms, vomiting, intense frontal headache, affection of the mucous membrane of the nose, ears, mouth, or throat, violent local pain in the chest, pain in the abdomen and limbs, lassitude, debility, and depression of spirits. The constitutional nature of the disease was rendered obvious by the prostration of strength being much greater than the symptoms would indicate.

Symptoms and Complications.—After the invasion, the cases assumed different types; out of the 45 cases treated there occurred—

8	of simple influenza.		
21	of influenza,	complicated with	bronchitis.
11	,,	,,	pneumonia or pleuritis.
2	,,	,,	diarrhœa.
3	,,	,,	delirium.

Simple Influenza.—The eight cases under this head were merely attacks of acute catarrh. They never would have been admitted into hospital for treatment, if it had not been for the lassitude, debility, and depression of spirits which accompanied the attacks. Their average duration was three or four days.

Influenza, with Bronchitis.—This was the most common complication. In many of the cases there was great dyspnœa, and the expectoration was scanty. The skin was hot and dry, the pulse 100. There was severe coughing occasionally in paroxysms, appetite wanting, tongue white, sometimes loaded, pains in the limbs, lassitude, and mental depression. A violent perspiration generally terminated the attack in eight days. The stethoscopic indications were those of bronchitis.

Influenza with Pneumonia and Pleuritis.—In this class of cases, there was dulness of percussion in some parts of the lungs, and expectoration tinged with blood. The crepitating râle was rarely heard. Under this head, the most tedious cases occurred. In two of them there were indications of pleuritis.

Influenza and Diarrhœa.—The two cases under this head had slight catarrh, purging, and griping, with great depression of spirits.

Influenza and Delirium.—In three cases, spectral delirium occurred, along with the catarrh. All the men so affected were in the habit of using spirits, but not to the extent to produce delirium tremens. It must have been the depression or derangement consequent on the disease which affected the brain; for in India I have occasionally observed drunkards labouring under intermittent and remittent fevers have spectral delirium during the exacerbation of these diseases.

Mortality from the Disease.—No case proved fatal among the military. Among the civil population in the town there were three fatal cases; all were persons near 60 years of age. In one, a *post-mortem* was made, which disclosed extensive pleuritis as the immediate cause of death.

Did the Influenza give rise to any other disease?—Boils in different parts of the body were very common after recovery from the disease; also deafness. In one case, consolidation of a part of the lung has occurred, but in none has consumption been induced.

Progress of the Epidemic.—It continued during six or seven weeks. The first admission into hospital occurred on the 10th of January, 1853, and the last on the 10th of February; but slight cases of the disease occurred before and after the above dates. The epidemic was at its height between the 18th and 20th February, after which it decreased. This will be seen in the following return, copied from the admission register:—

From Jan. 10	to	Jan. 13,	inclus.,	3	cases of influenza	occurred.	
Jan. 14	,,	17,	,,	5	,,	,,	
Jan. 18	,,	20,	,,	19	,,	,,	
Jan. 21	,,	23,	,,	7	,,	,,	
Jan. 24	,,	26,	,,	5	,,	,,	
Jan. 27	,,	29,	,,	1	,,	,,	
Jan. 30	to	Feb. 1,	,,	1	,,	,,	
Feb. 2	,,	5,	,,	1	,,	,,	
Feb. 6	,,	9,	,,	3	,,	,,	
Feb. 10	,,	13,	,,	1	,,	,,	

From the 14th to the end of the month, none.

Duration of the Attacks.—The average residence in hospital of all the cases was 11½ days. The most severe attacks occurred between the 18th and 23rd of February. A few severe cases occurred just before the disappearance of the epidemic. This will be seen in the following statement:—The cases admitted from the 10th to the 17th January had an average duration of 8¼ days. The cases admitted from the 18th to the 23rd January had an average duration of 13 days. The cases admitted from the 24th January to the 1st February had an average duration of 7½ days. The cases admitted from the 2nd to the 10th February had an average duration of 17 days.

ON THE LOSS OF BODILY WEIGHT WHICH RESULTED DURING THE RESIDENCE IN HOSPITAL OF MEN AFFECTED WITH INFLUENZA.

Every soldier admitted and discharged from the 58th regimental hospital is carefully weighed. This gives an idea of the severity of disease. Out of the 45 cases influenza treated, 8 of the men neither lost nor gained weight, 9 increased in weight on an average 3¼ pounds each, 28 lost weight on an average 6¾ pounds each.

From the above information we may learn that 28 cases were severe, and that the other patients gained what they lost previous to discharge. In many of the cases it was the nervous symptoms, lassitude, and depression, which drove the men into hospital, not organic derangements. This will account for 9 of the men increasing in weight; the greatest loss of weight which occurred was 25 pounds. Shortly after discharge from hospital the men rapidly regained the flesh they had lost.

HAD THE EPIDEMIC MUCH INFLUENCE ON THE NEW ZEALAND RACE?

I inquired of Missionaries and Europeans resident in different parts of the country relative to this. All stated, that the influenza was universally prevalent, and that many of the old died from it. I had an opportunity of watching several New Zealanders affected with the disease, and the depression and prostration of strength which occurred were greater than I ever observed with Europeans. As the New Zealanders are very neglectful of their sick, I have no doubt that many died from this cause. Out of a school containing 150 native children, scarcely any escaped, and all were unable to attend the school for a day or two,—none died.

A newspaper, published at New Plymouth, which place is surrounded by a large native population, stated, that "the want of labour to cut down the harvest was felt, owing to the all but universal prevalence of influenza among both settlers and natives."

Medical Treatment.—The simple cases were kept in bed, had a purgative and diaphoretic. The bronchitic cases had a similar treatment, but blisters were applied to the chest in several of them. In the cases complicated with pneumonia, tartar emetic was given; in some, the gums were touched with mercury. In two cases, blood to the extent of 7 or 8 ounces was taken from the arm, but patients did not bear the loss well. One of the patients affected with spectral delirium, had opium and brandy, which was beneficial. The others were treated with diaphoretics.

Elements of the Climate.—Table showing the elements of the climate 20 days before the appearance of the epidemic; viz., from the 20th December to the 10th January, 20 days after this, and the usual state of the climate at Auckland for this period:—

Elements of the Climate.	From 20th December to 10th January, 1853.	From 11th January to the 31st January, 1853.	Average Climate of Auckland from 20th December to 10th January*
Mean temperature	63·	65·7	65·
The highest temperature in shade	73·	78·	83·
The lowest temperature in 24 hours	53·	54·	49·
The daily range of temperature	12·5	15·	15·
The mean state of the barometer	29·75	29·79	29·90
The highest barometer	29·90	30·15	30 14
The lowest barometer	29·48	29·48	29·62
The number of rainy and showery days	13	3	6
Thunder and lightning	3 times on different days.	Once.	None.
The wet bulb of a thermometer fell by evaporation †	6·3 degrees.	6·8 degs.	7·1 degs.

* Drawn from three years' observation.

† The quantity of rain which fell in January and February, 1853, was 8¾ inches, while the usual quantity for the same period on the three preceding years was 5¾ inches.

It will be observed, from the foregoing table, that for twenty days preceding the epidemic, the air was unusually damp; the atmosphere was deficient in weight, and, what is very unusual here in summer, three thunder storms occurred, showing how deranged the electricity was in the air.

Causes of the Disease.—I do not assert that the above deviations from the usual weather produced the influenza, but I merely mention them for comparison with other places. That the disease existed in the air is, I think, obvious from the following circumstance. Two boats full of natives arrived from the Bay of Plenty during the prevalence of the epidemic; in four days they were all laid up with the influenza. Her Majesty's surveying ship Pandora was at the North Cape of New Zealand during the time the epidemic was worst in Auckland, and her crew suffered very slightly from the disease. About forty miles from Auckland there were a good many men digging for gold in mountains composed of primitive rocks, among which there was much iron, and they suffered slightly from influenza compared with those in Auckland. On the 10th and 12th of March, 1853, there was a state of the weather not unlike that which prevailed previous to the influenza, and several cases of the disease again occurred. The sudden invasion and the rapid diffusion of the disease put out of the question Cullen's idea of the influenza being caused by contagion. The influenza was not prevalent over the whole island at once. At Wellington, New Zealand, and in the Southern parts, it prevailed nearly two months previous to its appearance at Auckland, which latter place is about 400 miles further to the North than Wellington. Extensive ranges of elevated mountains lying between these places may have produced this peculiarity. At Hobart-town, it was prevalent at the same time that it was prevalent at Wellington. At Sydney it was prevalent about the same time as in Auckland. The disease at Wellington was not so severe as in Auckland; only 8 men were admitted into hospital from this cause out of 400.

General Remarks.—It is curious, that a climate so favourable for the non-development of the diseases of the lungs should have produced so many cases of influenza, complicated with an affection of these organs. I cannot account for this; but the mild nature of the climate is rendered obvious by so many affections of the lungs passing off without any serious permanent injury. According to the traditions of the New Zealanders, there were several similar epidemics many years ago. In 1847, there was one which was very prevalent. The lower animals were not affected with the disease, so far as I can find out from inquiry.

Among the Polynesian Islands in the Pacific Ocean, influenza has been prevalent. After the influenza epidemic ceased, children began to be affected with hooping-cough, which became prevalent in Auckland during April and May, 1853.

CASES OF CHRONIC DISEASE OF THE STOMACH. WITH SARCINÆ IN THE VOMITED MATTERS.

By W. H. RANSOM, M.D. Lond.

Case 1.—John King, aged 43, of moderate habits, and regular life, twenty-three years ago had an attack of obstinate vomiting, and pain at the epigastrium, with obstructed bowels; has had several similar attacks since, at irregular intervals. In one of these, six years ago, he vomited brown matter.

In May, 1850, I saw him; he had then been suffering for four months from pain in the right side and epigastrium, obstructed bowels, and vomiting at irregular intervals; these symptoms having no relation to the periods of taking food. The stools were described as having been dark, once or twice almost black, and the vomited matters sometimes a deep brownish black. He was much emaciated.

The vomited matters examined, were found to be watery, of a brownish red colour, acid re-action, containing residue of food, as starch corpuscles, fat, muscular fibre, torulæ, and sarcinæ, but no blood. The fæces were faintly alkaline, colour almost black, containing crystals of the ammoniaco-magnesian phosphate, dumb-bell crystals of the carbonate of lime, sarcinæ, and a linear form of algæ, besides the insoluble residue of the food, and mucus, which ordinarily make up the mass of the fæces. On palpation and percussion, I could discover no evidence of dilatation of the stomach; the belly was collapsed; there was no undue resistance or dulness in any part like a tumour; he complained much of a hot, burning rising in the throat.

He took nothing but rhubarb and magnesia.

The following July, he was again confined to bed, with a similar attack, in which the vomited matter was described as

distinctly bloody. He seemed about to die; but, taking only magnesia, a treatment suggested by himself, he got better, and went to work of a light kind.

January 22, 1853.—Soon after unusual exposure to cold, he was suddenly seized with convulsive motions, confusion of intellect, and, ultimately, total loss of consciousness, and died Jan. 25, having during the last forty-eight hours passed only three ounces of urine, which was found to be albuminous and alkaline.

Autopsy Eight and a-Half Hours after Death.— Body warm, not yet rigid; seemed much emaciated, but on cutting into the integuments there was a considerable amount of fat. *Lungs.*—The right adherent by old adhesions, intensely coloured, its substance firm and solid, imperfectly crepitating, and a few spots of hæmorrhage in the lower lobe; the left with similar characters, but less strongly adherent. *Heart* natural. *Liver* adherent by old adhesions to the abdominal wall and to the stomach; its substance apparently healthy. The *Stomach* enormously distended, being in contact with the greater portion of the abdominal walls, and adherent to everything near it. The great omentum adherent to the parietal peritoneum in the pelvis, thus binding down the small guts. The stomach measured thirty-four inches along its great curvature; in shape longer in proportion to its breadth than normal; contained about four pints of gruel-like fluid, consisting almost entirely of undigested food and mucus, with an acid odour and reaction, due to the presence of free hydrochloric acid, as even the very earliest product of distillation showed. Around the pylorus was a dense mass of fibrous tissue, subperitoneal, which by contraction had narrowed the orifice to the size of a quill. To this dense mass the liver was closely adherent; the mucous membrane was thick and mammilated, but not injected or otherwise altered, and neither ulcers nor their scars could be seen. The *Brain.*—Its membranes unusually injected; a small defined collection of serum; subarachnoid quite clear, like a prominent blister, about one inch in diameter, on the left lateral lobe of the cerebrum; no inflammatory exudation matter to be seen. The capillaries and minute arteries of the pia mater extensively fatly-degenerate. Both *Kidneys* large, and finely granular; studded with cysts, both the well known visible ones, and those smaller microscopic cysts described by Simon. In the substance of the brain, and in the blood, some of which had been removed by cupping, urea was found.

This case appears to have been one where chronic peritonitis caused contraction of the pylorus; as a result of which, dilatation of the stomach and impaired digestion occurred; and sarcinæ, together with torulæ, were developed at the same time. These latter disappeared, as well as the symptoms which accompanied them, under the influence of an aperient alkaline earth; and the patient ultimately died of a different affection, which may have been essentially a blood poisoning by some of the urinary elements.

Case 2.— — Moore, aged 48. Mr. Bourne, who attended this patient, kindly furnished me with some vomited matter, April 7, 1853, which contained sarcinæ, torulæ, and remnants of food. He died April 11, and I then obtained from the relatives and the surgeon the following particulars:— The patient had been for four years liable to pain at the epigastrium, and a sense of distension there; both relieved by vomiting. The bowels were very costive. The attacks occurred at irregular intervals, sometimes as long as six months. He continued to work till the last four weeks, when the symptoms had so increased in severity, that he was obliged to give up. The vomiting was frequent and severe; the fluid vomited amounted, the wife said, to half-a-gallon at one time; was, in the twenty-four hours, considerably more than the total amount of his drink; was acid, and of a chocolate-brown colour. The appetite was good, but he was much wasted. Mr. Bourne could find no physical signs of tumour, and but little tenderness on pressure. No treatment relieved the vomiting. On Sunday, April 10, he ate a good dinner, some supper, and went early to bed; awoke at 11 p.m., and remained uneasy at the stomach, sometimes retching violently, till 4 a.m., April 11, when he was suddenly seized with intense pain, confined to a small spot about the region of the pylorus; vomiting of a dark brown thick fluid, which continued till 9 a.m., and then ceased. He gradually sank, and died at 6 p.m.

Autopsy Thirty-nine Hours after Death.—The abdomen was swollen and very prominent, resonant on percussion, but peculiarly so, the resonance extending upwards under ribs in the region of the liver. On opening the abdomen, this was explained by the large quantity of gas which escaped; a distinctly acid odour was perceived; also a smell like that of fermenting beer. Free in the cavity of the abdomen, upon the surface of the liver especially, was a dirty brown flocculent substance, evidently escaped from the stomach; and in the right flank a few ounces of fluid, similarly tinged. In the pelvis and left flank, about half-a-pint of turbid serum, containing shreds of recent inflammatory exudation matter; some of this was also found adherent to the peritoneum, which was injected in stellate spots. The stomach was large, but collapsed; curved like a horse-shoe; its convexity descending to four inches below the navel. The pylorus was in its normal place, but fixed by old, contracted, and dense adhesions to the liver; the subperitoneal cellular tissue all around the pylorus being dense and thick, and like old cicatrix tissue to the feel; this tissue extended along the adhesions to the liver. Close to the pylorus, immediately where the adhesions to the liver joined the stomach, was a small round opening, about the size of a pea, through which the contents of the stomach were escaping. The stomach felt thicker than normal, and all its coats were thickened, but most so the mucus, which was, however, not injected. The pyloric orifice was narrowed to the size of a quill, by the dense tissue around it; and the pyloric end of the stomach was dilated into a circular cul de sac, all round the obstructed opening, which thus presented into the stomach upon the point of a papilla. Corresponding to the external opening, was seen a small circular ulcer, of about three-quarters of an inch in diameter, with smooth, thick, inverted edges, the base of which was formed by the ruptured peritoneal membrane. The diseased fibrous tissue above spoken of under the microscope was found to consist of fibres, not distinguishable from ordinary white fibrous tissue, mixed with some elastic tissue, and a few fibro-plastic cells. The *Liver* was apparently healthy throughout its substance, except a small mass of fawn-coloured gritty substance, with well-defined boundaries, about the size of a hazel-nut, which lay near the gall-bladder. This latter was contracted and thickened, being implicated in the dense bands that bound the liver and stomach together. The gritty deposit of the liver consisted almost entirely of cholesterine and biliary pigment. The contents of the stomach resembled thick gruel, of a dirty colour, an intensely acid odour and re-action, contained a great deal of ropy mucus, undigested food, such as fat, starch granules, vegetable cells, and muscular fibres, torulæ in immense numbers, but no sarcinæ, though sought for with greatest care. Some of the vomited matter, placed in a warm closet, fermented, blew out the cork, and foamed over the mouth of the bottle. A portion of the mucous membrane of the stomach sufficed, with a little hydrochloric acid, to make a powerful artificial digestive fluid, in which coagulated albumen was rapidly dissolved.

In this case the patient died from perforation and peritonitis; constriction of the pylorus was present here, as in the last case. All the symptoms could be accounted for, independently of any influence of the sarcinæ, which disappeared suddenly without the use of any sulphite, and without any improvement in the symptoms. The persistence and abundance of the yeast plant are worthy of notice, and will again be alluded to.

Case 3.— — Hemm, aged 63 years; formerly a soldier, of late years a machine-maker; of regular habits; has been a free drinker, but not a drunkard; general health good; once had a severe pain in the loins, from cold; once, about fourteen years since, had inflammation of the chest. About a year ago, he had an attack of vomiting, with pain and tenderness at the epigastrium, which yielded to treatment, but he never returned to his usual sense of comfort. Four months ago, he had another similar attack, in which there was also constipation; in this attack the fæces are described as nearly black, and the vomited matters as chocolate-brown. Treatment failed to relieve him. When seen by me—April 7, 1853—he was much emaciated, having lost six stones in weight within the year. He complained of epigastric pain, which was accompanied with a sense of heat, and distension, and came on at irregular intervals, but generally after food, and was relieved by vomiting, and by an evacuation of the bowels. The pulse 120, regular and small. Tenderness, but no evidence of a tumour, or any undue resistance, in the epigastric region. A quart of the vomited matter was ex-

amined; it was fluid, with an acid odour and re-action; of a chocolate colour, with a yeasty scum on the surface; gave off small bubbles of gas; it deposited ropy mucus, fragments of undigested food, as husks of oats, small black seeds, starch corpuscles, abundance of fat, solid, amorphous, crystalline, and fluid; abundance of sarcinæ ventriculi; no torulæ, and no blood corpuscles.

The filtered fluid contained free acetic acid; no hydrochloric acid could be obtained till towards the end of distillation, and then only by raising the heat of the sand-bath; fermented with yeast at 80° to 90° Fahr., carbonic acid was given off, equal in volume to half the fluid employed, though, by Trommer's test, no sugar could be detected.

The vomited matters did not give off any appreciable amount of gas, placed at 80°, without any ferment; so that the little bubbles before spoken of may have been included air.

Albumen in considerable amount was detected by heat and nitric acid.

The nature of the colouring matter was not made out further than the fact, that it resided in the solid particles, and was not dissolved in the fluid.

The fæces were greenish brown, almost black, fluid, with a few solid masses of hardened fæces; also shreds of transparent mucus, fragments of undigested food, sarcinæ, and vibriones in great numbers.

No blood-corpuscles could be seen, nor pus mixed with the mucus, but numerous crystals of the triple phosphate.

The filtered fluid was alkaline and albuminous.

In the absence of blood, it is difficult here to account for the colour of the stool.

Sulphite of soda, in scruple doses, every four hours, was taken; he experienced immediate relief from a severe attack of pain after the first dose, and remained better for ten days, taking occasionally, as an aperient, some of Dinneford's fluid magnesia. While taking the sulphite, he vomited once a quantity of acid fluid, not so deep in colour as the previously-described fluid, free from sarcinæ, and without any scum on the surface. After this time, he said the sulphite did no good, and he left it off. He remained thus till May 8, when he vomited about four pints of greenish black fluid, with a scum on the surface, and giving off bubbles of gas, in which blood discs, quite bleached, were found in abundance, also sarcinæ without any torulæ; the fluid was less acid than the last described, (perhaps the blood had neutralized it); albumen was present, and some sugar, only detectable by fermentation. He states, that he had never before vomited precisely similar matter; that the sickness had been preceded by severe pain, and by a fainting fit; while thus unconscious, the wife says, some of the black fluid ran passively out of the mouth.

May 9.—I felt now for the first time a distinct resistance in the epigastrium, which was distinguished as liver, and noted as rough. There was no distension of the stomach. The urine was found to be acid, clear, and free from albumen. He gradually became weaker, did not again vomit, and died May 12, in a heavy sleep, having complained of some pain, but not more than usual.

Autopsy, Thirty-Four Hours after Death.—There was some subcutaneous emphysema in the scrotum and flanks, but the body was not more decomposed than is commonly the case; abdomen not distended or collapsed, (before death it had been very much collapsed.) On opening the belly, a small quantity of blackish fluid, with similarly-coloured shreds, were found free in the cavity, and some fetid gas escaped. The *Stomach* was collapsed, and closely adherent to the liver; the great omentum contracted, and adherent by a long band to the sigmoid flexure. Close to the pylorus, just in front of the attachment of the small omentum, was a round, smooth-edged opening into the stomach, about three-fourths of an inch in diameter; and a similar one was seen on turning up the stomach, together with the transverse colon, close to the lower border of the head of the pancreas. From both the contents of the stomach were escaping. On laying open this organ, a large ulcer was seen, of about two inches diameter, of a circular outline, situate near the pylorus on the posterior surface, with smooth, inverted edges, and having for its base the substance of the pancreas, the coats of the stomach being all destroyed. There was no vascular injection to be seen. The contents consisted only of a very little creamy, pinkish fluid, and some seeds of grapes, though the wife declared that he had tasted none for seven weeks. No ruptured vessel could be seen, to account for the hæmorrhage. The pyloric orifice was large enough to admit the little finger, but it was pressed upwards, and almost valved, by a mass of the size of a walnut, placed in the angle formed by the junction of the stomach and duodenum; this mass had a hard, firm feel, and was surrounded by much dense fibrous tissue. The liver was adherent to the stomach near the pylorus, both by false membranes and by condensation and shortening of the free edge of the small omentum; was studded with whitish masses, varying in size from that of a pin's head to that of a walnut, which, as well as the mass near the pylorus, were found to be medullary cancer, upon examination with the microscope. In Glisson's capsule, or along the small curvature, there were no cancerous glands, and the vessels and ducts were all pervious. No cancer could be traced in direct continuity with the ulcer, its base and margins being carefully examined without finding any cancer-cells. The pancreas and duodenum healthy. No recent exudation matter in the peritoneal cavity or on the membrane.

It is worthy of remark here, that only temporary (though that was marked) relief was offered by a remedy that destroyed the sarcinæ. In this case, there were no symptoms of perforation which could indicate the time of its occurrence, but, from the absence of inflammatory results, it probably did not occur till immediately before death.

[To be continued.]

A CASE OF LARGE POLYPUS OF THE UTERUS COMPLICATED WITH INVERSION.

By GEORGE CANNEY, Esq.
Late House-Surgeon to University College Hospital.

M. H., a stout, fair-complexioned woman, many years married, but without family, has suffered severely during the last seven years from uterine disease, attended with severe pain, floodings, and extremely offensive vaginal discharges. On the 6th of Oct., 1848, she was seized, while in bed, about seven o'clock in the morning, with violent expulsive pains, which in a short time, as she thought, protruded the whole mass of the diseased womb through the os externum. Her midwife was sent for, and for many hours made fruitless attempts to return the mass. About five in the evening, I was requested to see her, and found her faint from loss of blood, the surface of the body, and the external genitals, being quite blanched. Protruding from the os externum there was an enormous pear-shaped mass, of a red colour, and smooth, shining surface, which was a perfect cast of the body and neck of an enlarged uterus, (the narrow portion or neck of the tumour being the lowest,) having a dark sloughy appearance; and, to complete the deception, the finger could be passed for nearly an inch into a depression in the lower portion of the tumour. As a catheter, however, passed into the bladder in the usual course, I at once pulled down the mass until the forefinger could be passed over its larger extremity into the vagina, when the large end of the polypus could be distinctly felt connected with the inverted fundus of the uterus by a short, thick pedicle. A ligature having been applied, the pedicle was divided with a pair of scissors, and the surface of the uterus being found free from any further growth, the inverted fundus was carefully replaced. As soon as the womb was restored to its natural condition, the ligature came away; nevertheless, there was no further flooding; the patient never had a bad symptom; and the gentleman under whose care she was placed reported to me, at the end of a week, that she had resumed her household duties.

The tumour was of a simple fibrous texture, and weighed twenty-four ounces.

Bishop Auckland, October 7, 1853.

Dr. Kahn's Anatomical Museum.—There are many preparations and wax-models in this Museum which make it worthy of a visit. The models of the Comparative Anatomy of the Brain, and the collection exhibiting the result of modern researches in microscopic embryology, are especially instructive. They are beautifully executed, and illustrate the history of the development of the embryo very effectively. The models of the heads of the different varieties of the human race, will also be regarded with interest. We may remark, that a very good popular lecture is given at stated hours, and in a manner likely to prove useful; for when the public gain some slight knowledge of anatomy and physiology, they will not be likely to trust themselves, when ill, to the care of those who are ignorant and unqualified.

THE LONDON PRACTICE OF MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

CASES ILLUSTRATIVE OF THE MODERN TREATMENT OF EXTERNAL ANEURISM.

(The Series concluded from our last.) (a)

Case 19.—LARGE POPLITEAL ANEURISM.—TREATMENT BY COMPRESSION.—CURE IN SIX WEEKS.

[Under the care of Mr. ERICHSEN.]

GEORGE HALE, an ostler, aged 42 years, was admitted on September 19, 1853, having, in the lower part of his left popliteal space, a strongly pulsating aneurism, the size of a large fist. He had for about three months noticed a weakness about his left knee and ankle, but of the existence of the tumour he had only been aware for about three or four weeks, during which time it had rapidly increased in size, and been very painful. He was a moderately stout man, of temperate habits, and in good health. The pulsations of the tumour were very forcible, perceptible to the eye, and attended by a bruit; they ceased entirely, and the sac collapsed when firm pressure was made upon the femoral. The whole left leg was considerably larger than its fellow, but there was not sufficient œdema to cause pitting on pressure. The subcutaneous veins were much enlarged, and very tortuous. The most prominent part of the aneurism was about an inch and a-half below the middle of the joint, and at this point the limb had a circumference of 16 inches.

The compression treatment was commenced on the 20th, by means of two Signorini's tourniquets, applied so as to press, the one over the brim of the pelvis, the other in the middle third of the thigh, and alternately employed. During the first two days, the patient complained of much pain, and was not able to bear pressure sufficient to arrest the beating of the tumour; and the instruments had to be laid aside each night.

On the 23rd, more efficient treatment was adopted, as he now became able to bear, without much inconvenience, the requisite amount of pressure; and from this time forwards it was found practicable to keep up, with a few accidental intermissions, constant pressure, night and day, sufficient to entirely arrest the circulation through the sac. The intermissions alluded to were occasioned by the apparatus sometimes getting displaced, more especially during sleep. The man, however, had great tact in re-adjusting it for himself; and the greatest credit is due to Mr. Turle, Mr. Erichsen's House-Surgeon, for the assiduous attention which he devoted to the case, making it his duty to ascertain, at frequent intervals, both night and day, that the instruments were acting efficiently. The patient was put on a full meat diet, with an allowance of two pints of beef-tea daily.

On Oct. 3rd, (the 13th day,) Mr. Erichsen ordered that the diet should be closely restricted to the following allowance:—Breakfast, four ounces of bread and a pint of milk; dinner, four ounces of bread, a chop, and a small quantity of water; tea, two ounces of bread, and a pint of milk. At this time the tumour was decidedly harder, and less in size than at first.

On the 10th, the horse-shoe tourniquets, which had acted very well, were substituted by two of Dr. Carte's instruments, the application of which had been delayed owing to some alterations necessary in order to fit one of them to the pelvis. The tumour was examined, when all pressure was removed, and it was found to have decidedly diminished in expansile force, to have become much firmer, and to be about two-thirds of its original size. The circumference of the limb was fourteen inches and a half.

On the 15th, but little progress had been made since last note; the patient had not been able to manage the more complex apparatus so well as he did the tourniquets, and on several occasions Mr. Turle had found the tumour beating forcibly. The skin had also become somewhat chafed from pressure. Although the prescribed diet had been strictly kept to, the patient's pulse continued strong and full. Mr. Erichsen ordered the limb to be enveloped in an elastic bandage, the tumour being protected by a pad of tow. Venesection to eight ounces.

During the night of the 17th there was so much pain caused that the man took off the apparatus entirely. He was, however, visited within an hour after by Mr. Turle, and the instrument again applied. On the following day, venesection to four ounces was again practised.

On the 22nd, the man was again bled to four ounces; a draught containing five minims of the tincture of digitalis was ordered to be taken three times daily, and a scruple of compound jalap powder every other night. On this day there was noticed a yet further lessening of the expansile force of the tumour.

On the 26th, the bleeding to four ounces was again repeated. The immediate effect of this measure had, on each occasion, been to render the pulse rather quicker, more compressible, and a little jerking. The man had sometimes complained of feeling weak. The medicines regularly continued.

On the 29th, there was found, at the time of visit, slight beating in the tumour, but it ceased immediately on screwing down the pad a little tighter. Pulse 80, soft and full.

In the night of the 31st, owing apparently to the patient having turned in his sleep, and the pad having consequently slipped, the tumour was found pulsating sharply. The apparatus was at once re-adjusted.

Nov. 3 (45th day.)—The treatment, as last indicated, has been regularly persevered with. Last night the man states that he awoke with a peculiar sensation all over him, and, feeling alarmed, he unscrewed the tourniquet, and discovered that the tumour which in the preceding evening had pulsated with usual force, had now quite ceased to beat. He re-adjusted the instrument, and soon after again fell asleep. To-day the tumour feels hard, and does not pulsate in the least when compression is removed. A vessel of some size may be felt crossing the sac. The dose of digitalis was yesterday increased to ten minims, and it is ordered to be continued. The patient does not feel any pain whatever in the limb.

On Nov. 7th the instruments were finally laid aside, and the man allowed to leave his bed; he could walk about the ward, though with some sense of stiffness in the affected ham.

At the present time, Nov. 11, the man is up regularly every day, and the tumour, which remains quite solid and hard, is gradually diminishing in size. Enlarged collateral vessels may be felt on both sides the joint, and also over the surface of the sac itself; there is feeble pulsation perceptible in the posterior tibial, but none at all in the anterior tibial or the dorsal artery of the foot.

We have extracted the above details from the notes taken by the dresser, Mr. White. The result of the case is probably in a very considerable measure due to the careful constitutional treatment which Mr. Erichsen enforced, and is, considering the very large size of the tumour, extremely satisfactory. Under the depletive measures pursued the man lost strength and colour considerably, but he is now fast regaining both. It must be noted, that the inconvenience caused was never so great as to require the administration of opium, and the man slept fairly almost every night. The swelling of the leg, so far from being increased, gradually diminished from the day of his admission. The compression was borne almost equally well in the groin and in the middle of the thigh, and at night the precaution was usually adopted of screwing down both pads.

ST. BARTHOLOMEW'S HOSPITAL.

Cases 20 *and* 21.—ANEURISM OF BOTH POPLITEAL ARTERIES.—CURE OF BOTH BY COMPRESSION IN PERIODS RESPECTIVELY OF FOUR AND EIGHT DAYS.

[Under the care of Mr. STANLEY.]

The following case was among the earliest of those submitted to the compression treatment in the London Hospitals; its interesting particulars have, however, never been as yet placed before the public. John Donovan, aged 29, an Irishman, in good health, by trade a boot-maker, applied on account of a beating tumour in his right ham, where, on examination, a soft, but forcibly pulsating aneurism, the size of a pigeon's egg, was discovered. He had only noticed the swelling for about a week, during which he had experienced some pain in the part, and the leg had become slightly swollen. On examining the opposite leg, another aneurism of nearly the same size as the first was found; of this the man had known nothing. It was situated quite in the lowest part of the popliteal space, lower down than that in the right limb. It appeared on inquiry that the man had for about a year been in the habit of sitting at work on a high wooden chair, with his knees pressed firmly back against the front edge of the seat, and with the left foot a little higher than the other. Agreeing, so well as it did with the relative position of the tumours, Mr. Stanley stated, that he had no hesitation in accepting this as the true explanation. By the continued irritation of pressure on the vessels, disease of coats had been set up until they became unable to resist the impulse of the current of blood within them. It was ascertained

(a) The numbers of our last week's eight cases, from 10 to 18 inclusive, were accidentally omitted by the printer.

that the chair used was of unusual height, and quite different from those commonly employed by shoemakers.

The treatment was first adopted for the left. After trying in vain to adapt the Signorini's tourniquets to the limb, so as to efficiently command the vessel, Mr. Stanley had an iron clamp made, with a broad splint fitted to one end, and a screw pad to the other. This succeeded well, and for four successive days (the place, of course being varied) efficient compression was unremittingly kept up, and at the end the tumour was found to be quite solid. The instruments were retained in use for a day or two longer, and then laid aside. During the first day of pressure the limb lost temperature, and had to be wrapped in flannels. On the following day, however, some enlarged collateral vessels were found crossing the joint, and the two legs had an equal temperature.

An interval of ten days having been suffered to elapse, and the cure of the left appearing permanent, the treatment of the right tumour, which had in the mean time not altered in size or other condition, was commenced. The same clamp was used, but, as the man complained of much pain, it was not applied continuously. It was tried, with short intermissions, for four distinct periods of respectively 39, 24, 24, and 48 hours' duration, after the last of which the contents of the sac had become solid, and no pulsation returned. As in the former case, the instruments were continued in application for a few days longer, and very shortly afterwards the man left the hospital. Mr. Stanley informs us that he saw him some time subsequently, and that he continued quite well.

It appeared in this case, that the collateral circulation was established with unusual ease and rapidity, for in both limbs, at the time compression was abandoned, pulsations could be felt in the tibial vessels. That this was really due to the establishment of collateral channels, and not to continued perviousness of the popliteal trunk, Mr. Stanley concluded from the circumstances, that the popliteal could not be felt to beat; that there were in each limb supplemental arteries of considerable size to be found crossing the joint; and that, from the kind of aneurism usually occurring in the ham, it was difficult to conceive of its cure without obliteration also of the popliteal artery.

GUY'S HOSPITAL.

Case 22.—LARGE POPLITEAL ANEURISM.—TEN WEEKS' TREATMENT BY COMPRESSION. — FAVOURABLE PROGRESS.

[Under the care of Mr. HILTON.]

THE following case is still under treatment. The tumour is, however, so nearly cured, that we shall venture, from its connexion with our present series, here to record its history and progress thus far, and shall content ourselves with mentioning its final result in our "Statistical Report of Operations," at a future date.

Thomas Allen, aged 28, a tall and muscular carman, was admitted on August 31. He had known of the tumour, which was in the middle of the right popliteal space and the size of an orange, for only a few days, but had suffered severe pain in the knee and ankle at times for more than two months. The aneurism had all the usual signs,—it beat very forcibly, and gave to the finger a peculiar thrilling sensation; its pulsations were arrested completely by slight pressure on the femoral, and the sac, which appeared to be a thin one, could then be easily emptied of its contents. There was a loud bruit audible over it, and the patient complained much of pain when it was handled.

On September 1, Mr. Poland, who was at the time on duty for Mr. Hilton, commenced the compression treatment. A clamp and cylinder (see *Medical Times and Gazette*, Oct. 29, p. 452,) were employed, the latter chiefly, as it was found to command the artery well. Although the pressure occasioned a little numbness and tingling down the thigh, yet it relieved the pain and tension of the tumour, and rendered the man much more comfortable than before. The oxide of zinc, in powder, was dusted over the skin to prevent excoriation, and a meat diet, with a small allowance of fluids, was ordered.

On the 4th day, the treatment having been sedulously continued, some progress had been made. The man had not slept well the last night or two, and a pill containing a grain of opium was ordered, which, on the following night, was increased to two grains, and, on the 7th, was substituted by a dose of morphia (two grains), which last procured a good night's rest.

Up to the 14th inst., the progress made in the consolidation of the tumour was most satisfactory, and it then appeared just on the point of being cured. During the night, however, the instruments got displaced, and the patient slept for several hours with the blood rushing freely through the sac. On the following morning, the tumour was found to be pulsating nearly as strongly as at first, and to have regained its former size; it was, however, still much more solid-feeling than previously.

During the last six weeks the same general plan has been carried out. The patient has suffered very little, always taking his food and sleeping well, without any opiate. He sleeps, indeed, too well, and often allows the apparatus to be displaced for a time. He has not been able to confine himself to a less allowance of fluid than a pint and a-half per day. There has been throughout very little œdema of the leg, and but very slight excoriation in the groin. At the time we write (Nov. 10) he is in excellent health, and the tumour, which is very firm, pulsates with much less distinctness than it did, and does not, the pressure being off, feel larger than a full-sized egg. There seems every probability that, with a little longer patience, it will become quite solid. Several enlarged collateral branches can be felt about the joint. We have made the above abstract from notes taken by Mr. Ince, the clinical reporter of the case.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

THE EXETER INFIRMARY.

Case 23.—TRAUMATIC ANEURISM OF THE ANTERIOR TIBIAL.—TREATMENT BY COMPRESSION.—CURE IN THREE WEEKS.

[Under the care of Mr. EDYE.]

The following case illustrates the successful treatment, by compression, of a more recent case of traumatic aneurism than any which our series contains. The particulars of it are taken from the notes of Mr. Clapp, the House-Surgeon to the Hospital. It is especially interesting, because its whole course from the wound of the artery to the formation of the aneurism and its cure had occurred under close observation in the Institution.

James Cook, aged 36, a wood-cutter, was admitted one afternoon in the beginning of February, having a short time previously wounded the front of his right leg with a hook. The wound inflicted was a deep incised one, and situated about two inches below the spine of the tibia. It had been attended at the time with very profuse bleeding. The man had been obliged to walk three quarters of a mile to his home before assistance could be obtained, and during the whole distance the blood had flowed in considerable quantity. On arriving there, however, it was arrested by the application of a tight bandage, and had not again returned. On admission, no bleeding was going on, but the man was very faint and cold. Having been got to bed, however, he shortly afterwards rallied, and as no fresh bleeding then broke out, it was not thought desirable to disturb the parts in order to ligature the wounded vessel. The wound was regularly dressed, and everything seemed to be going on well, until about the expiration of the first fortnight, when it was found that an aneurism had formed over the trunk of the injured vessel.

On March 5, the day on which treatment was commenced, the condition of the limb was as follows:—A little above the upper angle of the wound was a prominent swelling, about the size of a chesnut, pulsating very strongly and synchronously with the heart, and conveying through the stethoscope a distinct bruit. The pulsation was not limited to the tumour, but spread deeply around its base, involving an extent considerably larger than the surface of a crown-piece. The ecchymosis caused by the accident had not yet quite disappeared; but, excepting about the tumour, there was no swelling of the limb. Feeble pulsation could be detected in the anterior tibial artery on the dorsum of the foot. The man had very much regained his strength; but the original wound, although looking very healthy, was not healed. Mr. Edye, considering it a favourable case from the compression treatment, had a common Signorini's tourniquet applied to the femoral artery in the middle part of its course. A pad was also fixed over the tumour itself, and a bandage applied to the leg, from the toes to the knee. Continued compression by this means having subsequently been found difficult, Mr. Edye had a box made to receive the thigh, having its inner side open. Over this a common bridge tourniquet was applied in such a manner that its pad could be adjusted so as to compress the artery through the open side of the box. This plan succeeded very well. The vessel was efficiently commanded, and the force with which the pulsations returned when the pressure

was remitted and the size of the tumour gradually decreased, and at the end of three weeks the cure was effected.

On April 9 there was scarcely any remaining trace of the tumour. Pulsation in the anterior tibial was perceptible on the dorsum of the foot, but not higher than the ankle-joint. The leg itself was somewhat wasted, and slightly œdematous; the patient was in good health. As a measure of precaution, he was confined to the recumbent posture until the end of April, when he was permitted to leave his bed, there being no appearance of a return of the tumour.

On May 24, he was discharged, having been provided with a pad to be worn over the seat of aneurism. At this time pulsation could be felt in the anterior tibial, one-third up the leg, but not higher. There was no pulsation whatever, and very little thickening of parts about the original seat of the disease. Mr. Edye informs us that he has quite recently had an opportunity for examining the patient, who continues in every respect quite well.

The above case forms the last in the present series of which we are in possession of full details. In order, however, to make the list honestly inclusive of all which have recently come to our knowledge, we must allude to yet two others, both of which occurred at provincial hospitals. In *Case* No. 24, then, the aneurism was popliteal, and compression was tried for some time, but ultimately abandoned on account of the great pain produced, and of the swelling of the whole extremity. During the subsequent application of a ligature to the femoral, a large vein was wounded, and rather profuse bleeding occurred. The patient afterwards died of gangrene of the limb. In *Case* No. 25, the aneurism was also a popliteal one, and the treatment by compression failed for almost similar reasons. After the tying of the femoral, sloughing of several toes took place, but with this loss the patient recovered. The experienced surgeon under whose charge it occurred was inclined to think that disadvantage had certainly resulted from the trial of compression, and that probably to the disturbance of the conditions of vascular supply consequent upon it the subsequent sloughing was to be attributed.

Our province being in this department of our labours to bring out facts and not to state opinions, to record rather than to dogmatise, we might here very safely leave the preceding series of most instructive cases to the attentive consideration of those interested in the subject. Nor have we, indeed, any wish to engage in an argument as to the merits or demerits of the plan of treatment which chiefly they illustrate; "les faits sont les meilleurs raisonnements, car un fait est la raisonnement plus la preuve." As the series has, however, been unavoidably long, we may, without risk of being charged with too hasty generalisation, briefly direct attention to its general results and apparent indications. Of twenty-five cases of aneurism we have seen, then, that compression was tried in twenty-three, and that in thirteen out of these it was successful in periods varying from sixty hours to five months; and, further, that in a fourteenth, yet under treatment, there is every reason to expect a cure. The one case in which compression was not tried, was an example of diffused aneurism, in which no time could be lost. Of the ten cases in which compression had to be abandoned, one was afterwards subjected only to palliative treatment, and in the remaining nine ligature of the proximal arterial trunk was practised. Of these latter two have died; in one sloughing of portions of the toes resulted; in one the pulsations of the tumour still remain, and in five the event has been in every respect favourable. Speaking generally, then, these results must be considered as highly satisfactory, and the mortality, compared with that which ensued formerly under the invariable treatment by ligature, as unusually small. When it is considered further, that in several cases the tumour was of unusual size, and that many of the patients were not promising subjects, these results become additionally pleasing. It must also be noticed, as regards the compression, that the cases which ended unfortunately were none of them very marked instances of its injurious action, although in each it contributed probably in some small degree to the ultimate result. With regard to the mode of applying pressure, and the various adjuvantia of the treatment, the cases do not seem to teach any uniform lesson, or to afford any new knowledge. One of them (*Case* 12) affords a warning against the too long continuance of pressure in one part, and many of them illustrate the great inconveniences resulting from compression of the femoral vein. To avoid the latter, is, indeed, evidently one main indication; and, in pursuance of it, it might be well perhaps to direct more attention to the placing of the compressing-pad over such parts of the vessel as are least in proximity with the vein. By this rule, the commencement of the middle third of the thigh is, of course, the least suitable place, and the brim of the pelvis the most so; and in confirmation of the theory it may be noted, that several of the patients in the preceding cases bore the pressure in the groin remarkably well, and much better than lower down. The cases in which cure resulted may be roughly divided into those in which the solidification was a speedy, almost sudden, consequence of efficient pressure, and those in which it followed gradually, after its long-continued, but interrupted and inefficient application. In several of the latter, which is the larger class, the final and complete cessation of pulsation ensued after the pressure had been for some hours employed with extra care and efficiency; and it is, from the whole, very evident that, to insure quick cures, the complete and continued arrest of the circulation through the tumour is desirable. It is also, however, equally evident, that, by instrumental aid, this entire and sustained arrest cannot be accomplished without much risk; and as the other plan, although slower, is ultimately equally successful, it is much the preferable of the two. It may be questioned, however, whether, by the employment of manual pressure, the requisite completeness of arrest might not, without danger, be secured, and if so, the time gained would probably well compensate for the trouble bestowed. The practice of supporting the sac itself by an adjusted compress, which was done with advantage in several cases, is also worthy of attention.

There have been one or two other cases of aneurism under treatment in London lately, which, as they have no bearing whatever on the subject in hand, we abstain from mentioning here. One of them was a very interesting case of tubular aneurism of the femoral in a boy, and another of aneurism of the carotid treated by ligature. These we hope to record at a future time.

SHORT NOTICES OF HOSPITAL THERAPEUTICS.

Pityriasis Versicolor Curable by Local Applications.—This common disease, known vulgarly as "Liver spots," and in the nosology of Wilson as Chloasma, is one generally acknowledged to be of extreme intractability. Mr. Paget, we notice, among his out-patients at St. Bartholomew's, does not adopt any constitutional treatment whatever, but simply orders a wash of the bichloride of mercury (gr. j. ad ℥j.) He informs us, that he has never known a case long resist the influence of this remedy regularly applied to the whole affected surface once in the day. At the Skin Hospital, although an arsenical course of internal medication is always prescribed at the same time, yet a mercurial lotion is also used, and may possibly be the chief curative agent. In the hands of Dr. Jenner, at the University College Hospital, the sulphurous acid has, we understand, succeeded very well. There can be little doubt but that the disease is almost invariably curable by local applications solely (parasiticides?) In relation to this mode of cure, it is important to connect the observation of Eichstedt and others, as to the eruption depending on the presence of a cryptogamic plant. Another interesting link in the same chain of evidence has recently been made out at the Skin Hospital, namely, that it is not unfrequently contagious.

Iodide of Zinc.—During the last six months an extended series of trials of a new drug, the iodide of zinc, has been made in Guy's Hospital on patients under the charge of Dr. Barlow. The salt has been prepared, we believe to Dr. Barlow's direction, by Messrs. Davenport, and is given in the form of a syrup, of which the dose is the same as of the iodide of iron. Dr. Barlow considers it especially indicated in cases in which the zinc alone might be too stimulating, and in those in which it is desirable to have the effects of both the ingredients. Chorea, struma, cachexia, and some forms of hysteria, form the chief in which it has been tried. In one case of severe strumous superficial lupus, it has been continued for many months and in full doses, with great apparent benefit. It is doubtful whether the cases of chorea have improved more rapidly than they might have been expected to do under the usual treatment by the sulphate.

Galvanism in Ununited Fracture.—A case occurred some months' ago, at the York County Hospital, in which, under the care of Mr. Holl, the House Surgeon, galvanism was employed for the production of union in an ununited fracture. Mr. Holl introduced a needle from each side of the limb into the interspace between the bones, and then passed a continuous galvanic current through. The operation was repeated every day for about a fortnight, and a cure ultimately resulted. The fracture was of the leg, very moveable, and had existed more than a year.

Local Treatment of Acute Gout.—The extreme pain attending acute gouty inflammation may, it appears, be very quickly relieved by the application of pure spirits of wine. We witnessed a trial of this remedy by Dr. Goolden on a patient in St. Thomas's Hospital, who was suffering at the time agonising pain in the foot,

and the result was an almost immediate relief. Dr. Goolden informed us, that he was in the habit of using it very frequently in private practice, and always with the most pleasing effect. He believed it to act by being absorbed, and not by mere evaporation. The mode of application is by a piece of lint saturated in the spirit, laid over the part, and then covered with oil silk.

Sesquichloride of Iron, etc., in Erysipelas.—Many instances have lately occurred in the London hospitals in which the treatment of erysipelas by the much-vaunted tincture of iron has appeared to be very successful, but none of the experiments have been sufficiently crucial in their character to warrant us in considering their results as conclusive. Still, however, the evidence in favour of the remedy is very strong. Some of the patients on whom it has been tried have been young children. With regard to local applications in this disease, it may be stated, that the wrapping up the affected part in a large and thick sheet of cotton wool appears to be very superior in its protecting influence to all others. In several severe cases of erysipelas of the scalp, lately in St. Thomas's Hospital, Dr. Goolden had the whole affected parts smeared over with a thick coating of white paint. The patients did very well, but the remedy is not an agreeable one to use. It is, we believe, in common employment in some of the pottery districts, where erysipelas of the face and head, from the alternate exposure to cold draughts and to furnace heat, is very frequent.

Tobacco-smoking in Traumatic Delirium.—We mentioned in the *Medical Times and Gazette* for August 13, at P. 167, a case in which delirium appeared to have been induced by forced abstinence from tobacco, and was relieved by its re-employment. Since then another very conclusive illustration of the medicinal usefulness of the weed has occurred. The patient was a man in Guy's Hospital, whose skull had been trephined by Mr. Poland, on account of a compound fracture, with depression. The dura mater had not been lacerated, and the parts had been put by the operation in a condition every way favourable to recovery. The man, however, became extremely restless, and, in spite of the use of his accustomed stimulants, ultimately delirious, insisting upon getting out of bed, etc. In his delirium he raved much about his pipe, and this indication for treatment Mr. Poland at once seized, directing, although contrary to the rules of the hospital, that the patient should be allowed to smoke. The beneficial effects were immediately apparent, and the favourable termination of the case appeared to be in no small degree attributable to this simple expedient.

Local Applications in Chronic Gout and Rheumatism.—The ancient remedy of soda poultices for chronic gout appears to have fallen into very unmerited disuse. We have seen lately numerous cases in which very great apparent benefit was produced by them. The quantity of soda used was one drachm mixed with a common bread poultice, and applied hot over the affected joint every night. Many cases affording illustrations of the good effects resulting from iodine-painting of joints affected with chronic rheumatism, have recently been under the care of Dr. Bennett, in St. Thomas's Hospital. This remedy also, although long known, does not appear to be so generally used as it deserves. It was, we believe, a great favourite with the late Dr. Pereira.

Ethereal Solution of Iodine.—Both from its more rapid evaporation and its higher degree of concentration, the etherial solution of iodine is a much more powerful counter-irritant than the spirituous ones. A young man was recently in the London Hospital, under the care of Mr. Curling, on account of impeded respiration from a bronchocele. The tumour was not a very hard one, nor yet unusually large, but it extended equally to both sides, and involved also the isthmus. That the trachea was compressed was evident from the dusky countenance, stridulous respiration, dyspnœa, aphonia, and laryngeal ring with the cough. It was feared that tracheotomy might become necessary, as the common solutions of iodine, conjoined with its internal use, had failed to produce any mitigation of symptoms. Mr. Curling now ordered the etherial solution to be applied; it produced extreme pain and irritation, but a few days afterwards the tumour was perceptibly softer, the man could speak sufficiently loud to be heard across the ward, and the air entered freely into every part of his chest. Mr. Curling has also employed this preparation with great benefit as a counter-irritant in several cases of inflamed joints. We noticed in our reports some weeks ago, from the City Hospital for Diseases of the Chest, the very successful employment of a strong alcoholic solution of iodine applied to the external throat in cases of chronic or catarrhal laryngitis, with aphonia. Since then, the remedy has been tried in numerous other instances, with like favourable results; and although, of course, not always curative, it certainly appears to possess great advantages over all other modes of counter-irritation.

Lobelia in Asthma.—The lobelia inflata, a drug much praised and abused by quacks, and somewhat slighted by the Profession, is, we observe, in constant use among the out-patients at the last-mentioned hospital. In doses of ten minims three times in the day, it appears frequently to produce most admirable effects in cases of chronic bronchitis complicated with tendency to paroxysmal asthma. It is commonly given in conjunction with sedatives, expectorants, or stomachics, often agreeing remarkably well with the latter. Patients taking it frequently complain of much nausea and sense of depression during the half-hour or so following each dose; but it seems, on the whole, to decidedly improve the appetite and digestion. If the nausea be excessive, combination with a few drops of dilute hydrocyanic acid is often useful.

Aconite as a Local Anodyne.—The comparative value of several of our local anæsthetics was well exhibited in a case recently under the care of Mr. Curling in the London Hospital. The patient, a woman of 57, had a patch of dry gangrene on the outer side of her left foot. Its slow increase was attended with such intense pain, that for several weeks she scarcely slept at all. To obtain relief, chloroform, on lint beneath oil-silk, belladonna lotion, and the solution of opium, were severally applied to the part, with, however, but very slight and temporary benefit. A liniment, consisting of equal parts of the soap liniment and of tincture of aconite, was then ordered to be used in the same manner; and so great was its efficiency, that under its influence the poor woman was frequently able to obtain a very fair night's rest. This case is only one among many in which we have seen proved the powers of aconite as a local anodyne.

Treatment of Congenital Syphilis.—The continued administration of mercurials to infants is a matter often involving some difficulty. By simply giving the drug to the mother, and trusting to its influence on the mammary secretion, the effect is often not produced with sufficient rapidity; and if the ordinary preparations as hydr. c. cret., etc., be given, they are very apt to produce diarrhœa, and run off by the bowels. To obviate this, we observe that Mr. Wormald, at St. Bartholomew's Hospital, is in the habit of ordering a piece of flannel smeared with mercurial ointment to be worn constantly over the child's belly, never omitting, however, if the little patient be at the breast, to administer mercury to the mother also. The daily experience of the Skin Hospital proves, that small doses of the bichloride may be given without risk of any evil consequences, even at the most tender age. The dose usually given to an infant of from one to two months is about one ninetieth of a grain in solution three times daily; and it is usually combined with as much of the tincture of opium as may be necessary to relieve the extreme restlessness which often attends the disease. Under this treatment, illustrations of the truth of Abernethy's observation as to "fattening courses of mercury," are often afforded.

Medical Times & Gazette.

SATURDAY, NOVEMBER 12, 1853.

ASSURANCE OFFICES.—WHO OUGHT TO PAY THE SURGEON'S FEE?

We have had forwarded to us a correspondence between a Surgeon and the Secretary of the London Life Association.

The Secretaries of the Assurance Offices which refuse to pay for that which they have received, usually limit their reply to an application for a fee to a simple expression of regret that the Office has no funds at its disposal that can be applied to that purpose, and that the Medical man must apply to his former patient for the sum to which he is entitled. Not so Mr. Edward Docker, Secretary to the Assurance Association to which we have referred. He has stated his case at some length; and as probably he has said the best for the repudiating Offices that can be said, though somewhat in the worst possible taste, we reprint his letter at full, and append what seems to us a sufficient answer.

"London Life Association, No. 81, King William-street,
"October 15, 1853.

"Sir,—I beg to acknowledge the receipt of your letter of the 14th inst., and to inform you that the Society can have no possible objection to your making known its practice in regard to Medical fees, through the medium of the Medical journals, or any other

medium; the fact that the Society pays no such fees being published by the Society itself in its Prospectus.

"The London Life Association is not a trading Company, but a body of persons associated together for their mutual benefit; and whoever wishes to enter the body must submit to its rules, or be excluded, one of these rules being, that the applicant shall refer to his medical attendant, from whom the Society may receive, free of charge, the requisite information. It is no object to the existing members to increase their number, if that increase be attended with an increase of expense, and therefore they decline to pay fees of any kind for the purpose of obtaining new assurers.

"You state, that the assurer is in no way benefited; and your Profession, by demanding a fee from the Society, appear to believe that they confer an obligation on the Society rather than on their patient; but, for the reasons I have endeavoured to explain, the Society holds a different opinion, and therefore declines to pay the fee, and moreover requires the applicant for admission himself to obtain the medical report in the form supplied by the Society, in order that it may 'evade' (not the payment of the fee, but) the risk of that low abuse which some members of the Medical Profession have not thought it beneath them to employ.

"If you think it will promote your object, you are quite at liberty to make any use you please of this letter.

"I am, Sir, your obedient servant,

"EDWARD DOCKER, Secretary."

In the first place, Mr. Docker affirms that the London Life Assurance Association is not a trading Company, but a body of persons associated together for their mutual benefit. Let us consider this sentence—a body of persons associated together for their *mutual benefit*. The founders of this Association could not carry on this concern "for their *mutual* benefit" unless they could persuade new members to join; for it is manifest that, supposing the members of the Society to fall below a certain number, the Association would have to draw on its capital for the payment of the sums for which the lives that dropped in were insured. That the London Life Association does desire new members is proved by the fact, that the Association issue a Prospectus, etc., just as those Associations that have, what Mr. Docker terms, a trading character. The Association itself has "for its object the mutual benefit of its members." How is that to be promoted but by obtaining a certain number annually of new lives to insure, and by those lives being good ones?

A proposes to join an Association. (This case occurred to ourselves.) He is a stout John-Bull-looking man, engaged in an occupation not usually considered unhealthy. He is of temperate habits, and it is now two or three years since he was confined to his bed, and then only for a short time. The office forward to his medical attendant a series of questions, to all of which a favourable answer might have been given; but at the bottom of the series was the following:—"Please to state any other particulars which may influence the office in estimating the value of this life," or words identical in meaning with these. He declined to give the office his opinion unless a fee was forwarded.

The office took the life without his opinion, and a precious life it is. The man is the subject of albuminuria, and his life almost valueless. The man himself, probably answered all the questions of the office with a clear conscience, for being of a somewhat nervous temperament, his Medical attendant had never informed him that he was the subject of serious organic disease.

Now, supposing that the questions concerning this man's state of health had been propounded to us by the London Life Assurance, "a body of persons associated together for their *mutual benefit*," who would have benefited had we answered the questions? Would the now happy patient? No, certainly not; for his life most assuredly would have been rejected, or he would have had to pay a much larger sum annually than a healthy individual. Would "the body of persons associated together for their mutual benefit" have been benefited by our opinion? Most certainly they would; for they would have escaped the accepting a *very very* bad life.

The patient, the applicant to the office, cannot be benefited by the opinion of his medical attendant; the office must in every case be greatly benefited. The Association must, for its continued existence, gain new members; it is to the advantage of the Association that those members be good lives. The Medical opinion secures them good lives; and, therefore, we say the Medical opinion "confers an obligation on the Society rather than on the patient." Never was a more just demand for payment made than that of the Medical Practitioner for an opinion given under seal to an insurance office; and we earnestly trust that our professional brethren will, one and all, and on every occasion, decline to answer any questions forwarded to them by the repudiating offices, and also in every way exhibit their want of trust in offices, the directors of which decline to pay that which in equity they are bound to pay. Confidence in the *public* moral principle of the managers of such offices should be withdrawn by every member of the Profession.

The farce of making the man who applied to have his life assured sign the application, which is to be returned sealed to the Secretary of the Society, and then pretending that the former, and not the latter, requires the opinion,—an opinion which may cause him to be rejected,—is too trumpery to be played with any effect, and we should strongly advise the managers of the London Life Association to have it withdrawn *instanter*, if they desire their office to hold even a moderately respectable position. The Directors of the Association must know, the Secretary must know, the Candidate for assurance must know, and the Profession know, that it is—we can use but one word to express it—pure humbug.

We can afford, in the name of the Profession, to pass unnoticed the remarks about "low abuse."

THE RECENT DEATHS FROM CHLOROFORM.

THREE late Numbers of this Journal have contained melancholy evidence, that chloroform cannot be administered without a certain amount of fear of a fatal result. On the 15th October we published the first account of the case of death under chloroform, which happened some days before in the Edinburgh Infirmary; on the 22nd, this was followed up by details of a second, which occurred in University College Hospital on the 6th, and a notice of a third, at St. Bartholomew's, on the 20th, full particulars of which were given in our Number on the 29th, with some valuable remarks by Mr. Roberton, of Manchester. Last week, Dr. Snow made some very instructive comments on these cases in our columns; and the subject is so important that we think it advisable to call attention to certain questions suggested by these cases, and by the cautions recommended by Dr. Snow.

In the Edinburgh case, it would appear from the letter of our Correspondent, that it was not the chloroform to which the fatal result should be attributed, but the manner in which it was administered. Dr. Simpson, it is well known, has always advocated the simple mode of giving chloroform by merely wetting a handkerchief. It is not so well known, but no less true, that he has repeatedly insisted upon the careless manner in which this mode has been followed at the Edinburgh Infirmary, and has predicted that some fatal accident would occur if more precautions were not adopted. If the details of the recent case recorded in the letters we published be correct, it would appear that the

patient was killed because sufficient precautions were not taken to dilute the vapour of chloroform sufficiently with atmospheric air. If so, the case must be a severe lesson to the Edinburgh School, who have not been sparing in their ridicule of the efforts made by Dr. Snow to ensure a precise dilution of the vapour,—efforts which have reduced the mortality almost to nothing when his inhaler has been properly used. Dr. Dunsmore, in his remarks on the case, in the November Number of the *Monthly Journal of Medical Science*, says, that the quantity of chloroform used was *about an ounce*, and that the handkerchief upon which it was administered was held at the distance of *a few inches* from the mouth. He says, that the *ordinary precautions* were had recourse to in the administration; but should have added, at the Edinburgh Infirmary, as we are in the habit of using greater precautions in London.

But little can be learned from the case at University College. It is by no means clear what share chloroform, fatty degeneration of the heart, exhaustion from hunger, peritonitis, or strangulated hernia, had in producing death.

The case at St. Bartholomew's is more instructive, as there, no doubt, chloroform led to the fatal result. Our reporter states, that "every precaution was adopted in its administration." Dr. Snow, however, says, "I believe that the kind of inhaler used at St. Bartholomew's Hospital affords no means of either knowing or regulating, even approximately, the proportion of vapour in the air which the patient inhales." We should be glad to hear from Dr. Black, the administrator, whether Dr. Snow's belief is correct. If so, the case will be additionally important.

If, as Dr. Snow asserts, in all the cases of death from chloroform yet recorded, the fatal event was produced by the inhalation of air too highly charged with chloroform vapour, it is quite clear that such untoward accidents may be prevented for the future, or rendered very rare, by diluting the vapour with a sufficient volume of air. If all the effects of chloroform can be safely produced by the inhalation of air which does not contain more than 4 or 5 per cent. of chloroform,—if air containing 10 per cent. is sufficiently powerful to kill by paralyzing the heart,—and if by Dr. Snow's inhaler we can exactly regulate the per-centage of vapour in the air, we can look forward with confidence to the future, and trust that the proper and careful administration of chloroform may be as safely continued as it has uniformly been, since the discovery of its power, in St. George's and King's College Hospitals.

In the mean time, these recent deaths should teach us to continue researches for some anæsthetic agent which may confer upon mankind all the advantages derivable from chloroform without its dangers.

ALBERT-PARK, FINSBURY.

We last week noticed that a Memorial, addressed to Her Majesty's Government, urging upon them the necessity of forming the Albert Park, had, in little more than ten days, obtained no less than 1300 signatures from Medical men in all parts of the Metropolis. Since that time a large number of additional names has been appended, and the list is now given, in four extra pages, at the end of our present publication. As this Journal has ever taken a deep interest in all sanitary improvements, the circumstance is peculiarly pleasing; and the promptitude with which this appeal has been met, shews the unanimity and energy of the Profession on one of the great points of public welfare; many of the signatures being accompanied by remarks containing strong and special grounds for urging this case on the attention of the Government,—such as the following, from the pen of the venerable Dr. Farre:—

"In an examination before a Committee of the House of Commons on the 7th of August, 1832, I had occasion to state the relative value of pure atmospheric air, as vital food, to the grosser aliments of bread, flesh, and water.

"If a human being be deprived of these aliments he dies in a period varying from eleven to nineteen days; but, if atmospheric air be excluded from his lungs he dies in one minute; therefore, the relative value of atmospheric air to water, bread, and flesh, is as fourteen days to one minute, and the *deterioration* of the atmosphere in which human beings are residing, produces a deleterious effect on life *in proportion* to that deterioration."

We sincerely hope that the Park will be granted, and that the Government will not turn a deaf ear to so powerful an appeal from so influential, and, in this case, most assuredly disinterested a body, as the Medical men of the Metropolis.

It will naturally be asked, how were 1300 signatures procured in so short a time? and the answer would be, that each member of the Profession was supplied with a circular containing a form, which he filled up and returned to a Secretary. This cannot be done without expense, but the result shows how productive a small sum well laid out may be made. Why should not representations to Government, on the subject of Medical grievances, be made in the same way? It would take little from the funds of any large Association. Surely the money of such a Society as the Provincial Medical and Surgical Association would be more legitimately expended in making known the wants of their members in this way, than in the support of a weekly Journal which absorbs the whole receipts of the body, and obliges the Council to discontinue the publication of their Transactions, and apply for subscriptions to carry on the battle of Medical Reform.

THE CHOLERA.

THE EPIDEMIOLOGICAL SOCIETY AND CHOLERA.

The following are the questions regarding the origin, propagation, pathology, and treatment of epidemic cholera, addressed to the Medical Profession, by the authority of the President and Council of the Epidemiological Society, who remark, that "the following queries have been prepared and carefully arranged, with a view to eliciting a large body of information, which may be analysed, so as to afford some definite facts with regard to the subject of cholera. It is not expected that each individual member of the Profession to whom they may be addressed should be able to enter into all the points touched upon; but it is hoped that every Medical Man who has attended cases of cholera will willingly give such positive data as he may have observed. By this means, a variety of facts and opinions will be acquired, which, when compared and digested, must necessarily yield positive and beneficial results."

First Series.—Questions Relating to the General Physical Condition of ————.

1. *a* Describe the site and the geological formation of its soil. *b* Is it an inland or sea-coast place? *c* Is it level or hilly? *d* What is the elevation? *e* What is its aspect? *f* What winds prevail, and what winds are found to be most obnoxious to the inhabitants?

2. *a* What is the nature of the sewerage? *b* Of the surface drainage? *c* Of the water supplies?

3. *a* What are the worst sanitary evils and defects? *b* How may they be rectified? *c* What are the impediments which have prevented the adoption of the necessary improvements?

4. *a* Have any sanitary improvements in regard to sewage, drainage, watering, widening the streets and ventilation, and especially, in regard to the dwellings of the labouring classes, taken place, between 1832 and 1849, or subsequently? *b* Are there any model

lodging-houses? *c* Has the "Common Lodging-house Act of 1851" been adopted? *d* Are there any public baths and wash-houses?

5. What localities in the town are the most frequent seats of other epidemic diseases, apart from cholera?

6. *a* If the town is a port, state whether it is an open roadstead, a harbour, or a river anchorage. *b* What is the rise and fall of the tide? *c* What is the state of the banks at low water? *d* Is the sewage discharged into the port? *e* If so, how is the sewage influenced by the tide? *f* What is the state of the docks and wharves? *g* If a creek or river anchorage, how far is it from the sea? *h* Is the water salt, brackish, or fresh? *i* If a harbour, what is its aspect, is it open or land locked?

Second Series. — QUESTIONS RELATING TO THE GENERAL FEATURES OF ———— CONNECTED WITH THE ORIGIN AND SPREAD OF CHOLERA IN 1853-54.

1. *a* Has the locality suffered from epidemic cholera on the present or any former occasion, and if so, state when? *b* State whether it has enjoyed an immunity from cholera during the prevalence of the disease in neighbouring districts at one period and not at another? *c* Can you state the population during the epidemics stated under *a*?

2. *a* What was the state of the public health, prior to the appearance of cholera in 1853? *b* Did diarrhœa or any other epidemic affection immediately precede the advent of cholera?

3. *a* What was the character of the weather previous to and during the outbreak? *b* What was the condition of the atmosphere in regard to dryness and humidity? *c* Were any meteorological peculiarities observed?

4. *a* Did any diseases prevail among cattle, poultry, or other domestic animals previous to or during the outbreak, or subsequently? *b* Did the potato disease, or any form of vegetable blight prevail in the town or its vicinity at either period, or were unusual swarms of insects observed?

5. If the town is a seaport, be good enough to answer the following questions:—*a* With what ports on the Continent or in this country where cholera exists or has recently existed, does the town hold communication? *b* How frequent is that communication? *c* Is it by steam as well as by sailing vessels? *d* What is the nature of the trade of your town? *e* What measures, if any, have been adopted for the purpose of preventing the introduction of cholera in the locality? *f* Is there any quarantine or medical surveillance over the shipping of the port, and of what character is it? *g* Has cholera or diarrhœa, to your knowledge, existed among the crew or passengers of any vessel prior to the occurrence of the earliest cases on shore, if so, state the name of the vessel, the port whence she came, or any port or vessel with which she may have since communicated; in which latter case state, if you can, whether cholera prevailed at the port or on board the ship communicated with? *h* What is the condition of the sailors' berths, as to space, cleanliness, and ventilation, on board the vessels which have been attacked? *i* Has cholera attacked any of the passengers or crew after landing? *k* Has it attacked any of the inmates of the houses inhabited or frequented by the passengers or the crew, if so, give the dates and briefly narrate the circumstances? *l* Have the crew or passengers of any vessels which left a port, infected or not, without any sickness among them, been to your knowledge, subsequently attacked with cholera or diarrhœa before reaching your town?

6. *a* What parts have been most, and which least, severely attacked by cholera? *b* What parts suffered most in former epidemics of cholera? *c* Are they the same as those ordinarily infested by other epidemic maladies? *d* Have any parts of the town or district escaped entirely? *e* Have any localities, which suffered more or less severely under either of the former epidemics, escaped during the present one? *f* How far does a liability to, or exemption from, cholera appear to have been influenced by particular trades or occupations?

7. Give any statistical information you may possess with regard to the occurrence of cholera in the abodes of the poor and of persons in easy circumstances?

8. *a* Have many attacks of cholera occurred among the well-conditioned classes? *b* Have these cases been single or numerous in the respective households? *c* Were there any special circumstances in connexion with the locality or the personal habits of the affected to account for the attacks?

9. *a* Have cholera patients been received into the general hospitals, the unions, or infirmaries? *b* Were they separated from the other inmates? *c* Have the other inmates in these establishments been attacked; and if so, how soon after the admission of the cholera patients?

10. Did diarrhœa, or any other form of bowel complaint become prevalent among the inhabitants of the town after the first case or cases of cholera?

11. Did strangers, or persons recently arrived in the locality, appear to be more liable to the disease than permanent residents?

12. *a* What do you consider to have been the duration of the epidemic in your locality? *b* Give the dates of the first and last cases, and the date or dates on which the disease reached its climax?

Third Series. — QUESTIONS RELATING TO THE DETAIL OF INDIVIDUAL ATTACKS OF CHOLERA DURING THE EPIDEMIC AT ———— IN 18 .

1. State if you can the exact date of the first case of cholera which occurred in ————, and under whose care.

2. State the date of the first case of cholera which fell under your observation. State the following particulars regarding the patient: *a* Age. *b* Sex. *c* Occupation. *d* Whether married or single. *e* Whether impoverished or well to do. *f* The previous habits, and the history immediately preceding the attack. *g* Whether a resident or a stranger. *h* Whether direct or indirect communication was traceable with any person labouring under cholera, or with a place where cholera was prevailing. *i* If a stranger, whence and when did he arrive in the town?

3. Specify the symptoms, course, and termination of the case, according to the following formula:—*a* The premonitory symptoms and their duration. *b* The period of the supervention of rice-water evacuations, spasms, and cramps, with the state of the pulse, breath, urine, the number of discharges, and the condition of the surface. *c* The period of collapse. *d* The period of death, if the termination was fatal, with *post-mortem* appearances. *e* The period and character of the consecutive fever and of convalescence.

4. *a* What was the number of inmates in the house and in the room in which the first case occurred under your observation? *b* Were any of them subsequently attacked? *c* If so, state the dates of these attacks.

5. State the exact dates of the second, third, and subsequent cases, which fell under your observation, with particulars as under question 1.

6. *a* What was the greatest number of severe or fatal cases of cholera in any one house? *b* Give a detailed account of the site and condition of the house, or of any other circumstances which may elucidate this mortality. *c* State the dates of the successive attacks.

7. Can you give any statistical information respecting solitary cases occurring in the impure and ill-ventilated abodes of the poor, as compared with similar cases occurring in localities usually salubrious? or as regards the average per-centage of attacks in the ill-ventilated dwellings of the poor as compared with those occurring in the dwellings of the higher classes?

8. Have any solitary cases occurred in the prisons, workhouses, lunatic asylums, public schools, model lodging-houses, factories, or coal-pits? *b* Did the disease spread in these places? *c* If the inmates escaped, to what circumstance is the exemption to be ascribed?

9. Have any cases of cholera occurred, to your knowledge, in persons who had been previously attacked either in this country or abroad?

10. *a* Have persons who had left, or were removed from houses or districts where the disease existed, been attacked in their new abode? *b* Give the exact date of their change of abode, and of the seizure?

11. *a* Has the disease in the present epidemic exhibited the same symptoms and character as in previous epidemics, or have any peculiar features been observed? *b* In what proportion of cases of cholera was the attack ushered in by premonitory symptoms? i. What was their nature? ii. What their duration? iii. State the symptoms which you regarded as pathognomonic of cholera. *c.* Did any cases occur to you in which collapse supervened without rice water or any other purging?

12. *a* At what period of life were severe attacks of cholera, whether fatal or not, most frequent? *b* At what period of life did the largest number of fatal cases occur? *c* Was one sex more liable than another? *d* At what period in the twenty-four hours did the decidedly choleraic symptoms occur in the majority of cases?

13. *a* Have the medical attendants of the sick shown a greater liability to, or immunity from, cholera than other residents in the same condition of life? *b* Have their families exhibited a similar proclivity or not? *c* State the number of medical men in the district? and *d* The number of those attacked with cholera? *e* Had the medical man attacked made any cadaveric examination of cholera patients, and at what date previous to the seizure?

Fourth Series.—QUESTIONS RELATING TO THE TREATMENT OF CHOLERA.

1. State your treatment, whether successful or unsuccessful. *a* In the premonitory stages. *b* In the stage of rice-water evacuations. *c* For the spasmodic affections. *d* In the stage of collapse. *e* During convalescence.

2. In what number of cases of recovery from cholera, with collapse, was there any consecutive fever, in what number was there none, and what had been the previous treatment in these cases respectively?

3. Did any of those cases terminate fatally in which the renal secretions were re-established?

4. Did any of those cases terminate fatally in which the biliary secretions were re established?

Fifth Series.—Questions involving Theoretical Opinions on the Subject of the Origin and Spread of Cholera.

1. *a* Have you known epidemic cholera to originate under circumstances in which contagion or infection was impossible? *b* State your reasons for assuming its spontaneous origin.

2. Was the disease, in your opinion, introduced by vessels, persons, or goods arriving from an infected place, or did it seem to make its appearance spontaneously, and to spread independently of any traceable communication?

3. *a* Have you observed any cases suggesting that the disease was propagated by the soiled linen or bed-clothes of the patients? *b* Have you found that persons who had washed the bed or body clothes of cholera patients were more frequently attacked than other persons in similar conditions of life? *c* Have you observed persons engaged in laying out the corpses of cholera patients to be peculiarly liable to become affected?

4. Have you reason to believe that the use of improper or unwholesome food exerted any influence upon the severity and spread of cholera?

5. Have you reason to believe that any cases were the result of emotional influences, such as fear or anxiety?

6. Have you observed anything indicating the conveyance of the disease by provisions supplied from a house in which cholera existed?

7. *a* Have you any reason for assuming cholera to have been originated or propagated by the use of tainted water? *b* Was the water employed in the household of your cholera patients derived from a river, a brook, or well? *c* Could it have received the contents of sewers or house drainage? *d* Could it have been contaminated by percolation from a churchyard or any locality in which putrefaction was proceeding?

8. Can you give any information with regard to the stage of incubation of cholera? If so, state the particulars and the grounds on which your information is based.

9. If you have any views regarding the personal or local predisposing or exciting causes of cholera, not involved in the preceding queries, be so good as to state them.

It is requested that any question of importance that may suggest itself to the persons to whom these questions are addressed, may be communicated to the Secretaries, for introduction at a future time, if approved of by the Cholera Committee.

DR. MACLOUGHLIN TO THE REGISTRAR GENERAL.

The following is a copy of an important letter, which has been addressed to the Registrar-General by Dr. Macloughlin:—

"Sir,—You are aware, that it has been asserted, not proved by any inquiry at the bed-side, that diarrhœa is almost always the first, the warning symptom of cholera; and that it has also been asserted, not proved by any inquiry, that there are cases of cholera without any premonitory diarrhœa, or without any warning whatever of the approach of the disease.

"In 1849, during the outbreak of cholera here, an inquiry was entered on, with the view to ascertain whether diarrhœa was the first, the warning symptom, of the approach of the disease; and whether there were cases of cholera beginning at once by spasms, vomiting, etc., without having given any warning of their approach by a diarrhœa or by any other symptom.

"In the course of that inquiry, in various parts of London and in the country, 3902 cases were examined into, in the presence of about one hundred Medical gentlemen, all willing to seek, anxious to find, and able to recognise, truth; and, out of these 3902 cases, not one case was discovered where the disease had manifested itself suddenly and without any warning. In all these 3902 cases, there had been a diarrhœa for some hours', for some days', or for some weeks' duration previous to an attack of spasms, etc., etc.

"Since cholera has again appeared among us, the same inquiry has again been undertaken, and with the same results,—that is, as yet no case of cholera has been discovered which had not had a premonitory diarrhœa for some hours, for some days, or for some weeks, previous to an attack of spasms, etc., not even excepting the cases reported in your Weekly Return as cases of cholera without any premonitory symptoms. All these cases have been inquired into, and all have been ascertained to have had either a diarrhœa for some hours or some days previous to the attack of spasms, etc.; or the certificate of death has been signed without having inquired into the state of health of these patients previous to the attack of spasms; or the Medical informant was not aware of what was meant by a premonitory diarrhœa.

"And that you may be satisfied that this is the case, herewith I beg leave to place before you the results of inquiries, obtained either from the Medical gentlemen who attended the different cases, or from friends of relatives of those persons who have died.

"Thus, therefore, whether in the outbreak of 1849, or whether in the present outbreak, so far as it has gone, not one single case of cholera has been discovered without having been ushered in by a diarrhœa of, I repeat, some 'hours', some days', or some weeks' duration previous to an attack of spasms, etc., etc.

"It is unnecessary to point out the importance of this inquiry. It will at once be seen, that if, by an attentive investigation at the bed-side, and in a doubtful case where death has occurred, by a minute and careful autopsy, it can be proved, that diarrhœa is the first, the premonitory, the only constant indication of an attack of cholera,—and as the knowledge has been acquired, that in this stage the disease is under the control of medical science,—it will then be in the power of human foresight, not only to save thousands, but to prevent the death of one single individual of the community by cholera. And to prove the correctness of this conclusion, I beg leave to appeal to the results obtained by the Military Medical Officers in charge of the health of the garrison at Newcastle during the ravage of cholera in that town two months ago,—a result which reflects the greatest credit on these gentlemen and on their Profession, and which must form an epoch in Medical Science.

"But I must here express the regret, that this inquiry is materially impeded by the inaccurate reports which are sent to your office of cases of cholera without any premonitory symptoms, which, appearing in your official return, command more confidence than any more accurate information furnished by an unofficial individual.

"Could not this be obviated by having in each district a regular Medical Officer, whose duty should be to see the remains of such individual, and there to inquire into and ascertain the cause of death, so that you would then have reports on which you could depend, and which would make your weekly publication what you intend it to be,—the most correct publication in existence of the cause of death?

"You have already been so kind as to call the attention of Medical informants to the necessity there is, when diarrhœa has preceded an attack of spasms, etc., to state the number of hours, of days, or of weeks for which this diarrhœa has persisted previous to an attack of spasms, etc.

"Would it be asking too much to request you to call attention to what is meant by 'premonitory,' which appears not to be understood,—that it is the time which has elapsed from the first liquid evacuation to the first symptoms of spasms, etc., and that all the liquid discharge which takes place during that interval is called a 'premonitory diarrhœa?'

"I have the honour to be, Sir, your obedient servant,

"Dr. Macloughlin, M.D.

"Member of the Legion of Honour of France.

"London, 7th November, 1853,
34, Bruton-street, Berkeley-square."

REPORT OF THE REGISTRAR-GENERAL FOR THE QUARTER ENDING SEPTEMBER, 1853.

The appearance of the Asiatic cholera in London, and the terrific mortality which it has occasioned within a few weeks in the north of England, are of such importance as to demand the whole of our attention.

As a means of guidance and a basis of reasoning it may be useful to present here a brief summary of some of the facts which regulated the course of the epidemic that broke out five years ago.

Cases were registered in London and in Sunderland during the first week of October, 1848. Deaths in all England, 1105 in last three months of the year. The epidemic declined, and in April, 1849, the deaths were only 107; in May, 327. The great epidemic eruption began; and in June, 2046 persons died of it; July, 7570; August, 15,872; September, 20,379; October, 4654; November, 844; December, 163. The thirty-sixth and thirty-seventh weeks of the year 1849 were the most fatal; the deaths from cholera in those two weeks were 12,592. On the most fatal day, September 6th, the deaths by the disease were 1121. The total deaths in 1849, were 53,293. 12,152 were persons under 10 years. Rate of mortality, 30 in 10,000 of the inhabitants. Diarrhœa of severe form was fatal to 18,887 persons, chiefly children; or to 11 in 10,000 inhabitants.

The danger of dying greatest at advanced ages; the rate of mortality, 13 in 10,000 at the age of 12; 64 in 10,000 at 70.

The duration of the attacks of cholera in 39,468 cases was found to be 50 hours on an average. 20,684 cases terminated within 24 hours.

In 85 of the 623 districts of England no death from cholera was recorded.

The centres of the attacks of the great epidemic were London, Portsmouth, Plymouth, Bristol, Merthyr Tydfil, Wolverhampton, Liverpool, Hull, and Tynemouth.

Rate of Mortality.—Hull, 241 in 10,000 inhabitants; Merthyr

Tydfil, 234; Stoke Damerel, 193; Salisbury, 185; Neath, 169; Liverpool, 167; Plymouth, 167; Sculcoates, 152; East Stonehouse, 148; Leeds, 145; St. Germans, 143; Wolverhampton, 137; Tynemouth, 129; Gravesend, 119; Newcastle-under-Lyme, 117; Hunslet (near Leeds), 102. The districts which in London were most fatal were Rotherhithe, 205; St. Olave, 181; St. George, Southwark, 164; Bermondsey, 161; St. Saviour, 153; Newington, 144; Lambeth, 120; Wandsworth, 100. The mortality was at the rate of 50 in 10,000 on the coasts; 17 in 10,000 over the inland districts. It was at the rate of 125 in 10,000 in the districts including the large ports; 47 in the districts of the secondary ports; 15 in the other coast districts. Of the inhabitants of low, river, and seaside districts, 85 in 10,000 died by cholera; in London, the loss was 62; in inland towns, 38; in small towns and the country around the river sources, only 12 in 10,000 perished. Of the inland towns, Wolverhampton, Merthyr Tydfil, Manchester, and Leeds, experienced the greater part of the mortality; in the 35 other large inland towns the mortality was at the low rate of 11 in 10,000. In London, the water supply had considerable influence on the mortality. The density of population and the poverty of the inhabitants were not without effect, but the effect of elevation of the soil transcended all other influences. On an average, the mortality by cholera was, in the several London districts at elevations of less than 20 feet above Trinity high-water mark, 102 in 10,000; in the districts at an elevation of 20—40 feet, 65 in 10,000; of 40—60 feet, 34; of 60—80 feet, 27; of 80—100 feet, 22; of 100 feet, 17; of 350 feet, 8 in 10,000 inhabitants.

The present epidemic has appeared first, like all that have preceded it, in the seaports. The first well-defined cases in London were registered in August, and the epidemic may be dated from August 20th; up to October 1st, the registered deaths, including some by English cholera, have amounted to 133. The origin of the last epidemic may be dated from October 1, 1848; and that of 1831-32 also began in the month of October, 1831. The present epidemic has attacked us earlier in the year, but it has not yet in the aggregate been more fatal in London than it was during the same number of weeks in 1848.

In Newcastle-upon-Tyne, with a population of 89,156 in 1851, the mortality from cholera has raised the deaths by all causes from 638 to 2085; in Gateshead from 374 to 771 in three months. The epidemic poison was no sooner introduced into the region than it, as it were, exploded, and destroyed nearly 2000 lives. In neither of the previous epidemics was any such sudden destruction of life observed. Is the present epidemic—so quickly following the epidemic of 1848-9—of a different and more fatal character? or are there local circumstances, independently of the nature of the epidemic, that account for the desolation that now surrounds Newcastle-upon-Tyne? These important questions can, it is evident, only be definitively answered by careful inquiry into all the circumstances; but enough has been elicited to justify us in refusing to admit at present that the epidemic is in its nature more destructive than its predecessors; while it yields an awful sanction to the hygienic law which prohibits the use of impure water.

The Superintendent-Registrars of Newcastle and Gateshead, in reply to inquiries which the Registrar-General has made, state, and have forwarded documents showing, that, from the 5th of July last, the town, which had been supplied before with salubrious water, was supplied largely "from the impure source of the Tyne, in the vicinity of the sewerage of the town." (a)

The fact cannot be questioned, that the water with which Newcastle-upon-Tyne was supplied in 1848-9 was comparatively pure; and that in 1853, when the calamitous loss of life was recorded on the registers, the city was supplied with water containing a strong solution of the contents of the sewers. The same effect was the result of the same cause in Hull in 1849. And other examples may be cited in which the converse happened, as at Exeter, where the inhabitants, after having suffered severely from cholera in 1832, obtained pure water, and escaped its ravages in 1848-9.

Dr. Snow says:—"Water into which sewers flow, or which is navigated by persons living in boats, or which is in any other way contaminated by the contents of drains or cesspools, should be entirely disused." No person, to test the value of such a rule, would ever have proposed that a large town, which was supplied with good water, and escaped with no considerable loss in a previous epidemic, should, on the eve of another epidemic, do all that is here forbidden. What no sceptical philosopher would have dared to propose as an experiment, what no haughty conqueror ever condemned the inhabitants of a subjugated city to endure,—this fine English town on the Tyne,—the centre of the coal trade,—of intelligence of every kind,—and of engineering knowledge,—has done and suffered. All the excreta, which are thrown into the streets or water-closets, are washed down the acclivities of the streets into the river; the fermenting mass is driven up and down by the tides, and has thence since July been pumped by the engine at Elswick all over the town through the water pipes for domestic uses: it has been used for ablution, it has been washed over the floors, it has been drunk as a beverage by many of the children and the wives, as well as large numbers of the higher and middle as well as the working men of the town.

No water was drawn from the Tyne after September 15; the cholera then raged with less intensity, and the epidemic speedily subsided.

(a) The Newcastle water taken from the River Tyne has been analysed by Dr. Robert Dundas Thomson. He found it to contain a quantity of organised matter mechanically diffused through it (loaded with living vibrios) to the amount of 4·502 grains per gallon. Of this 0·545 grains was destructible matter; the remaining 3·957 grains consisted of siliceous forms resembling the shields of infusorial animals or diatomaceous plants. Dissolved, or finely diffused in the water, he further found 2·68 grains per gallon of organic matter. The water likewise contained 1·18 grains per gallon of chalk and 7·3 grains of muriate and sulphate of soda and sulphate of magnesia. The total solid contents were 15·662 grains per gallon. This water was, it is said, filtered, but the process is not described by the Water Company.

METROPOLIS.

Cholera continues to make progress, though its rate of increase is not rapid. The deaths referred to it last week were 102. In the last four weeks the numbers rose as follow: 45, 83, 99, and 102; in the same periods diarrhœa and dysentery were fatal in 55, 48, 43, and 42 cases, showing a constant decrease. Of the 102 deaths by cholera, 11 occurred in the West Districts, 9 in the North, 2 in the Central, 21 in the East, and 59 in the South districts.

London is situated in a basin, through the bottom of which the Thames flows; and it was discovered during the epidemic of 1848-9 that the rate of mortality by that disease was nearly in the inverse proportion of the elevation of the ground on which the dwellings of the inhabitants stood. The same relation between the rates of mortality at different elevations, though the deaths have been comparatively few, has hitherto been observed in the present epidemic.

Exceptional circumstances disturb the average in particular districts; but it is a general rule, that the danger of dying of cholera, and of all plagues, diminishes within certain limits in proportion as the dwellings of the population are raised above the level of the sea.

MORTALITY by CHOLERA in the Houses of London at various Elevations.

Average Elevations in Feet.	Population 1851.	Deaths from Cholera in the Ten Weeks ending October 29.	Deaths to 100,000 Inhabitants.	
			Observed.	Calculated Series.
350 feet	11,986	0	0	2
100 ,,	157,696	20	13	5
80—100 ,,	262,285	9	3	6
60— 80 ,,	118,992	5	4	8
40— 60 ,,	513,588	55	11	10
20— 40 ,,	438,193	70	16	16
20 ,,	859,496	264	31	31
Under 350 ,,	2,362,236	423	18	18
1	2	3	4	5

The series, col. 5, was obtained by dividing 31, the rate of mortality in the lowest terrace, successively by 2, 3, 4, 5, 6, and 17, in conformity with the law laid down in the Report on Cholera (p. lxiii.).

DEATHS from SCARLATINA, TYPHUS, DIARRHŒA, CHOLERA, and all Causes, Registered in LONDON in the last Thirteen Weeks, with the Mean Temperature for the same periods.

	Aug. 13.	Aug. 20.	Aug. 27.	Sept. 3.	Sept. 10.	Sept. 17.	Sept. 24.	Oct. 1.	Oct. 8.	Oct. 15.	Oct. 22.	Oct. 29.	Nov. 5.
Deaths.....	984	1053	1021	1029	1015	949	969	1212	1001	1039	1054	1144	1112
Scarlatina.	30	27	18	32	43	34	48	47	58	54	46	44	52
Typhus	60	48	37	48	37	39	49	57	49	52	47	50	49
Diarrhœa and Dysentery..	141	131	144	157	137	80	94	71	72	55	48	43	42
Cholera	19	10	18	16	7	16	29	47	66	45	83	99	102
Mean Temperature	61·2	60·4	58·6	55·7	56·1	57·6	54·6	52·4	48·6	52·0	48·6	55·5	48·9

DISTRICTS.—The following are the Deaths from Cholera in Districts, with the Population, as compared with that of the same period of 1849.

DISTRICTS.	Population.	Area in Square Miles.	Total Deaths from Cholera in 1848-9.	WEEKS ENDING Aug. 26, 1848.	Aug. 27, 1853.	Sept. 2, 1848.	Sept. 3, 1853.	Sept. 9, 1848.	Sept. 10, 1853.	Sept. 16, 1848.	Sept. 17, 1853.	Sept. 23, 1848.	Sept. 24, 1853.	Sept. 30, 1848.	Oct. 1, 1853.	Oct. 7, 1848.	Oct. 8, 1853.	Oct. 14, 1848.	Oct. 15, 1853.	Oct. 21, 1848.	Oct. 22, 1853.	Oct. 28, 1848.	Oct. 29, 1853.	Nov. 4, 1848.	Nov. 5, 1853.
West	376,427	17·2	1258	1	1	2	3	1	...	1	3	1	2	1	3	1	9	5	6	4	2	4	16	2	11
North	490,396	20·5	965	2	5	3	6	...	...	2	3	1	4	...	6	...	5	...	3	4	5	1	3	1	9
Central	393,256	2·8	1739	...	3	...	3	1	...	2	2	2	2	2	2	3	2	1	2	4	3	...	1	...	2
East	485,522	8·8	3218	2	5	1	2	2	3	...	3	2	3	1	4	5	8	7	6	5	24	5	24	3	21
South	616,635	66·2	7048	2	4	1	2	3	4	1	5	1	18	...	32	5	42	21	28	28	49	24	52	59	59
			Totals.....	7	18	7	16	7	7	6	16	7	29	4	47	14	66	34	45	45	83	34	96	65	102

PROVINCIAL.

From the Board of Health Report of Nov. 8.—Deaths.

Dundee.—Nov. 5 to 8, cholera, 17.

Morpeth.—Nov. 5, cholera, 1.

Faversham.—Nov. 5, cholera, 1.

Gateshead.—Nov. 5—6, cholera, 2.

" (Hewarth).—Nov. 5, cholera, 1; diarrhœa, 1.

South Shields Union.—Oct. 30 to Nov. 6, cholera, 5; diarrhœa, 1.

Luton.—Nov. 7, cholera, 2.

Strood.—Nov. 6, cholera, 2.

Soham.—To Nov. 8, 35.

Malton.—Nov. 7, cholera, 1.

Arbroath.—Nov. 8, cholera, 1.

Tenterden.—Nov. 2, cholera, 1.

Belfast.—On board the Guiding Star, Nov. 7, cholera, 13.

The *Cork Examiner* announces the arrival at Queenstown, on Sunday evening, of a large American vessel,—the Kossuth,—bound from Liverpool with emigrants for America. She was fifteen days out up to the time of her putting into harbour, during which time cholera had made its appearance on board, and of the most virulent and fatal character. Fifty persons were attacked, eighteen of whom died, and the bodies were thrown overboard. A number of the emigrants were Germans. Another frightful case of cholera, on board an emigrant ship, the Guiding Star, also from Liverpool, is described in the *Belfast News Letter*. The total number of deaths has been thirteen,—viz., one at Liverpool, six at sea, and six in Belfast Lough. The sick, twelve or thirteen, have been removed to the workhouse hospital. The ship was left free from disease. The Guiding Star left Liverpool with 550 souls on board, principally Irish, English, and Scotch emigrants.

CHOLERA IN SHIPS AT SEA.—PORTSMOUTH, Nov. 7.—The Bremen merchant-ship Anna arrived at Spithead from Bremerhaven, which she left on Thursday last for Baltimore, having lost some of her passengers by cholera. On the day she sailed, a child 4 years old was taken ill with diarrhœa and vomiting, and died in four hours after. On the same day, two adults and a second child were also attacked with similar symptoms, and died on Friday. On Saturday, five of the crew were taken ill, and one died yesterday; the other four are so far recovered as to be able to do light work.

On the 21st ult., 10 emigrant ships arrived at New York with 3779 passengers, of whom all but 150 were from Liverpool. The Benjamin Adams, from Liverpool on the 20th ult., lost 15 passengers by cholera. The ship Sagadahoc, arrived at Boston on the 21st ult. from Gottenburg, reported the loss of 70 emigrants on the voyage from the same disease. On the subject of the frightful mortality on board emigrant ships from Europe, the *Herald* has the following:—

"Among the arrivals of emigrant ships at this port during the past few weeks, a very large number of deaths have been reported. In one vessel, the Charles Sprague, the unusually large number of 45 persons died on the passage from Bremen; and in another, (the Winchester, from Liverpool,) the number of fatal cases amounted to no less than 79.

"The following is the number of cases at this port, from September 9 to October 21:—22 ships; number of passengers, 7701; deaths, 359.

"Although the captains in their reports, with one exception, merely mentioned the fact of such a number having died, it is pretty certain that the disease which carried them off was cholera. Several, no doubt, died by the common diseases, but that cholera was raging on board many of the above-named vessels is beyond all question, from the fact that 33 persons who were landed at quarantine were suffering from that epidemic. The sickness in the Benjamin Adams was decidedly cholera; and, in addition, the ship Sagadahoc, from Gottenburg, which arrived at Boston yesterday, reports the loss of 70 passengers by the same disease.

"In reference to this matter, a Committee of the American Medical Association has drawn up a memorial to Congress, urging the necessity of compelling all emigrant vessels to carry a surgeon."

REVIEWS.

Asiatic Cholera: its Symptoms, Pathology, and Treatment; with which is Embodied its Morbid Anatomy, General and Minute. Translated from a Paper by Drs. Reinhardt and Leubuscher. By RICHARD BARWELL, F.R.C.S.E., Demonstrator of Anatomy at St. Thomas's Hospital. Pp. 219. London. 1853.

Mr. Barwell tells us, that during the worst part of the last epidemic visitation of cholera in 1849, he was engaged in superintending the admission of cholera patients into St. Thomas's Hospital, and in treating the sufferers, under the direction of the physicians.

Mr. Barwell is a decided non-contagionist, and attributes the spread of cholera to atmospheric influences, assisted and concentrated by bad drainage, bad ventilation, and the over-crowding of the dwellings of the poor. He draws a very close comparison between cholera and typhus, which he even considers to be analogous in their nature.

One chapter is devoted to the consideration of the premonitory diarrhœa, which Mr. Barwell regards as the usual antecedent to cholera, and therefore deserving of the most active and energetic treatment on the part of the Practitioner. He speaks highly of the benefit to be derived from the starch and opium enema, and of moderate doses of mercury and opium, with aromatic spirits of ammonia and catechu; and when these means fail, acetate of lead and opium. To remedy the incessant vomiting which often marks the onset of the disease, he gives hydrocyanic acid, but has not much faith in creasote; external warmth, mustard-poultices, brandy, ammonia, soda-water, and especially ice in small lumps, will, he says, often relieve the irritability of the stomach.

In the algide stage of cholera, we find, that out of 90 cases recorded by the author as having passed into this stage, 41 died. He recommends the external application of heat in the form of the *hot-air bath*, and the *hot, wet sheet*, which he has often seen applied with advantage.

The chapter on the "Morbid Anatomy of Cholera," which is a translation of a paper by Reinhardt and Leubuscher, is very interesting. The *post-mortem* appearances consist chiefly in congestion of the mucous surface of the large and small intestines, and when examined under the microscope, the mucous membrane, in many places, is found more or less entirely deprived of epithelium. The solitary glands of the small intestines are constantly more or less enlarged, and Peyer's glands are either marked by vivid capillary congestion, or they are of a clear white colour. The changes seen in the kidneys are analogous to those observed in Bright's disease; granular matter is found in the tubuli, and afterwards dark globules of fat, which are soluble in ether; and fibrinous moulds are found during life in the urine. The female organs of generation are very frequently the seat of morbid changes; the mucous mem-

brane of the womb is often hyperæmic, and universally infiltrated with blood; the vagina and ovaries are often much congested.

This book exhibits considerable ability, which would have been displayed to more advantage had the manuscript, or the proofs, been carefully revised by the hand of some judicious friend. We must protest against the wretched dog-Latin in which the prescriptions are written. They would certainly horrify any tyro of the Pharmaceutical Society. We select a few:—"Diet *lactæ*," "enema statim *utenda*," "*radetur* capill." "*sumat.* gin., ʒiv." These, and similar mistakes, occur perpetually, and cannot be printers' errors.

The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L., Etc.

The Twenty-fourth Number, completing the Sixth Volume of this Journal, is now before us, and we reiterate the favourable opinion of the work which we have heretofore expressed. Among all the subjects which engage the attention of professional men, there is none more important, and perhaps more difficult, than that which relates to the pathology and treatment of diseases of the brain.

The present Number contains some important matter, and is replete with interest, not only to the pyschological physician, but also to the Profession generally, and, indeed, to a certain extent, to the more thoughtful portion of the public at large. The following is a brief summary of its contents:—Article 1. On the "State of Lunacy in England," is an able analysis of the Seventh Annual Report of the Commissioners, and contains judicious remarks on the defective organization of the Medical staff in our public asylums. 2. "On Moral Sanitary Economy,"—an essay on education, physical training, domestic culture, and dieteties, which every *paterfamilias* would do well to peruse with care and diligence. Then follows Article 3, a deeply-interesting "Psychological Study," being a review of the Autobiography of poor Haydon, the painter, in whose work are ample materials for the contemplation of an erratic genius in its usual course of development and termination. We perceive that the last Number of the *Quarterly Review* has taken almost identical views of the character of this singular man. This chapter is worked out with great effect, and gives a clear insight into the peculiarities of Haydon's mind. We have then elaborate statistics on the subject of lunacy and lunatic asylums in Ireland; and an analysis of the various Reports of the British asylums; some able monographs on mental dynamics, and other interesting articles relating to psychology.

Altogether, the Volume for 1853 thoroughly sustains the high character which Dr. Winslow's Journal has attained.

Hand-book of Organic Analysis. By Justus Liebig, Professor of Chemistry in the University of Munich. Edited by A. W. Hofmann, Ph.D., F.R.S., Professor in the Royal College of Chemistry. Pp. 135. London. 1853.

To no philosopher in the present day is organic chemistry so deeply indebted as to Baron Liebig, and the Work now before us is a most valuable contribution to our knowledge on this important subject. The style is lucid, and the processes are not only explained to the mind, but are made manifest to the eye by a profusion of beautiful illustrations. The translation has been executed by Professor Hofmann, and exhibits him not only as an accomplished chemist, but as a proficient English scholar. He has faithfully adhered to the text of his illustrious author and teacher, but he has added, in an appendix, a short, but very useful description, by himself, of an apparatus for the use of gas, instead of charcoal or spirits of wine, in organic analysis.

Notes on the Climate and Diseases of the City of Cork. By John Popham, A.B., M.B., Physician to the Cork North Infirmary. Pp. 21. Dublin. 1853.

This pamphlet is a reprint from the *Dublin Quarterly Journal of Medical Science* for May of the present year. It is a very good monograph upon the subject of which it treats, and it states a great number of facts within a small compass. We are sorry to find, that, although nature has done much for Cork and its environs, man has done very little, and its sanitary condition is anything but creditable to its inhabitants. In fact, many of the well-known causes of disease, such as filthy streets, overcrowded houses, intramural grave-yards, and ill-regulated *abattoirs*, exist unmolested in this great city; and we cannot wonder that it has been frequently the seat of epidemic maladies.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

OPIUM IN THE PROLAPSUS OF THE RECTUM OF CHILDREN.

By GIUSEPPE MONTINI, of Montechiaro.

The author regards infantile dysentery as the commonest cause of prolapsus of the rectum, and comes to the conclusion that opium, either alone or combined with other remedies, (so important a medicine, according to Frank, Chomel, Ramazzini, Horn, Fallot, Gueretin, Malin, and others, in asthenic dysentery,) would exert a beneficial effect in prolapsus of the rectum dependent upon asthenia. After he had administered opium in asthenic dysentery with the usual good result, he made use of the remedy in cases of prolapsus, in occasional doses not exceeding half a grain every two to three hours, while a compress was applied to the anus, and maintained there by a T-bandage.

Of the two cases which he relates, the first was a child, aged 3, with a prolapsus three inches long, suffering from tenesmus and frequent fluid evacuations. Reposition, compression, and astringent washes, were tried in vain. The author replaced the gut; and, after administering opium in the way here recommended, effected a cure in four days.

In the second case, the prolapsus was six inches long, and the malady had existed two years. After the internal administration of opium, and the application of the compress, the disease disappeared permanently.—*Gaz. Lomb.*, 1852.

UPON THE SIGNIFICATION OF THE MILK-SCAB (MILCH-SCHORF) IN INFANTS.

By F. VAN WILLEBRAND.

The author remarks, that, both in the Profession and the public, there prevails an idea of the innocent and curable character of the milk-scab, which is considered to indicate an effort of the organism to throw off some acrid scrofulous matter by the skin. He denies the scrofulous nature of the above-mentioned disease, and proceeds to offer some remarks upon scrofulosis generally.

Recent investigations, and especially those of Lebert, (Traité des Malad. Scrof.,) have shown, that in scrofula there is no peculiar matter or deposit, nor any special disease of organs; and that, therefore, we are not justified in regarding scrofula as a specific disease. The glandular swellings upon the surface of the body, which have for so long been regarded as characteristic of scrofula, are, as proved by Andral, Velpeau, and Rokitansky, only a secondary affection, which arises from irritation in parts from which the absorbent vessels proceed, but which may continue long after the cessation of the local irritation. As a cause of glandular swellings in the neck, the author mentions irritation of the mucous membrane of the mouth by dentition; in older children, by carious teeth; irritation of the Schneiderian membrane; chronic conjunctivitis, inflammation of the mucous membrane of the ear, inflammation of the brain, (according to Griesinger,) and especially cutaneous eruptions of the head and face. The peculiar ramifications of the lymphatic vessels in the places here enumerated explain the frequent occurrence of glandular swellings of the neck in consequence of affections of the skin, in which the different degrees of irritability of the lymphatic system exercise a most important influence. As instances of glandular swellings occurring at a distance from the local irritation, the author mentions swellings in the axilla, consequent upon vaccination, and remarks, that he has seen glandular swellings, terminating in suppuration, in the neck from the same cause. As, however, a morbid irritation once excited in the lymphatic system may spread after the cessation of the local cause, so may glandular

swellings continue or increase after the cicatrisation of the vaccine puncture; a fact which the author affirms he has often witnessed. He considers these swellings in no way connected with the protective influence of vaccination; on the contrary, he pronounces them the results of a morbid process complicating vaccination, and he deems it best for the health of the child to make as few punctures in the arm as possible, because many of them tend to excite glandular swellings. Although these enlargements of the cervical glands depend, in by far the greater number of instances, upon no corruption of the blood, but are secondary, and excited by different external causes, yet it cannot be denied that morbid conditions of the lymphatic system, let them proceed from whatever cause they may, exert a prejudicial influence upon the composition of the circulating fluid. All investigations, however, upon the deviations from the normal constitution of the blood in scrofula are valueless, because our conceptions of the disease are too fluctuating and arbitrary.

From the preceding the author concludes, that the milk-scab is not to be regarded as dependent upon scrofula; he rather supports a totally converse view to that, which attributes a purifying effect upon the blood to these cutaneous eruptions. He thinks that most eruptions of a chronic character proceed from external causes, and he especially mentions eczema and impetigo. As external causes he enumerates deficient attention to the skin, both dirtiness and excess of cleanliness, especially constant bathing in hard water, by which the integument loses its oil, so necessary for its lubrication and protection; rubbing and irritation of the skin by rough coarse hands. The custom, in Finland, of washing and dressing children before a stove is to make up for the want of the sun's warmth. The author has often noticed the first appearance of an eruption after exposure of the child to a sharp raw air. As internal causes, he speaks only of dentition and disturbances of the digestive organs. The spread of eruptions he explains, by the ramifications of the lymphatic vessels under the skin. The effect of prolonged irritation is to cause congestion and inflammation of particular spots of integument, upon which vesicles and pustules and other simple forms of skin disease may appear. For an example, he brings forward the itch; the occurrence of eczema, after the application of blisters. No hypothetical acrid state of the blood is allowed by him under any conditions. All Dermo-pathologists agree, that this eruption—viz., the milk-scab—so long as it is of limited extent, may be cured without harm, and, indeed, must be cured. But, when the disease has existed for a long time, its sudden cure may seriously disturb the organism. The author mentions, as instances of what may ensue, inflammatory affections of the mucous membranes, especially those of the eye and ear. Catarrh of the air-passages or of the alimentary canal, difficult of cure. He thinks that chronic cutaneous affections of the head confirm the disposition to congestion of the brain and its consequences in young children; but he does not consider it yet proved, that the external inflammation is directly propagated to the dura mater by the freely anastomosing vessels of the cranium, which pass from the pericranium to the parts within the skull. Finally, such widely-diffused eruptions bring on disturbances in the digestive organs,—a statement which is confirmed by the observation, that the vasa chylifera are inactive in proportion as the external integument is coated with a varnish, or any other application excluding the air. The practical rule in these diseases, to attend to the functions of the digestive organs, appears well-grounded. The blood may become more serous in consequence of such digestive disturbances, and hence comes the tendency to watery effusions, œdema, etc. They may take place upon the brain or the lungs, and with imminent peril to life; most commonly in the latter organ, and in the advanced stages of cutaneous disease. Œdema of the lungs often alternates with hydrocephalus in children. The author does not consider it proved, that the speedy cure of an eruption is attended by risk of such watery effusions. At all events, no such case is recorded by Hebra, although he used every means to produce the rapid clearance of the skin. But the author attributes Hebra's success to the custom of putting the patients into warm baths, or employing wet dressings, as is now the custom in some hydropathic establishments. He never employed salves or unctuous applications, believing that their constituent parts could become absorbed and act injuriously.—*Finstra Läkare Sällskapets Handl., Bd.* 4.

UPON PAROTID SWELLINGS IN CHILDREN.

By BOUCHAT.

In a light and conversational strain, the author depicts the progress and the symptoms of simple parotid swellings (oreillons) in children; and he asserts that the disease does not easily happen after the twentieth year. From specific parotitis, he distinguishes the simple form by the mildness of the symptoms; and he affirms, that the latter only arises from septic conditions. The swelling of the mammary gland and testicle in this disease is no metastasis, in his opinion, but only the consequence of like structures, suffering similarly when exposed to the same cause. The author, however, does not explain why other glandular organs more nearly allied in structure do not suffer likewise. The whole article shows, by its superficial strain, that the attempt to found a distinction between oreillons and parotitis is artificial, and attended by no useful result.—*Gaz. des Hôp.*, 1853.

FOREIGN CORRESPONDENCE.

MEDICAL SKETCHES IN GERMANY.

No. III.—THE PRESENT SCHOOL OF HEIDELBERG.

Some important changes have recently taken place in the professional chairs at Heidelberg, which it will be necessary for us to allude to before we speak of those who now preside over the several courses in the Medical Faculty. The names of Henle and Pfeuffer, and the *Zeitschrift für Rationelle Medicin*, in which they have been associated as editors, are familiar to all acquainted with the principal media of publication of the original monograph literature of Germany. Pfeuffer has not been for some time directly connected with the School of Heidelberg, as he holds a clinical professorship at Munich; and, within the last year, this School has had another loss, as M. Henle has been called to a professorship at Göttingen. We have already explained this system, by which an eminent observer in one place is invited to fill a professorship in another school. As a microscopic anatomist, and a close and able original investigator in this department of science, M. Henle's name has been long familiar to all interested in these pursuits; and it is incontestable that he has rendered much service to science by the results he has arrived at by original inquiry, as well as by his classic work, "Allgemeine Anatomie." He has within late years devoted much attention to the study of pathology, chiefly as regards its general principles; his work on "Rational Pathology" has acquired much repute, and—the first part especially—contains many bold and striking views. M. Henle has largely directed his efforts to the advancement of the system of *Rational Medicine*. At another time, we hope to have a better opportunity of giving an account of this and other doctrines which now prevail in several of the chief German Schools.

To fill the place of Henle in the chair of anatomy, M. Frederick Arnold has been called from Fribourg, where he has taught with great success for several years. The name of Arnold occupies a very distinguished place among the first human anatomists of the day. The discovery of the ganglion oticum, (the ganglion of Arnold,) and his elaborate work on the ligaments, the greatest and most complete which has appeared since the days of Weitbrecht, (to whose memory it is most appropriately dedicated,) with many other observations and inquiries, have justly raised M. Arnold to a high rank as a profound anatomist, and his works take a stand with the classic authorities in this branch of science. M. Arnold is still in the prime of life, still enthusiastic and vigorous, and he has entered on his duties at Heidelberg in a manner that promises well for the cultivation of anatomy in this School henceforward. Being charged with the delivery of the course of physiology also, which here, as in many other Schools, takes place in the summer tremestre, he took means, on arriving at Heidelberg, to have established a proper and commodious physiological laboratory, an adjunct now indispensable to the delivery of an adequate course of physiology, in which so much of experiment and actual demonstration of facts is required, and for which any verbal descriptions, however eloquently or carefully delivered, are

but a very imperfect substitute at best, more especially as regards that department of science now known by the comprehensive term, "physiological physics." For such a course of physiology as we now refer to, combining full descriptions of the results arrived at by recent investigators, and, what is of more importance to the student, the proper illustration of them by experimental demonstrations wherever practicable, not only a laboratory, but also a collection of appropriate apparatus, is necessary. With the aid of the numerous illustrated books now within the reach of almost every student, it is quite possible for him to dispense with attendance on lectures which are merely descriptive; indeed, as far as the comprehension of a difficult subject, or the understanding of a complicated instrument, his time will be more profitably spent at home; but what it is especially to be expected that a Professor shall supply, is the proper illustration, by suitable apparatus and experiment, of those things not within the student's command; how all-essential, therefore, a well-arranged physiological laboratory, and well-stored cases of suitable philosophical apparatus! M. Arnold was so kind as to accompany us through the museum and laboratory, and to allow us to examine some of the most interesting portions of his philosophical collection. The Anatomical School and Museums of Heidelberg are situated at some distance from the University, in a building specially erected for the purpose, and constructed with much judgment, some four or five years since. Large and spacious rooms are devoted to the anatomical, physiological, and pathological collections, and a separate apartment to the zoological series. All these collections are valuable and extensive, and will well repay a visit. Some subjects may be well studied here, as the vascularity of bone, illustrated by many very careful and successful injections by Kobelt; the anatomy of the female generative organs, with most successful injections of the crura clitoridis, showing their remarkable size and attachments; some beautiful dissections, showing the connexions, structure, and anatomical situation of the par-ovarium in the ala vespertilionis. There are also many interesting examples of abnormal conditions, among which we noticed that described by Arnold, in the stomach, and to which he attributes the singular phenomenon of *rumination*, when it occurs—as it occasionally does—in man; this condition is believed by this eminent authority, to consist in a pouch-like dilatation of the stomach at the cardiac orifice, which is situated above the diaphragm, and may be regarded either as a dilatation of the lower end of the œsophagus, or of the region of the cardiac orifice; in either case, the food lodged here is situated above the point of constrictive influence of the fibres of the diaphragm, and can thus without much difficulty be forced up the œsophagus by any ascending movement of the diaphragm. In making these passing allusions to the collection now under consideration, or to any other at a future time, we wish to be understood only as giving an indication of the nature of the collections in any given locality; we could not pretend, in our present limits, to give anything like a detailed account of even the most remarkable and interesting specimens. Our object will be fully answered if we shall have given such an idea of them as may induce the medical traveller to turn aside, even for an hour, from the more attractive sights which surround him; and many a visiter, after having exhausted the "lions" of a small town, finds an hour or two hang wearily and heavily enough on his hands, especially if it rains, (as is not uncommonly the case in Heidelberg,) while he waits the departure of the next train or steamer; if he be a medical man, such an hour may be spent not only agreeably, but profitably and instructively, if his attention have been called to the existence of an anatomical or pathological collection, of which he would, perhaps, otherwise remain ignorant.

The philosophical apparatus, under the care of Professor Arnold, interested us much. The collection is yet in its infancy, having been commenced only under the *régime* of the present Professor. One instrument in particular had, for private reasons, an especial attraction for us. It is, we believe, already known to experimentalists in England; but, as even a very brief account of it may not be uninteresting to general medical readers, we shall run the risk of being *ennuyeux* to those who have already seen or heard of it. The instrument we allude to is the cymo-graphion (κῦμα, wave, γράφειν, to write) of M. Ludwig, now Professor at Zurich. It is destined to measure and indicate the comparative force and duration of the pulsations of a vessel. For this purpose, a small tube is introduced into a vessel, and its pulsations are, by means of a suitable flexible tube, allowed to play on one extremity of the column of mercury of a hæmadynamometre, similar to that of Poisseule; the other extremity of the mercury communicates the pulsations it thus receives to a piston-like rod, which passes some inches out of the glass tube, and carries at its upper extremity a pencil, placed horizontally, whose writing-point plays on a cylinder of some three to four inches in diameter, suitably placed to receive the impressions of the pencil; the cylinder, which is placed vertically, is caused to revolve on its axis by a simple clock-work arrangement. When it is required to make an observation, all that is necessary is to roll a band of paper on the cylinder, bring the blood-vessel into connexion with the hæmadynamometre, set the clock-work in motion, and the cylinder revolves, receiving from each movement of the wave of blood communicated to the column of mercury, and then to the pencil, an impression whose vertical height corresponds to the length and force of the wave. When the observation is concluded, we have on the roll of paper a series of curves, indicating with great nicety the comparative force and duration of each wave of blood. M. Arnold, who has in a considerable measure simplified the apparatus, has himself already arrived at some very interesting results. It is evident that the instrument admits of very extensive application, and to pathological investigations as well as others. In this latter department, indeed, especially in reference to the subject of aneurismal motions, now generally so imperfectly understood, we feel satisfied that some important positive results will be arrived at by investigations conducted in this manner. Did our space admit, there are many other subjects and instruments connected with Professor Arnold's cabinet to which it would be important to allude; for the present, we must take leave of them. We cannot, however, pass unnoticed the labours of M. J. Moleschott, privat-docent in the departments of general and experimental physiology. This young and already distinguished author is by birth a native of Holland; but, having pursued his studies in Heidelberg, the University of his early studies subsequently became that of his adoption and the scene of his maturer labours, and he has had the honour of conducting most successful courses in experimental physiology during the last six years. A pupil of Tiedemann, he was, at a very early period in his career, entrusted with the editing and completion of one of the last works of this great physiologist, "On the Nature and Physiology of Food," etc. He has also published independently two works on this subject, —"Ueber die Nahrungsmittel," and "Ueber Stoffwechsel," etc., on food, the changes of food, etc. He is well known also as an original investigator in experimental physiology, and as an able microscopic observer. Several of his researches have been conducted in conjunction with his friend, Professor Donders, of Utrecht, editor of the *Niederlandische Lancet*, etc. Experimental physiology in Heidelberg owes much to the labours of Moleschott; he did much to revive it when, after the labours of Tiedemann, it had in a measure fallen into disuse, and the newer methods of research were either unknown or disregarded. With such men as Arnold and Moleschott, however, this and the allied branches of anatomy and physiology promise soon to be raised in Heidelberg to a position equal to that which they occupy in the most favoured schools.

The department of pathology in Heidelberg has, within a recent period, received a most important acquisition, in the person of the distinguished Professor Hasse, whose labours had previously been conducted with such eminent success in Zurich. It is quite unnecessary for us to say a single word in reference to this scientific observer; his works are already well known to the English reader by the excellent translation in the Sydenham Society's volumes. In Heidelberg he enjoys the additional important advantage of holding a chair of clinical medicine also, which gives him the opportunity of investigating disease in the living, as well as its results in the dead. We cannot sufficiently admire or praise the energy and spirit, still quick and vigorous, with which Professor Hasse follows out his investigations. We have had the good fortune of not only following his clinique, but witnessing his performance of *post-mortem* sections, when, with the rachitome and mallet, or the less arduous sections with the scalpel, he worked with all the vigour and enthusiasm of one commencing a career of investigation. Professor Hasse has not yet passed the meridian of life, and we anticipate

in his department also that the School of Heidelberg will soon have a new fame. Of the labours of Chelius, Puchelt, Delfs, in their several departments, it is unnecessary to speak. The veteran Chelius is still an able and intrepid operator, and still distinguished for his courtesy and polite attention to strangers. Among the younger names, we must not omit those of Chelius (fils), Hœfle, etc. The latter is known by his useful and valuable work, "Chemie und Mikroscop am Krankenbette." The chemical department has received an addition, in the person of Professor Bunsen, who has been called from Marburg.

Our limits alone prevent us from entering more at length into the present state of this now most efficient School, for which, with the able professional staff it possesses, and the number and ability of its many young and enthusiastic observers, we anticipate within the next five or ten years a *renommée*, of which it will not be saying little that we believe it will equal that of its brightest days under Tiedemann, Gmelin, and Nageli.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, Nov. 7, 1853.

The bustle of commencing winter now relieves the dearth of news, and gives the promise of something to write about.

MEDICAL SCHOOLS.

The session opened last week. As far as the matriculation of medical students at the University has yet gone, a larger number have enrolled than at the corresponding period of last session. The introductory address of Principal Lee, which was a very eloquent one, was listened to by a crowded audience. The session of the College of Surgeons' School was opened by Dr. Mackenzie. His lecture was of that thoroughly practical character which is the characteristic of his mind, and it gave general satisfaction. The only changes this year are, that

PROFESSOR GOODSIR,

who has been for some time in declining health, has been obliged from this cause to winter abroad; and his place is supplied by Mr. Smithers, from the Extra-academical School.

PROFESSOR JAMESON

is also still unable to lecture; and

DR. TRAILL

lectures for him. As the Professor has been laid aside for several years, and as he has discharged the duties of his office for upwards of half a century, besides contributing in other ways to the advance of science, it is much to be regretted that Government does not bestow on him a pension to enable him to retire. Some attempt was made in this direction previously to the commencement of the session, but it proved abortive.

PROFESSOR FORBES

also remains unable to resume his course, and his class is taught jointly by Professor Kelland and Mr. Sime, formerly a distinguished pupil of the class. The College of Surgeons have lately passed a Resolution, doing away with compulsory attendance of the mechanical philosophy class on the part of applicants for their diploma. Henceforth they are to show that they have a competent knowledge of the branch, but do not require to produce a ticket of attendance on a class for it.

EXTRA-ACADEMICAL SCHOOL.

There have not been many changes in this branch of the school. The temporary removal of

MR. SMITHERS

to the University has left the Lectureship of Anatomy vacant.

DR. W. M. GAIRDNER,

who must be favourably known to your readers as the contributor of several papers to the Journals, has commenced to lecture on the practice of medicine; and those who heard his introductory lecture on Thursday will agree that he gives great promise of future success. At the same time, he starts in opposition to

DR. ALEXANDER WOOD,

a gentleman who has for many years been a favourite lecturer, and who has the advantage of being also an active practitioner.

DR. ANDREW HALLIDAY DOUGLAS,

having served his full time in the hospital, has been succeeded by

DR. WILLIAM ROBERTSON,

the late Editor of the *Monthly*, who will now be the lecturer on clinical medicine.

SCOTTISH RIGHTS AND MEDICAL REFORM.

A certain party here have been very clamorous for some time past in favour of what is called "Justice to Scotland." The gravamen of their charge against you Southrons is, that your fellow-countrymen north of the Tweed do not get their full share of the good things that are going. The first meeting of the Association was held on Wednesday night, and, if the report of the newspapers favourable to the movement is to be believed, was most thoroughly enthusiastic and successful. Several medical men of eminence were on the platform, and one of these (Dr. Alexander Wood), in a curious, conglomerate speech, which is, however, said to have been thoroughly successful as a specimen of the *ad captandum* style, brought the question of Medical reform before the meeting as one of Scotland's grievances. We have not yet seen enough of this movement to be able to pronounce on the judiciousness of this speech; but we observe that some of the newspapers, in commenting on it, refer to these grievances under which our Profession labours as having been stated for the first time, so little impression have all the discussions, petitions, remonstrances, etc., on this vexed question made on the public mind.

MEDICAL JOURNALISM.

I believe it is now settled that Dr. Bennet is in future to be charged with the whole responsibilities of the *Monthly*, while the new series of the *Quarterly* is to be under the charge of Dr. Seller. The November number of the *Monthly*, the first issued by Dr. Bennet, is a specimen of what a journal should be, and if he continue to conduct it in this way, and to be supported as he has been, he cannot fail to command success. The new series of the *Quarterly* is to commence on the 1st of January, 1854.

GENERAL CORRESPONDENCE.

SULPHURIC ACID AND DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—Cut from the *Times* newspaper, I forward the analysis of the Austrian specific for cholera, by W. Herapath, Esq. I do not recollect that it has appeared in your columns; if not, you may perhaps think it worth insertion now that sulphuric acid is being so strongly recommended to be tried as a remedy for cholera.

The directions for the administration of this specific are nearly the same as those given by Dr. Fuller in the *Medical Times and Gazette* of October 1, for that of sulphuric acid. Whether the sulphuric and nitric acids given in conjunction have a better effect than the former alone, I know not, not having given them a trial.

Dr. Fuller, in his valuable and important communication, thinks that sulphuric acid is all-sufficient, and the less it is mixed with other matters the better. He does not allude to this Austrian specific. He may never have seen this analysis. I am induced to notice it because I think, that if one-half only of the good it is said it is capable to effect be true, it will give additional confidence to those who may desire to try what sulphuric acid will do in choleraic diarrhœa and in cholera.

Without going into the details of cases, I can give good testimony to the success which attends the use of sulphuric acid in the common attacks of diarrhœa, usually prevalent in the summer and in the autumn months of our year.

I have given it to the old, to the young, and to the middle-aged with equally satisfactory results. I will briefly state a few particulars in one case—a child, a year old, passing motions frequently, which were offensive and dirty-looking, containing but little bile, often mixed with mucus and streaked with blood, and accompanied with prolapsus ani in a small degree. I found the administration of dilute sulphuric acid here highly serviceable, and in this case its good effects were the more striking in consequence of the child having been ill twelve days, under treatment by chalk mixture, gallic acid, extract of logwood, catechu, and compound tincture of camphor, with only partial benefit. The acid mixture was directed to be given according to the frequency of the motions, always several times a day, and that for five consecutive days, and then once every night, with the addition of a few drops of tinct. camphor. co., which effected a cure. I have found no disadvantage to arise from mixing the acid with other matters which render it more palatable to some, especially children, and give it more the appearance of medicine to others. My formula is, however, very simple; for adults it is this—

℞ Acidi sulph. dil., tinct. aurant., syrp. rhœados, aa. ʒij.; aquæ

ad ℥vj. Misce. A quarter part after each loose motion, and seldom are the whole four doses required.

A contributor to the columns of the *Medical Times and Gazette* a short time since, in recommending the acid treatment for diarrhœa, states that the acid is only beneficial in bilious diarrhœa where there is an excess of bile of a morbid and vitiated quality, and, if I remember correctly, ascribes its beneficial effects to its chemical action upon the bile neutralising its unhealthy alkalescence. Dr. Fuller, on the contrary, writes that "in bilious diarrhœa, and in certain chronic diarrhœa, it is of little or no avail, but in epidemic diarrhœa, in acute autumnal diarrhœa, if I may so term it, and in more decided choleraic diarrhœa, I have known no single instance of its failure." The case, which is bilious at first, may become serous or choleraic soon afterwards. I have prescribed the acid without having met with one case which required the previous administration of any other medicine during the autumn of the past and present years. Some were bilious and some were not. Mr. J. R. Pretty is giving the acid in infantile diarrhœa with much benefit. I have myself now under treatment an unweaned infant, six months old, to whom the acid, properly diluted, has been given according to the frequency of the motions, for forty-eight hours, with decided beneficial results. The motions were at first very bilious, soon lost colour and became dirty, greenish, watery, mucous, and slightly streaked with blood; much straining, with a great amount of flatulence. All these symptoms have been greatly corrected, and the frequency of the motions so diminished, that I shall substitute a carminative with a few drops of tinct. camph. co. for the next twelve or fourteen hours, for the acid medicine. The motions possessed the usual sour odour attendant upon the common diarrhœa of infants. This same infant was cured of an attack of diarrhœa, two months previously to the present attack, by dilute sulphuric acid, after chalk mixture, etc., had been given with but very little benefit. The mother has also taken the acid one day for the relief of loose bowels, during this latter attendance upon her infant. This, and the former case briefly noticed, are just those kinds of cases which I should have almost thought, two years ago, a man must be out of his senses to think of attempting to cure by the means of acid medicines. I have not, however, abandoned the old plan of treatment entirely. In an urgent attack requiring immediate relief, I find it convenient occasionally to supply my patient with one or two pills from my pocket, of either calomel and opium or compound soap pill, and to follow this with either an ammonia effervescing mixture, chalk mixture, or even the acid mixture, as I judge best. Attacks of cholera morbus, such as we used to have to cure before the first invasion of Asiatic or blue cholera, and which is essentially a bilious complaint, I fancy have not been nearly so prevalent since the appearance of the latter. I will only add, that the feelings of comfort and relief which follow the cure by sulphuric acid, very far exceed those which follow the use of opium, etc.'

I am, &c. WM. PRETTY.

AUSTRIAN SPECIFIC FOR CHOLERA.

"The Chief Commissioner of the Birmingham Police lately placed in my hands a bottle of cholera medicine which he had received from the head of the Austrian police, as being in general use in that country, under the influence of the Government, and as having been found a specific.

"The printed description stated, that the inventor had been allowed, in 1831-2, by the authorities, to try it upon the persons of some criminals, and that the result was a recovery in every instance, and that many thousand persons having since been cured with it, the Government, in 1849, commanded its employment in several large provinces, in prisons, and public establishments, and that not a single person who took the specific, where any hope of life remained, failed to recover, and that, too, without the slightest detriment to general health. This was, apparently, so decisive of its great value, that I determined to analyse it, and publish its components for the use of the world at large.

	Grs.
"I find in the fluid ounce density 1055.	
"Sulphuric acid (density 1845)	19·07
Nitric acid (density 1500)	11·81
Gum and sugar	23·62
Water	407·00
	461·50

"The sugar, as found was that of the grape, but most probably was cane sugar, altered by the action of the acids.

"The mode of administration was said in the directions to be as follows:—

"As soon as any premonitory symptoms of cholera show themselves, one table-spoonful of the mixture is given, diluted with four or five of water. Cold water is also drunk freely immediately after.

"At the end of half an hour, in mild cases, the dose is repeated, and this is often all that is required.

"The original anguish of the patient is generally found to undergo a remarkable diminution soon after the first dose; he becomes warmer, and the pain in the stomach and breast rapidly abates, and then ceases.

"In the same degree in which the patient recovers his warmth he becomes conscious of thirst, and feels a longing for cold water; in order to satisfy this longing, a table-spoonful of the medicine is mixed with a pint of water, and of this the patient is allowed to take *ad libitum*.

"When the symptoms do not rapidly yield, the dose is repeated at short intervals in the way already described; where vomiting does not occur, four or five spoonsful generally effect the cure; when, however, the phenomena of collapse have already set in, with continual vomiting, diarrhœa, etc., the acid mixture must be given in double doses,—namely, two table-spoonsful at a time in four or five of water, and repeated after every attack of vomiting until the sickness ceases and the cramps abate; after the vomiting has ceased, the medicine must still be repeated every quarter of an hour, until at least five or six table-spoonsful of the mixture have been retained in the stomach; cases have occurred in which it has been necessary to give as many as from ten to fourteen spoonsful before vomiting ceased. Cessation of pain, abatement of cramp, and a warm perspiration, are the first signs of amendment; should quiet sleep set in, it must not be interrupted. Cold water may be freely given, unless perspiration has commenced, when no more should be given than enough to assuage thirst; all warm or spirituous liquors should be avoided as so much poison.

"Mansion-house, Old-park, Bristol, Sept. 25."

SALINE TREATMENT OF ASIATIC CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—In the year 1849, as Physician to the Belfast Hospital, in which nine-tenths, or about 800, of the cholera patients sent to hospital were treated, and having read in some of the Medical journals of that period an account of Dr. Stevens's saline treatment of this very formidable disease, I felt bound to give it a fair trial. I therefore employed salines in seventeen cases, admitted consecutively, using at the same time heat, stimulants, and opium, as circumstances demanded.

As the result was very different from what I was led to expect, I feel called on to lay it before the Profession, in consequence of your reviewer now recommending a further trial of this mode of treatment.

I shall arrange my seventeen cases under three groups.

GROUP I.

On admission to hospital, seven of the patients were pulseless, had cold, livid, and sodden skins, with cold tongue, vomiting, and diarrhœa of variable duration, and dark areolæ round eyelids; the remedies used were heat, opium, stimulants, and the saline solution as directed by Dr. Stevens. The result was, that all died; the following Table gives the chief particulars:—

	1.	2.	3.	4.	5.	6.	7.
Aged	32	30	24	30	7	60	45
Time ill before admission to Hospital	2 days.	3 hrs.	4 hours.	2 hrs.	16 hrs.	Not stated.	10 hrs.
Died, after admission, in	8½ hrs.	7 hrs.	6 hours.	16 hrs.	17 hrs.	12 hours.	11 hrs.
Contagion traced?	Yes.	Yes.	Cholera in street; intercourse denied.	Yes.	Yes.	Yes.	Yes.

GROUP II.

In the five patients forming this group, there existed all the symptoms noted in the first; but, in all of them, "the pulse was to be felt feeble in the radial artery." They also all died.

	1.	2.	3.	4.	5.
Aged	20	70	45	10	7
Time ill before admission to Hospital	Uncertain.	36 hours.	3 days	1 hour.	Uncertain.
Died, after admission, in	29 hours.	18 hours	3 days	1½ days.	2¾ days.
Contagion traced?	From Workhouse, where Cholera prevailed.	Yes.	Yes.	From Workhouse, where Cholera prevailed.	From Workhouse, where Cholera prevailed.

GROUP III.

In the other five patients, it was found, on admission to hospital, that the pulse was quite distinct in the radial artery, that the skin and tongue were warm, that there was slight—if any—lividity, that vomiting and diarrhœa existed in all, and that in two the dark areola was observed on the eyelids.

	1.	2.	3.	4.	5.
Aged	34	16	12	26	20
Time ill before admission	14 hours.	18 hours.	5 days.	4 days.	2 days.
Died, after admission, in.....	15 hours.	Recovered	Recovered	Recovered	Recovered
Contagion traced ?	Not stated	Yes.	Doubtful.	Yes.	No.

I have strong reasons for believing that No. 5 in this group was not a case of cholera, but rather the result of a debauch. In none of the four who recovered did consecutive fever take place. In four of the thirteen who died, muscular movements were observed, beginning generally about three-quarters of an hour after death, and continuing in one for an hour and a-half.

I believe, in the foregoing Tables, and their respective headings, I have given all the particulars requisite to admit of a correct opinion being formed of the circumstances of all the patients to whom the saline treatment had been applied in the Belfast Hospital; to which I may add, that these cases were treated in the third month of the epidemic, and that they, as well as all the other patients, were sent into hospital by other practitioners—an arrangement which, it is obvious, prevented the possibility of my reducing the average mortality by the admission of patients who had little or nothing wrong with them. I will close this communication by stating, that precisely one-half of the 800 patients recovered; and it is my intention to endeavour to arrive at some practical benefit by an examination of the effects of some other plans of treatment that were adopted in the hospital. I am, &c.

J. SEATON REID, M.D.,
Physician to the Belfast Union Hospital for the Treatment of Contagious and Acute Medical Disease, and Consulting Physician to the Belfast General Hospital.

Belfast, October 21, 1853.

CLINICAL INSTRUCTION AT THE LONDON HOSPITALS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As you have lately been advocating in your Journal the necessity of clinical instruction, allow me to draw your attention to an absurd regulation of the authorities of St. Thomas's Hospital, viz., that notice of only one lecture on clinical surgery is allowed to be posted per week; therefore, when this lecture is posted, and another of the surgeons is desirous of giving a lecture that week, the students cannot be apprised of it, and only those who may happen to be going round the wards with him have the opportunity of hearing the lecture.

This is certainly a student's grievance, for there are many students who are otherwise employed than in going round the wards (in the dissecting-room for instance) who would willingly avail themselves of the opportunity, if due notice of the lecture were given.

I am, &c. STUDENS.

St. Thomas's Hospital, November 2, 1853.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. COPLAND, President, in the Chair.

This Society commenced its session on Tuesday, November 8. About 140 Fellows were present.

Dr. Copland, in commencing the business of the session, congratulated the Fellows upon the encouraging prospects before them. He begged that all who intended to favour the Society with papers would present them as early as possible, inasmuch as at the close of the last session so many contributions were received that he was forced so to hurry their delivery that the attention which their ability demanded could not be afforded to them. He begged, moreover, that all demonstrations of applause be always checked, as inconsistent with the dignity of the chief Professional Society in London.

A very interesting and learned paper by the President was then read, of which we shall give a full analysis in our next.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 5, 1853.

Dr. JOHN SNOW, Vice President, in the Chair.

CHOLERA.

As this was the first evening of the session on which the engrossing subject of cholera was to be discussed, the Society's rooms were crowded with Fellows and visiters.

Dr. Cormack read a Paper on the Pathology and Treatment of Cholera. He arranged his observations under the following heads:—The manner of studying cholera; the literary history and pathology of cholera; the treatment of cholera; and general conclusions. Most authors who have written on this disease, have drawn their description from the more severe forms; this, however, is an error; and it is necessary to study simple and uncomplicated cases, especially those which terminate in recovery with little or no medical interference. In other diseases, such as scarlatina, we see thousands of cases recover almost spontaneously, while others are saved by the skilful use of remedies; but not a few are tremendously rapid in their fatal career; and we often meet with the mildest and the most terrible cases occurring in the same house simultaneously or consecutively. Both classes of cases are then evidently the results of the same morbid poison, and the diversity of effects proceeds from a difference in the quantity of the poison employed, and in the condition of the recipient. And it is equally reasonable to regard tractable cholerine and intractable cholera as pathologically the same, and to include in the same category all the intermediate cases. If this were done, the mortuary statistics of cholera would be more truthful, and less appalling. Dr. Cormack then proceeded to consider the literary history and pathology of cholera. From the writings of Alibert, Comparetti, Merton, and Raimond Restaurant, and from the observations of Dr. James Bird and Dr. Charles Bell, and from cases which had occurred under his notice, he concluded that cholera was essentially a pernicious intermittent fever. In noticing the morbid anatomy of the disease, he insisted on the importance of noticing in what stage of the disease the patients had died, and referred many of the *post-mortem* appearances, generally described as characteristic of cholera, to the increased thickness of the blood, produced by the serous discharge from the bowels. In the treatment, we must bear in mind that cholera is a disease resembling, if not identical with, pernicious ague. The remedies which Dr. Cormack had found most useful were, preparations of iron and quinine in the early stage, or rather as prophylactics; camphor and chloroform in the cramps and collapse; and various astringents, as acetate of lead, creasote, nitrate of silver, or sulphuric acid, to arrest the diarrhœa. He deprecated the practice of giving large quantities of opium or calomel, believing that, when reaction has set in, fatal narcotism has been, in many cases, induced by the opium, which had till then remained inert in the intestinal canal.

The leading points in the discussion were—first, is cholera in its essence analagous to an intermittent fever; and, second, the general treatment of the disease.

Mr. Ross expressed his approval of Mr. Barwell's little book on cholera, and believed, with him, that the disease is similar to an intermittent fever. There is, however, this difference between the course of zymotic diseases and that of cholera, that while the former must run through its defined course, the latter may be arrested at every stage. It had been remarked, that the efflux of the serous and saline parts of the blood through the bowels had induced inspissation of the blood, with congestion at the surface, and in the deep-seated organs; but these conditions had been observed where there was no flux, and both had arisen under the same atmospheric influences. He thence inferred, that something more was necessary to produce cholera, and believed that to be the presence of a poison. He then alluded to the efficacy of nitrate of silver in the treatment of cholera, but remarked, that although it had produced more cures in his hands than other remedies, he had used it only during the subsidence of the epidemic.

Mr. Dendy characterised the Paper as the most judicious one he had ever heard or read. He also believed cholera and intermittent

fever to be analagous diseases, and considered, that so far from cholera and diarrhœa being merely stages of the same disease, the disease ought rather to have been designated "a-cholera." He objected to the employment of external heat in the treatment of cholera, and humorously affirmed, that the Medical Officers appointed by the Board of Health during the last epidemic, had, in his neighbourhood, boiled some patients and baked others; and he (Mr. Dendy) had observed the plan to be eminently unsuccessful as a remedial agent. He, however, approved of external applications, and usually directed the body to be washed first with vinegar and water, and then with salt and water, and afterwards to be wrapped in flannel; but this was not to induce warmth. He also directed the doors and windows to be opened; not to lower the temperature of the body, but to raise it by promoting the free inspiration of oxygen. With this exception, he approved of the author's plans of treatment. He considered Mr. Ross to be in error when he drew a distinction in those cases in which no external flux had been observed, and stated that there was internal, if not external flux, and that the large and small intestines would be found filled with the effused serum.

Mr. Robinson was decidedly of opinion that cholera depends upon the presence of a poison. He approved the author's treatment, except so far as referred to the use of mercury. He was of opinion that mercury was a most valuable agent in destroying the poison, and in emptying the distended gall-bladder, and had observed a profuse flow of disordered bile on the recovery of decided cases of cholera. He called for a large average of cases in reference to the beneficial action of any special remedy, since there are cases which will recover with any, or in spite of any, treatment whatever; while, on the other hand, there are those which, from the intensity of the action of the poison, resist stimulants, mercury, and purgatives, and will die in spite of any treatment.

Dr. Crisp inferred that no analogy exists between intermittents and cholera, since the latter, unlike the former, may be confined to parts of a common locality, as one side of a street or river. He affirmed cholera to be a disease *sui generis*, and altogether of modern origin. He conceived the aspect of the countenance to be an infallible diagnostic sign, and stated, that within the space of two or three hours the patient appeared to have aged twenty years. In reference to treatment, he had collected statistics to prove that workers in metals enjoyed no special immunity; and, in order to test the relative merits of mercury, sulphur, and injections into the veins of human and brute blood, and of saline fluids, he had advised that our great hospitals should each appropriate three wards for the reception of cholera patients, in each of which one of the above-mentioned modes should be exclusively tried.

Dr. Webster agreed with nearly all the views expressed by the author, and combatted Dr. Crisp's objection to the theory of the analogy between cholera and intermittents, by stating, that he had observed that ague was oftentimes confined to one side of the Tiber, or to some one street in Rome; and he also affirmed, that the same disease was known long before 1815. He was pleased with the change of opinion which the Board of Health had undergone as to the contagious character of cholera, and had always believed the disease to be non-contagious. He instanced, in support of this view, the immunity of Versailles during the epidemic of 1848, notwithstanding the proximity of Paris, where the disease raged fearfully; and the spread of cholera in Sweden, in spite of the strictest quarantine. In reference to treatment, he did not approve of the author's omission of opium, and believed that that drug, when given in small doses, and conjoined with camphor, was an excellent remedy in the premonitory diarrhœa.

Mr. Lee advised that injections should be cast into an artery instead of a vein, believing the operation to be equally easy, and far less dangerous, since bubbles of air, and extraneous particles, would thus be carried to the capillaries, and not to the centre of the circulation. He would select the radial artery, and had found it to answer well in his experiments on animals.

This earnest and useful discussion was brought to an untimely end in obedience to the rules of the Society, although many gentlemen still desired to express their opinions. It is, however, understood, that another opportunity will be presented on the reading of a Paper on the same subject by Dr. Snow.

Dr. Cormack, in reply, referred to the co-existence of neuralgic affections having an intermittent type, and the rise and decline of cholera. He had noticed this in preceding epidemics, as also in connexion with the present one. He believed opium to be a valuable remedy among others, but considered that it should not be given in larger doses in this than in other diseases, lest it should exert a poisonous action on the recovery of the patient from the state of collapse. He had not had any experience in the use of mercury, and believed the opinions respecting it to be about equally balanced.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, NOVEMBER 7, 1853.

Dr. BABINGTON, the President, in the Chair.

This Society held the first meeting of its fourth session at the rooms of the Royal Medical and Chirurgical Society. The meeting was well attended, a larger number of members being present than on any former occasion; the visiters also were numerous, and highly respectable. Occupying a prominent position in the room was a large map, by Mr. Alexander Keith Johnstone (as yet unpublished), illustrating the predominance of particular forms of disease in different countries. It is the property of Sir George Ballingall, Professor of Military Surgery in the University of Edinburgh, and was lent by him to Dr. James Bird, who exhibited it to the Society.

Sir James M'Grigor, who retires from the list of Vice-Presidents, was elected an honorary member.

The President congratulated the Society on its progress. Though only just entering upon the fourth year of its existence, it had already borne evidence of healthful and vigorous growth, and given ample promise of rich harvests in future years. After recapitulating the subjects of the papers read during the past session, he remarked that there was every reason to believe that those for the present session would be equally interesting and instructive. He reminded members, that the approach of epidemic cholera to this country would render papers on points connected with that disease especially acceptable. Circumstances had arisen within the last six months, calling for unwonted exertion on the part of two of the Committees, viz., the Committee on Small-pox and Vaccination, and the Cholera Committee. The assistance and suggestion of the former Committee were requested by Government during the progress of Lord Lyttelton's Bill for rendering vaccination compulsory in this country, and the first part of the Report on Small-pox and Vaccination (the first fruits of the Society) had been printed at the expense of the Government in the shape of a blue-book. Since the reappearance of cholera in this country, the Cholera Committee had been almost constantly employed in drawing up a comprehensive series of queries regarding this disease. They were now completed, and were in the hands of the printer, and it was intended that they should have an extensive circulation both at home and abroad. The President regretted that the resources of the Society had not admitted of the simultaneous and unrestricted co-operation of this Committee with the Committee appointed to investigate the diseases that affect the vegetable kingdom, and expressed a hope that the importance of the benefits likely to follow from the labours of these Committees would excite sympathy in those quarters where effective aid could easily be rendered. He also drew particular attention to a Committee in the course of formation for the investigation of the causes which, in the Metropolis, tend to develope epidemic diseases. The best thanks of the Society were due to the Right Honourable the Earl of Clarendon for a renewal of the permission, first granted to the Society's Secretaries by His Lordship's predecessor in office, the Right Honourable the Earl of Malmesbury, to inspect despatches and other documents bearing on cholera; also to the General Board of Health, the Poor-law Board, the Registrar-General, and other Government authorities, for access to public documents readily accorded to the members of the various Committees. The Society had received several donations of books during the year, and some valuable communications from India, America, and other distant countries, as well as from the Continent and from our own provinces. Dr. John Atlee, of Lancaster, Pennsylvania, had transmitted to the Society some numbers of the transactions of a Society instituted in that town for the investigation of epidemic diseases, proffering in the most cordial manner the right hand of fellowship to the Epidemiological Society. It had been the custom in former years for the President to open the session with an introductory address. He had, however, the pleasure on this occasion, of transferring this honourable and important duty into the hands of another, and he was sure that the meeting would agree with him, that on no one could this duty more appropriately devolve than their excellent colleague Dr. James Bird.

Dr. Bird commenced with a well-merited compliment to Dr. Babington, saying, that he exercised his official calling, not for personal benefit but for the public good; and then addressed the meeting on the surpassing utility of those scientific investigations which are the objects of the Epidemiological Society's research. Fully appreciating the extent and importance of preventive medicine, as the mistress rather than the handmaid of curative science, and having been anticipated in all that regarded the

general objects of the Society by the President's former addresses, he had selected a special subject, "The Laws of Epidemic and Contagious Diseases:" as such might, he thought, be of some interest, while we now stand on the threshold of an expected outbreak of destructive cholera. The whole scope of the inquiry divided itself, he said, into 1st. The laws under which epidemic and contagious diseases take their origin, and are diffused. 2nd. The application of a knowledge of these laws to prevent predisposition to such maladies, mitigate their severity, and limit their diffusion. Both were subjects of necessary study for the Profession and the people, in order that the intellectual masses of the latter might learn the true philosophy of health and disease, and know when to avoid the meddlesome interference of the bold and fearless empiric; or cease to trust, where nature's resources must fail, the do-nothing practice of the deluded homœopathist. More comprehensive principles, and practical rules for preventive medicine were yet requisite; and, in all attempts to investigate the nature and character of epidemic and contagious disease, the observations and opinions of past ages should not be neglected. The characters of epidemic and contagious diseases, including small-pox, measles, hooping-cough, scarlet fever, typhus, plague, yellow fever, and Asiatic cholera, were then given; and their geographical distribution, with their modifications of character, pointed out on a copy of Sir George Ballingall's map of these varied affections. After having described the various conditions under which these diseases originate, are propagated, and decline, he asked whether we could obtain a scientific expression of the nature of the phenomena, and facts regarding them, which might be applicable as sanitary rules of practice in preventive medicine; and having done so, he embodied these phenomena under four different laws, specifying, in his subsequent remarks, the various exceptions which might occur under each. Our limits do not admit of giving each in detail, or the classification of the poisonous agents which produce these various diseases. Since cholera and other epidemic diseases would be active, he said, in proportion as the accessary circumstances, which favour their origin and diffusion, were allowed to remain without a remedy, it was the duty of every wise and paternal Government to use its strenuous efforts for the removal of all such. The market sale of improper articles of diet, or meat in a state of decomposition, was to be prevented; good and untainted water supplied for the population; houses of refuge, or soup-kitchens established for the poor; their dwellings to be ventilated, white-washed, and kept clean, while the surface drainage and sewerage of the neighbourhood were to be improved, and dampness prevented. And, finally, he recommended, as a wise precaution in cholera, that no more intercourse between the sick and well should be allowed than might be necessary for their comfort, nursing, and proper medical treatment. The address was listened to with much attention, and warmly received.

The President announced, that at the meeting in December, a paper by August Hùsch, M.D., of Dantzic, Prussia, would be read, entitled "The Indian Plague and the Black Death."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

Dr. James Arthur Wilson, President, in the Chair.

November 4, 1853.

Dr. Murphy read a paper

ON CONVULSIONS.

He showed that convulsions arose from various and opposite causes, and how embarrassing a case must be to a physician who is called on suddenly to prescribe, and yet is unable to ascertain their origin. He defined convulsions as "involuntary clonic muscular contractions, with alternate relaxations, attended with insensibility." He mentioned a few of the most common diseases in which convulsions occur,—hydrocephalus, physical injuries of the brain, the invasion of the exanthemata, especially variola, hysteria, epilepsy, intestinal irritation in children, puerperal convulsions, hæmorrhagic syncope. He expressed great doubts as to dentition being a cause, never having seen a case relieved by incising the gums. He also adverted to the practice among wet-nurses, of taking alcoholic and other stimuli, believing this to be a frequent cause of convulsions in infants. Dr. Murphy then read briefly several cases bearing emphatically upon the points adverted to, and illustrating the dangers to which hasty diagnosis will frequently lead; also some cases in which the cause was undetected until after death, as in abscess of the brain, occurring many years after scarlatina,—the only symptom during that period being a constant otorrhœa; and a case of undetected fracture of the skull, which simulated typhus gravior, until a convulsive fit induced an examination of the scalp, when an unhealthy wound was discovered, and a portion of depressed bone was raised. The author drew the following conclusions:—That the causes of convulsions being so numerous and dissimilar, every case requires its separate consideration, in order to prescribe appropriate treatment. Thus, puerperal convulsions bear copious bleeding, while those arising from loss of blood require wine. Congestion producing convulsions, is relieved by the cold affusion and venesection; but, if they be joined with the poison of the exanthemata, bleeding is highly injurious. Convulsions from intestinal irritation are relieved by opiate enemata and the cold affusion. The convulsions of pertussis justify laryngotomy. Turpentine enemata and the exhibition of chloroform are called for in the convulsions of hysteria. The author then adverted to the difficulty and danger of attempting the administration of remedies by the mouth during continuance of the fits; and recommended that antimony, turpentine, and other substances, should be given as injections. He considered the immediate cause of the convulsive paroxysm to be within the cranium, and that the return of sensibility during the intervals of the fits was a most favourable symptom. He concluded also, that were it not for the insensibility during the paroxysm, it would be attended with as much pain as tetanus; and that, like rigors, cramps, and spasms, they are salutary in keeping up the circulation.

A discussion of considerable interest ensued, during which a case was mentioned, in which an outburst of passion in the mother induced convulsions in the infant at the breast; and this occurred repeatedly to the same child, and in two children successively.

At half-past nine o'clock, the discussion upon the paper having terminated as usual at this Society, a conversation followed upon a case mentioned by Mr. Love, in which gallic acid had arrested profuse hæmorrhage from all the mucous membranes, after turpentine and various other remedies had been employed in vain.

At ten o'clock the meeting separated, the President having announced that Mr. Ellis would read, at the next meeting, on the 18th inst., a paper on the use of the galvanic cautery in uterine disease.

RETURN OF THE REGISTRAR-GENERAL FOR THE QUARTER ENDING SEPTEMBER, 1853.

This return comprises the births and deaths registered by 2191 Registrars in all the districts of England during the summer quarter ending September 30, 1853; and the marriages in 12,039 churches or chapels, about 3424 registered places of worship unconnected with the Established Church, and 625 Superintendent-Registrars' offices, in the quarter that ended June 30, 1853.

The marriages exceeded the average in the quarter ending in June. For the quarter that ended in September 30 the births have also been above the average number, while the deaths have been fewer than is usual in proportion to the population. The mortality of the town population has experienced a marked diminution during the summer; but one town has suffered severely, and others are threatened by Asiatic cholera.

Births.—147,581 births were registered in the quarter ending September 30. This is above the average number; but it is less by 3612 than the numbers (151,193) which were registered in the corresponding quarter of 1852. The decrease is, singularly enough, observable in every county except Middlesex, Surrey, Cornwall, Staffordshire, Rutlandshire, Cheshire, Lancashire, Cumberland, and Monmouthshire.

Increase of Population.—As 147,581 births and only 92,332 deaths were registered, a balance of 55,249 remains in the population. The births and deaths in Scotland, if the excess of births in those divisions of the United Kingdom bears the same proportion to the population as it does in England and Wales, would give an increase by natural causes of about 83,000. But 87,467 emigrants sailed from the United Kingdom in the quarter ending September 30, 1853; so that, allowing on one hand for births unregistered, on the other for emigrants unreturned, it is probable that the population of the United Kingdom has declined rather than increased during the summer.

State of the Public Health.—92,332 deaths have been registered during the quarter; a number less by 8165 than the number of persons (100,497) whose deaths were recorded in the summer quarter of 1852. The depression of the mortality extended over nearly every county except Durham and Northumberland, and, indeed, over all except a few districts of those counties. A similar

depression of the mortality was observed in the summer quarter of 1848, immediately before the outbreak of the epidemic cholera. The mortality during the quarter of the districts comprising the chief towns and a population of 7,795,882, was at the rate of 2·4 per cent. per annum nearly; the mortality of the districts of small towns and country parishes was at the rate of 1·7 per cent. The average rates are higher, or 2·6 and 1·9 per cent. The number of deaths in London was 12,918, which is below the average. The deaths by zymotic disease were 3456, including 1232 by diarrhœa, and 137 by cholera. The deaths by diarrhœa were 200 less than in either of the summer quarters of the preceding years, and the deaths from cholera did not exceed the average of the 3 preceding summer quarters. 585 deaths were referred to typhus, and over the country scarlatina prevailed with great severity in several districts. The local epidemics are indicated in the Registrar's reports.

MEDICAL NEWS.

CAMBRIDGE UNIVERSITY.—At a Congregation held Nov. 9, the following degree was conferred?—Downing College: Thomas Tattersall Roscow, Licentiate to practise in Medicine. A grace was passed, to appoint Dr. Bond, Regius Professor of Physic, one of the University Governors of Hobson's Trust, in the room of the Master of Pembroke College, who has resigned.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 4th inst.:—

CALDWELL, JOHN, Kew-green.
CURRIE, JAMES ALLAN, H.E.I.C. Service, Bengal.
DAVERN, JOHN RICHARD, Chelsea Hospital.
ELLIS, JAMES ASKQUITH, Nanty Glo, Monmouthshire.
WATERHOUSE, JOHN HODGSON, Sheffield.
WICKHAM, CHARLES THOMAS, Winchester.
WILLIAMS, J. IGNATIUS PURCELL, Denbigh, North Wales.

At the same meeting of the Court, Mr. WILLIAM THOMAS WILSON passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College, his diploma bearing date July 4, 1845.

APOTHECARIES' HALL.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Nov. 3, 1853:—

BIRD, WILLIAM VALENTINE, Seacombe, Liverpool.
BRIERLEY, THOMAS BOOTH, Tattenhall, Cheshire.
FLETCHER, JOHN WELLS, Upton-on-Severn, Worcestershire.
FULCHER, GEORGE AUGUSTUS.
HARMER, ROBERT, Wells, Norfolk.
MARLEY, HENRY FREDERICK, Padstow, Cornwall.
PRITCHETT, JOHN BENSON, York.
TUCKER, SILVANUS, Bridport, Dorsetshire.

APPOINTMENTS.

NAVAL.—Surgeon Joseph Caldwell (1842), to be Surgeon-Superintendent of the Sea Park convict-ship. Assistant-Surgeons: William T. Wilson (1846), to the Royal George, 120, screw steamship, at Sheerness; Julian W. Slight (1846), from the Amphitrite, 24, on the Pacific station, to the Princess Royal, 90, screw steam-ship, at Portsmouth. Acting Assistant-Surgeons: John Coogan (1853), to the London, 90, at Portsmouth. Thomas M'Catley (1853), to the Princess Royal, 90, screw steam-ship, at Portsmouth; Edward H. Evans (1853), to the Diamond, 28, at Sheerness; Andrew M'Mann (1853), to the Frolic, 16, at Portsmouth; Robert Burrows (1853), to the Victory, flagship, at Portsmouth.

MILITARY.—89th Foot.—Staff-Surgeon of the Second Class, Frederic Roberts to be Surgeon, vice Michael M'Dermot, M.D., who retires upon half-pay. Hospital Staff: Assistant-Staff-Surgeon Robert M'Warrie, M.D., to be Staff-Surgeon of the Second Class, vice Roberts, appointed to the 89th Foot. Assistant-Staff-Surgeon Thomas Dehane Lightbody, M.D., to be Staff-Surgeon of the Second Class, vice Blakeney, appointed to the Royal Hibernian School. Royal Hibernian School: Staff-Surgeon of the Second Class Edward Hugh Blakeney to be Surgeon, vice Elkington, deceased.

MILITIA. — Royal Surrey Militia. — Samuel Buckland Mitchell, gent., to be Assistant-Surgeon.

DEATH.

BULL.—Nov. 3, at Cork, Dr. Bull, Surgeon, of that city.

ROYAL SOCIETY MEDALS. — The Copley medal of the Royal Society was awarded on Thursday, the 3rd inst., to Dr. Dove, of Berlin; and the Royal Medals to Dr. Darwin, author of "Coral Reefs;" Dr. Tyndall, Professor of Physics in the Royal Institution; Dr. Dove for his works on the "Distribution of Heat over the Surface of the Globe;" Dr. Darwin for his work on Natural History; and to Dr. Tyndall for his researches in magnetism.

MEDICAL BENEVOLENT COLLEGE.—We understand the builder's contract for this "National Institution" was signed on Monday last by the Treasurer (John Propert, Esq.,) on behalf of the Council, and that the works are rapidly progressing.

MEDICAL BENEVOLENT FUND. — At the last Monthly Meeting of the Committee, in October, the Treasurer reported that since July 1st, the sum of 137*l.* 15s. 6d. had been received in subscriptions, and 33*l.* in donations; the expenses had been 125*l.* 16s. 8d; the sum now in the hands of the Treasurer being 12*l.* The Treasurer also reported that there were vacancies for two annuitants of 15*l.* each. These vacancies were filled up by the election of a surgeon, aged 73, who is in great distress, and in very bad health; and of the widow of a medical man, aged 63, who is entirely dependent upon her children, one of whom is a cripple. Cases relieved:—1. The widow of a Medical assistant, to whom the Treasurer had advanced two guineas to assist her in entering upon a situation. Voted 2*l.* 2s.—2. An Irish Medical student, now in London, the son of a Medical man; his health is so impaired that he cannot follow any avocation, and he is in distressed circumstances. Recommended by Sir J. Clark and Dr. Forbes Winslow. Voted 5*l.*—3. The wife of a surgeon who went to Australia five years ago, and has not since been heard of. He left his wife and four children unprovided for, who have endeavoured to support themselves, but are now in great difficulties. Recommended by Mr. Ince, Dr. Inman, Dr. Hall, of Hounslow. Voted 10*l.*—4. The wife of a Medical man, residing at Birmingham; has several children to support, and near her confinement; husband intemperate, and earns nothing; relieved several times previously. Recommended by Dr. Russell, of Birmingham. Voted 5*l.*, to be placed in Dr. Russell's hands.—5. The daughter of a Medical man, in great distress. Voted 5*l.*—6. A surgeon, lately residing in Bath, where, for seven years, he had endeavoured, unsuccessfully, to make a practice; has a wife and six children, and is anxious to emigrate. Recommended by Mr. Norman, Mr. Soden, Mr. George, Mr. Barrett, etc. Voted 10*l.*, to be devoted to the purposes of emigration.—7. A Practitioner, at the east end of London, who had been in practice for forty years; has a wife and three children dependent upon him, and the income from his practice is not more than 90*l.* a-year; he is now suffering from ill health. Recommended by Dr. Ramsbotham, Dr. Cobb, Mr. Self. Voted 10*l.*—8. A Medical assistant, with a large family, in very straitened circumstances; relieved on several previous occasions. Voted 5*l.*, to be placed in the hands of Mr. Bacot.

AT THE MEETING OF THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY, November 8, the following gentlemen were ballotted for and elected Fellows:—Henry Brown, Windsor, general practice; Patrick Burke, London, general practice; Robert Druitt, London, medicine; George Edwardes, Wolverhampton, surgery; James Ellison, Windsor, general practice; Alfred Baring Garrod, London, medicine; Thomas Hewlett, Harrow, general practice; W. C. Hood, Bethlem Hospital, medicine; Henry Jones, London, general practice; Draper Mackinder, Gainsborough, general practice; George Moseley, Sandgate, Kent, general practice. One gentleman was not elected; it was supposed because he was not a licentiate of the College of Physicians.

DALRYMPLE MEMORIAL.—At the meeting of the Council on Thursday, the 10th inst., the marble bust by Campbell of the late John Dalrymple, was presented to the College of Surgeons by the subscribers to the memorial.

HARVEIAN SOCIETY.—The first meeting of the session of this Society was held on Thursday, November 3rd, at 64, Edgeware-road. The introductory address was delivered by Dr. R. Quain, who was requested to publish it.

GLASGOW MEDICAL SOCIETY. — At a meeting of this Society, held on the 1st inst., the following gentlemen were elected office-bearers for the ensuing session:—Dr. James Wilson, President; William Lyon, Esq., Dr. James Adams, Vice-Presidents; Dr. Ebenezer Watson, Treasurer; James Fraser, Esq., Secretary.

IMPORTANT TO MEDICAL MEN.—In the Sheriff's Court, City, an action was brought by Mr. Gourlay, a surgeon of the West-end, against a Mr. Ferguson, a gentlemen residing at Brixton. The claim was only for two guineas, but involved some nice law points upon Medico-legal claims. The plaintiff stated, that he had been engaged to attend Mrs. Ferguson at her accouchement, and the fee agreed upon was the sum now claimed; and it was also stipulated, that he was to be paid another guinea for the first necessary visit previously; but if others were essential, he was not to make any charge for the succeeding visits. He made six visits on those terms, but received no notice so as to attend the accouchement, and consequently did not deliver the defendant's wife. He contended that he was entitled to the two guineas upon custom, and also upon the contract entered into. Mr. Buchanan, solicitor for the defendant, on the other hand, urged that the plaintiff could not recover, inasmuch as it was entirely through his own proceedings that he was not at the accouchement. When his client's messenger went for the plaintiff at the critical hour he could not find him, as he had removed from the address he gave to the defendant. The

defendant proved the latter fact. He said he had been to Mr. Gourlay's house, and he found it had been let to a family; and, on inquiry, he was informed that the plaintiff had not been there for a week, and they knew not his residence. In consequence of this he was compelled to call in another Medical man, and pay him his fee. The plaintiff said there must be some mistake about this, for it was not likely that a Medical man would leave his residence without leaving some good reference thereat where he was to be found. The Judge said, without entering any further into an answer to defendant's charge, he considered the plaintiff had, by his previous attendances, become entitled to his fee, and gave judgment for the amount.

YELLOW FEVER.—The New Orleans Board of Health has declared that yellow fever was no longer an epidemic in that city. At Mobile, on the 12th and 13th ult., there were fifteen deaths. At Galveston, out of a population of 4000, there had been 1600 cases of yellow fever, with 400 deaths; but at the last accounts the epidemic was subsiding. The accounts from Indianola and Lavaca were frightful. At the latter place there was not a physician left, and the Ministers had all fled. At Houston the fever was unabated, and the same is reported from many other of the Texan towns. A letter from Bermuda of the 12th ult. states that the yellow fever had somewhat abated its virulence, probably owing to the scarcity of victims. The steamer Vulcan, with 800 troops on board, having arrived from England, was warned off, and had proceeded to Halifax. At Bahia and Pernambuco the yellow fever had entirely disappeared.

SWARM OF FLIES.—The Carlisle papers state that early in the month, on an exceedingly close and sultry day, the air was literally swarming with small flies,—a source of infinite annoyance to all who were obliged to be abroad. A similar phenomenon occurred about a month since, just before the outbreak of cholera. Other towns have been similarly visited. We may add, that this phenomenon was also noticed in different parts of the country prior to the outbreak of cholera in 1848-49, and also before the first visitation in 1832. The flies were in very numerous swarms at Malta on that occasion, and, if our memory serve us right, were said to inflict malignant sting. The connexion between the appearance of these swarms and the outbreak of a malignant epidemic, has been frequently demonstrated. The species was described in a short account we recently published of a meeting of the Entomological Society (p. 491.)

MORTALITY NOTABILIA.—The number of deaths from all causes registered in London in the week that ended on Saturday, was 1112; in the previous week it was 1144. In the ten weeks corresponding to last week of the years 1843-52 the average number was 1001, which, with a correction for increase of population, becomes 1101. Hence it appears, that the mortality of last week slightly exceeded the estimated amount.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·833 in. The mean temperature of the week was 48·9°, which is 2·8° above the average of the same week in 38 years. The mean daily temperature rose above 52° on Tuesday and Wednesday, which is about 6° above the average. The wind blew from the south-east.

DEATHS *in the Metropolis for the week ending Saturday, November* 5, 1853.

CAUSES OF DEATH.	Nov. 5. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	552	361	176	1112	10014
SPECIFIED CAUSES	552	361	176	1089	9935
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	222	92	17	331	2421
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	26	16	46	439
3. Tubercular Diseases	61	110	5	176	1642
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	53	28	31	112	1129
5. Diseases of the Heart and Blood-vessels	3	26	9	38	369
6. Diseases of the Lungs and of the other Organs of Respiration ...	108	23	27	158	1745
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	21	24	14	59	603
8. Diseases of the Kidneys, etc. ...	1	6	3	10	102
9. Childbirth, Diseases of the Uterus	...	4	...	4	108
10. Rheumatism Diseases of the Bones, Joints, etc.	2	2	1	5	91
11. Diseases of the Skin, Cellular Tissue, etc.	1	1	1	3	15
12. Malformations	2	...	...	2	24
13. Premature Birth and Debility ...	28	1	1	30	263
14. Atrophy	28	3	7	38	210
15. Age	...	...	43	43	455
16. Sudden	1	3	1	5	71
17. Violence, Privation, Cold, and Intemperance	17	12	...	29	218
CAUSES NOT SPECIFIED	...	...	...	23	79

MORTALITY IN PUBLIC INSTITUTIONS for the week ending November 5:—

	Males.	Females.	Total.
Workhouses	44	42	86
Military and Naval Asylums.. ...	2	...	2
General Hospitals	37	21	58
Hospitals for Special Diseases ...	2	3	5
Lying-in Hospitals	1	...	1
Lunatic Asylums	1	...	1
Military and Naval Hospitals ...	...	...	...
Hospitals for Foreigners, &c. ...	...	...	...
Prisons	...	...	...
	87	66	153

TO CORRESPONDENTS.

A Constant Reader.—The tincture is never used undiluted.

Mr. Barron's Case of Rupture of the Uterus shall be published.

Students—Inquirer—G. O. S.—We believe it to be true that the College of Surgeons of England have refused to recognise the Royal Free Hospital and Medical College. This intention was intimated, we are assured, to some of the students when they registered their tickets at the College. If the grounds upon which the Council of the College have acted be those reported to us, they could not have done otherwise.

We will insert Mr. Knaggs's sensible letter on "Advice Gratis" as soon as possible.

A Country Practitioner.—The apparatus of Dr. Wright, of Edinburgh. It costs about £2. We will procure the address of the maker.

W. H. Borham, Esq.—The delay has been unavoidable. The paper shall appear as soon as possible.

Dr. Hood.—The lecture shall be looked for.

The papers of the Abernethian Society shall appear as soon as our space will permit.

THE BEARD AND MOUSTACHES.

[To the Editor of the Medical Times and Gazette.]

SIR,—Several paragraphs having lately appeared in the periodicals, recommending the wearing of the beard and moustache as a sanitary measure to certain classes of artizans, etc., I have been induced to give a little consideration to this subject, which, it is possible, may be of more importance than might at first sight appear; and, as I do not think there can be a more appropriate medium for the discussion of the question than the pages of your valuable Journal, I trust no apology will be necessary for proposing the following questions:—

1. May the prevalence of any of our present chest affections be referred to the custom of shaving?

2. Do we generally find that consumptive men have (or, rather, would have, in case of non-shaving), more beard than other men?

3. How is it that the beard increases in strength as the other powers of the body decay?

4. Do those communities among whom the beard is worn enjoy a greater degree of longevity and immunity from chest affections than those who indulge in the *barberous* custom of defacing God's image by removing that which there can be little doubt is as useful as the eye-brow or the eye-lash?

I trust some of my professional brethren who are more competent than myself to do justice to this subject will take up the discussion of it; and, should the result prove that the Almighty really did give us our beards to be the means of preserving us from disease and lengthening our lives, let the members of our own Profession be the first to strike a blow at the prejudice of fashion, by discarding their razors, strops, brushes, soap-box, and all, and standing forth in the image that the all-wise Creator has stamped upon them.

I am, etc. Q.

Dr. Barclay's cases received.

Dr. Melhuish's attack upon all the practitioners of his neighbourhood certainly will not induce us to break the rule we formerly announced as to his communications.

Quiz tells us Dr. Melhuish writes prescriptions in hieroglyphics intelligible only to Worboy, druggist, New-cut, Lambeth. Worboy sends about the streets an advertising van, on which is inscribed, in rather large characters, "Bile!!! Bile!!! Bile!!!" thereby insinuating to the public that Worboy is the man for bile.

We have been informed, that the Case of the Nurse at St. Bartholomew's had been referred to the Weekly Board, before the publication of the letter of "Students of St. Bartholomew's," in our last.

The letter of *A Student*, on the recent appointment to the Chair of Physiology at St. Thomas's Hospital, if published, could serve no useful purpose.

Mr. Henry Smith's communication has been received.

Dr. Hofmann has promised us that his valuable Lectures shall be finished in the present Volume.

Communications from Mr. BRODHURST, A MEDICAL STUDENT, Mr. WEBB, and R. GARDINER HILL, Esq., are in type.

COMMUNICATIONS have been received from—

S. LLOYD, Esq.: Mr. BERESFORD; SECRETARY OF CHEMICAL SOCIETY THOS. STAINTHORPE, Esq, Hexham; Dr. MORIARTY, Dieppe; A ST. THOMAS'S STUDENT; Mr. COCKERILL: Mr. EDYE; Mr. CALLENDER; Mr. HUMPHRIES; Mr. CHALK; Mr. WILLING; Mr. WILDE, Dublin; Dr. MACKENNA, Dublin; Dr. MEYER; Dr. BENCE JONES; A CONSTANT READER; Mr. BARRON; Mr. KNAGGS; A COUNTRY PRACTITIONER; W. H. BORHAM, Esq.; Dr. HOOD; Q.; Dr. BARCLAY; Dr. MELHUISH; QUIZ; Mr. H. SMITH, etc.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture XV.

OLEFIANT GAS.

Gentlemen,—In laying before you a general outline of the deportment of alcohol with acids, I took an opportunity of directing your attention in the first place to the action of sulphuric acid upon this body, which gives rise to the formation of sulphovinic acid, the type of vinic acids. I mentioned, at the same time, that sulphovinic acid is by no means the only product of this reaction, but that sulphuric acid, according to its proportion and the temperature at which it acts, produces a variety of other compounds, the most interesting of which are olefiant gas and ether; and it is to the consideration of the former of these two important compounds, which, like alcohol itself, are types, that the present lecture will be devoted.

If a mixture of one part by weight of alcohol (of specific gravity 0·85, or less) and six parts of concentrated sulphuric acid be submitted to distillation, the colourless liquid—which, as long as it is cold, contains sulphovinic acid—changes colour, begins to froth, and evolves an inflammable gas, which burns with a white, brilliant flame. It can be collected over water, in which it is insoluble. For some time this gas, which, for reasons to be mentioned bye-and-bye, has received the name *olefiant gas*, continues the principal product of the reaction. But soon it becomes mixed with sulphurous acid, the proportion of which gradually increases, predominates, and, lastly, forms the sole gaseous product. When the sulphurous acid ceases to be evolved, the retort contains nothing but sulphuric acid, mixed with a large mass of spongy charcoal. On account of the sulphurous acid, a bottle containing lime and potassa is generally interposed between the flask or retort in which the olefiant gas is prepared, and the delivery-tube, from which it is evolved, when the acid gas is retained in the form of sulphite of lime or potassa.

The analysis of olefiant gas has shown that this substance is composed of equal equivalents of carbon and hydrogen, the simplest expression by which this compound may be represented being

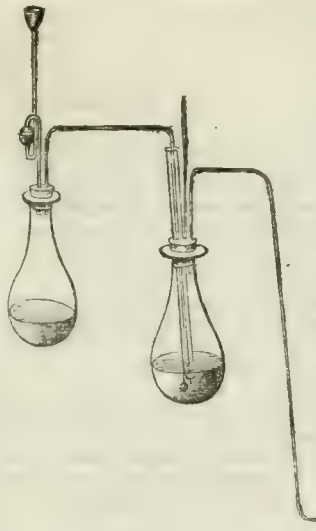
C H.

The process which converts alcohol into olefiant gas consists, therefore, in an elimination of water from the elements of alcohol.

$$\underbrace{C_4\ H_6\ O_2}_{\text{Alcohol.}} \quad - \quad 2\ HO \quad = \quad \underbrace{4\ CH}_{\text{Olefiant gas.}}$$

The sulphurous acid, which forms in the more advanced stages of the reaction, especially when the temperature increases towards the end of the process, is evidently a secondary product, arising from the deoxidation of the sulphuric acid, one-third of the oxygen of which converts a portion of hydrogen into water, carbon being thus eliminated. In fact, the formation of sulphurous acid and the separation of carbon may be altogether avoided, if the preparation of olefiant gas be slightly modified. If 1 part of sulphuric acid be mixed with 3 parts of water, a liquid is obtained which boils at 160° C. (320° F.) At this temperature the dilute acid is still capable of decomposing alcohol, if it come in contact with the latter in the state of vapour.

[No. 738.—New Series, No. 177.]



For this purpose a flask containing absolute alcohol is connected by means of a conduction-tube with a second flask containing the mixture of water and sulphuric acid; the latter is provided with the delivery-tube, and moreover with a thermometer, by the observation of which the temperature of the sulphuric-acid mixture may be steadily maintained at 160° C. The alcohol is now heated to ebullition, when every bubble of alcohol-vapour that passes through the hot sulphuric acid is decomposed, and furnishes olefiant gas without a trace of sulphurous acid. The sole products of the reaction are in this case olefiant gas and water. The sulphuric acid remains transparent and colourless, not a particle of carbon being separated. You are all acquainted with the remarkable attraction sulphuric acid possesses for water. We are constantly in the habit of using this substance as a desiccating agent; hence the idea naturally presented itself that the decomposition of alcohol by means of sulphuric acid took place in consequence of this attraction for water. But the experiment which I am showing you sufficiently demonstrates that the decomposition cannot be due to this attraction, for the conversion of alcohol into olefiant gas by means of this process has been going on since the commencement of this lecture, and will continue as long as there remains a trace of alcohol to be volatilised. In fact, the small amount of sulphuric acid contained in this bottle is capable of decomposing an almost unlimited quantity of alcohol, provided this alcohol be absolute. It is obvious that this cannot take place in consequence of any attraction which the sulphuric acid possesses for water, for at some time this attraction would cease, the acid becoming saturated with water. In fact, it can be proved experimentally, that the water which separates from the alcohol does not combine with the sulphuric acid; for if between the sulphuric acid flask and the delivery-tube, a third flask be interposed, which is carefully kept cool by being surrounded with water, this flask is found to contain after the experiment has continued for a certain time, a quantity of water which would be just sufficient to reconvert the olefiant gas produced into alcohol. Thus then, we find, that alcohol vapour, when coming in contact with sulphuric acid at a temperature of 160° C., splits as it were into olefiant gas and water, neither of which combines with the sulphuric acid; and here we meet again with one of those singular reactions which appear to outstep the domain of ordinary chemical phenomena, and to the character of which I had an opportunity of directing your attention when speaking of the conversion of cellulose and starch into saccharine substances. Most of these processes are of so obscure a nature, that they are at present but very imperfectly understood. But in some cases—and one of these we shall consider somewhat in detail in the following lecture—the mode of action of sulphuric acid has been successfully traced; and we may expect that these phenomena, which, at present, for the sake of convenience more than anything else, are designated as *phenomena of contact* or *catalytical phenomena*, will shortly be as accessible to the scrutiny of chemists as the ordinary instances of simple or double decomposition.

The action of sulphuric acid upon alcohol is not the only process which gives rise to the generation of olefiant gas. A great many carbon-compounds, which are rich in hydrogen, when submitted to destructive distillation, yield olefiant gas, frequently together with other gaseous products, particularly marsh-gas, a substance which I have already briefly mentioned when speaking of the derivatives of acetic acid. Ordinary coal-gas contains a variable proportion of olefiant gas, and it is to its presence that the luminous properties of the former are partly due. But from none of these

sources can olefiant gas be obtained with the same facility and of the same degree of purity.

When pure, olefiant gas is a transparent, colourless gas, possessing a faint but very characteristic odour, which betrays its presence even in very minute quantity; the gas is not only incapable of supporting respiration, but possesses actually poisonous properties. All attempts to liquefy this gas have hitherto proved perfectly in vain. The specific gravity of olefiant gas is 0·978. In contact with air it burns quietly with a brilliant light; mixed with a volume of oxygen or air, which is capable of effecting the combustion of its constituents, it explodes with fearful violence.

The simplest atomic expression for olefiant gas is, as I have pointed out, the formula

$$C\ H;$$

but the state of condensation of the constituents, together with considerations borrowed from the origin and from the derivatives of olefiant gas, has induced chemists to quadruple this formula, and to represent this gas by

$$C_4\ H_4.$$

If this formula be assumed, the molecule of olefiant gas in the state of vapour occupies 2 volumes, and 1 molecule of alcohol, when decomposed by sulphuric acid, gives rise to the generation of 1 molecule of olefiant gas.

$$\underbrace{C_4\ H_6\ O_2}_{\text{Alcohol.}} = \underbrace{C_4\ H_4}_{\text{Olefiant gas.}} + 2\ HO$$

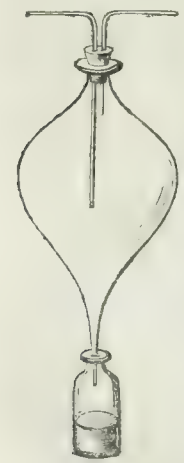
The action of chlorine upon olefiant gas presents considerable interest. On mixing in a tall cylinder, two volumes of olefiant gas and one volume of chlorine, and rapidly setting fire to the mixture, a smoky flame slowly descends, the whole of the carbon of the olefiant gas being liberated, while its hydrogen combines with the chlorine, producing hydrochloric acid.

The formula $C_4\ H_4$ satisfactorily explains several changes of olefiant gas. When passed through a porcelain tube, heated to redness, this gas splits into carbon and marsh-gas, the molecule of which, as I have pointed out on a former occasion, contains four equivalents of hydrogen.

$$\underbrace{C_4\ H_4}_{\text{Olefiant gas.}} = C_2 + \underbrace{C_2\ H_4}_{\text{Marsh-gas.}}$$

When the tube is heated to whiteness, the olefiant gas is entirely decomposed into carbon, which is deposited in the tube, and pure hydrogen gas, which is evolved.

If olefiant gas be left in contact with moist chlorine, the two gases combine, with evolution of heat, forming a fragrant liquid, which trickles down the sides of the vessel, where the gases meet, in colourless drops. The action of bromine is perfectly analogous. The experiment with bromine is even more striking, for the brown colour of the bromine vapour instantaneously disappears. The operation may be conveniently performed in a vessel having the shape shown in the annexed sketch, one delivery-tube of which is in connexion with a gasholder filled with olefiant gas, while the other supplies air likewise from a gasholder, which, passing through a bottle with bromine, becomes charged with bromine-vapour; the lower extremity of the bulb dips into a bottle, in which the newly-formed product collects. It was this property of producing an oily liquid with chlorine which, first observed by an Association of Dutch chemists, gave rise to the name of olefiant gas, *i. e.*, oil-producing gas. The oil was called Dutch liquid *(liqueur des Hollandais)*; and, although several times re-named in accordance with the theoretical ideas of the day, it has retained this name in the language of the laboratory. The name "olefiant gas," is, you have heard, likewise still in use, although it is now known that all the gaseous hydrocarbons possess the power of producing oily compounds with chlorine and bromine. There are, however, several other names in use for this compound, such as heavy carburetted (carbonetted) hydrogen, in contradistinction to light carbonetted hydrogen or marsh-gas, etherine, and ethylene, to remind you of the close relation in which this substance stands to the ethyl series, etc.



The history of the Dutch liquid claims our attention for a moment, on account of the assistance which this compound has afforded in the elaboration of the theory of substitution.

This liquid is very dense, possessing the specific gravity 1·28; it boils at 84° C. (183·2° F.) Its odour is very similar to that of chloroform, and, when inhaled, its vapour produces analogous effects. The formation of the Dutch liquid is due to a simple combination of the two gases, which unite in equal volumes, without any elimination of a second compound. The simplest atomic expression for this compound is the formula

$$C_2\ H_2\ Cl,$$

which corresponds, however, to one volume of vapour. In a former lecture,(a) I showed you that this is not a usual mode of condensation, but that, nevertheless, well-establishde cases of this kind occur. We should not, therefore, have any reason to alter this formula, if the deportment of Dutch liquid with the alkalies did not likewise furnish a strong argument in favour of a formula representing two volumes of vapour. The action of potassa indicates that the chlorine is present in this substance in two forms. If Dutch liquid be mixed with an alcoholic solution of potassa, a copious precipitate of chloride of potassium takes place, and a colourless gas is evolved, which, passed through a tube surrounded by a freezing mixture, solidifies into a liquid of a peculiar alliaceous odour, which boils some degrees below the freezing point of water. The simplest atomic expression for this new compound is the formula $C_4\ H_3\ Cl$ which represents two volumes of vapour. In this case, the simplest formula and most usual mode of condensation coincide, so that the formula $C_4\ H_3\ Cl$ may be viewed as fairly established as possible; and hence it is the natural assumption that both Dutch liquid, when converted into vapour, and olefiant gas, occupy two volumes, like the substance $C_4\ H_3\ Cl$, and like alcohol, which two bodies they link together; and thus we have the following series:

Alcohol	$C_4\ H_6\ O_2$	= 2 vols. of vapour.
Olefiant gas . . .	$C_4\ H_4$	
Dutch liquid . . .	$C_4\ H_4\ Cl_2$	
Product of the action of potassa on Dutch liquid	$C_4\ H_3\ Cl$	

The peculiar manner in which potassa acts upon Dutch liquid, has led chemists, moreover, to view this substance as a combination of $C_4\ H_3\ Cl$ with hydrochloric acid; that is, as

$$C_4\ H_3\ Cl,\ HCl$$

when the reaction assumes a simpler form—

$$\underbrace{C_4\ H_3\ Cl,\ HCl}_{\text{Dutch liquid.}} + KO = K\ Cl + HO + \underbrace{C_4\ H_3\ Cl}_{\text{Alliaceous liquid.}}$$

The composition of the substance $C_4\ H_3\ Cl$, connects this body closely with olefiant gas; it differs from that of the latter only by one equivalent of chlorine replacing one equivalent of hydrogen; the molecular system appears to have remained unchanged, only chlorine occupying the place which formerly was filled by hydrogen. We say chlorine has been substituted for hydrogen in olefiant gas, and we call the substitution-product thus formed, monochlorinetted olefiant gas, or monochlorinetted ethylene, Dutch liquid itself assuming the name of hydrochlorate of monochlorinetted ethylene.

Dutch liquid is still further acted upon by chlorine. On passing a current of chlorine through this substance until it has assumed a deep yellow colour, and exposing it afterwards to the direct action of the solar rays, a powerful evolution of hydrochloric acid takes place, and a new body is formed, possessing a higher specific gravity (1·422), and a higher boiling point [115° C. (239° F.)] than Dutch liquid itself. The simplest formula of this compound is

$$C_4\ H_3\ Cl_3 = C_4\ (H_3\ Cl)\ Cl_2,$$

representing likewise two volumes of vapour; it is derived from Dutch liquid by the substitution of one equivalent of

(a) Lecture V.

chlorine for one equivalent of hydrogen, which has been eliminated in the form of hydrochloric acid

$$C_4\ H_4\ Cl\ +\ 2Cl\ =\ C_4\ H_3\ Cl_3\ +\ H\ Cl$$

It may be designated as monochlorinetted Dutch liquid.

Submitted to the action of chlorine this substance absorbs a farther quantity of this gas, and furnishes hydrochloric acid and a new substitution-product, bichlorinetted Dutch liquid, the composition of which is represented by the formula

$$C_4\ H_2\ Cl_4\ =\ C_4\ (H_2\ Cl_2)\ Cl_2$$

(corresponding to two volumes of vapour,) and differing from the preceding substance again by an increased density (1·576), and a higher boiling point, 135° C. (275° F.)

In a similar manner, by the continued action of chlorine, we succeed in producing a trichlorinetted Dutch liquid of 1·663 spec. grav., and 153° C. (307·4° F.) boiling point, and having the composition

$$C_4\ HCl_5 = C_4\ (H\ Cl_3)\ Cl_2$$

In this substance the amount of hydrogen has been reduced to one equivalent; but even this last portion can be eliminated, and replaced by chlorine. When submitted for a long time in direct sun-light to the action of this gas, trichlorinetted Dutch liquid gradually solidifies into a white crystalline mass, which may be purified by crystallization from alcohol. Obtained in this manner, the new product forms small white crystals which fuse at 160° C. (320° F.), and boil at 180° C. (356° F.) This crystalline body contains no trace of hydrogen; its composition is represented by the formula

$$C_4\ Cl_6 = C_4\ Cl_4\ Cl_2$$

It may be viewed as quadrichlorinetted Dutch liquid, *i.e.*, Dutch liquid the whole of the hydrogen of which is replaced by an equivalent amount of chlorine. This substance is better known by the name, perchloride or sesquichloride of carbon.

I have already directed your attention to the peculiar manner in which an alcoholic solution of potassa behaves with Dutch liquid. I told you, that this reaction, which gives rise to the formation of monochlorinetted ethylene ($C_4\ H_3\ Cl$) has induced chemists to view Dutch liquid as a combination of hydrochloric acid with monochlorinetted ethylene; in fact, as $C_4\ H_3\ Cl,\ HCl$. Now, all the substitution-products of Dutch liquid, with the exception of sesquichloride of carbon, exhibit a perfectly analogous deportment with alcoholic potassa; a deposition of chloride of potassium takes place with elimination of water; while a new series of chlorinetted substitution-products is formed, which are derived in a similar manner from ethylene (olefiant gas). Monochlorinetted Dutch liquid gives rise in this manner to dichlorinetted ethylene

$$C_4\ (H_2\ Cl_2)$$

having a specific gravity 1·25, and boiling at 35° C. (95° F.)

$$\underbrace{C_4\ (H_3\ Cl)\ Cl_2}_{\text{Monochlorinetted Dutch liquid.}}\ +\ KO\ =\ KCl\ +\ HO\ +\ \underbrace{C_4\ (H_2\ Cl_2)}_{\text{Dichlorinetted Ethylene.}}$$

Dichlorinetted Dutch liquid produces trichlorinetted ethylene.

$$C_4\ (H\ Cl_3),$$

the specific gravity and the boiling point of which have not been minutely examined; and, lastly, trichlorinetted Dutch liquid gives rise to quadrichlorinetted ethylene,

$$C_4\ Cl_4,$$

or chloride of carbon, which is an oily liquid of 1·619 specific gravity, and boiling at 122° C. (251·6° F.)

These substitution-products of ethylene retain to a considerable extent the fundamental chemical characters of the type from which they are derived. Like olefiant gas, every one of them has the property of combining with two equivalents of chlorine, and of producing a substitution-product of Dutch liquid, in such a manner that each term of the chlorinetted ethylene series gives rise to the formation of a term of the Dutch liquid series, containing one equivalent of chlorine more than that from which itself originated by the removal of chlorine in the form of chloride of potassium. Thus monochlorinetted ethylene $C_4\ (H_3\ Cl)$, derived from Dutch liquid $C_4\ H_4\ Cl_2$ itself, produces monochlorinetted Dutch liquid $C_4\ (H_3\ Cl_2)\ Cl_2$; dichlorinetted ethylene $C_4\ (H_2\ Cl_2)$, derived from monochlorinetted Dutch liquid $C_4\ (H_3\ Cl)\ Cl_2$, dichlorinetted Dutch liquid, $C_4\ (H_2\ Cl_2)\ Cl_2$, and so on, until, lastly, quadrichlorinetted ethylene (chloride of carbon) $C_4\ Cl_4$, by simply combining with two equivalents of chlorine, becomes solid sesquichloride of carbon, $C_4\ Cl_6$.

The relation in which these several substances stand to each other appears at the first glance somewhat intricate; its actual simplicity, however, will become obvious by the subjoined diagram, in which, in accordance with the view proposed regarding the constitution of Dutch liquid, I have represented its derivatives likewise as hydrochloric acid compounds.

Ethylene Series.	Dutch Liquid Series.
1. $C_4\ H_4$	2. $C_4\ H_4\ Cl_2 = C_4\ (H_3\ Cl),\ H\ Cl.$
3. $C_4\ (H_3\ Cl)$	4. $C_4\ (H_3\ Cl)\ Cl_2 = C_4\ (H_2\ Cl_2),\ H\ Cl.$
5. $C_4\ (H_2\ Cl_2)$	6. $C_4\ (H_2\ Cl_2)\ Cl_2 = C_4\ (H\ Cl_3),\ H\ Cl.$
7. $C_4\ (H\ Cl_3)$	8. $C_4\ (H\ Cl_3)\ Cl_2 = C_4\ Cl_4,\ H\ Cl.$
9. $C_4\ Cl_4$	10. $C_4\ Cl_4\ Cl_2 = C_4\ Cl_6$

The order in which the several bodies are produced from each other is indicated by the numbers.

I have entered somewhat minutely into the consideration of these substances, which individually present but a very limited interest, because it was in their study that the true formula of olefiant gas was elicited, and likewise, because the above researches, which, to a great extent, are due to Regnault, have been particularly instrumental in elaborating the theory of substitution. Most organic bodies, whatever their chemical character may be, admit of a similar replacement of part or the whole of their hydrogen by chlorine, an almost unlimited number of chlorinetted substitution products being formed retaining the molecular arrangement of their respective types, from which they differ only by more or less space in the molecular system being occupied by chlorine in the place of hydrogen. The different characters of these elements of course involve certain modifications of the original properties of the type; thus, we have seen that the derivative both of the ethylene and of the Dutch liquid series, become denser and less volatile in the measure as the chlorination advances. The fundamental properties, however, remain generally undisturbed, unless the original group is entirely broken up, a series of substances being produced which no longer belongs to the same type.

The remarkable manner in which the properties of the chlorinetted derivatives depend upon those of the type from which they are derived is instructively illustrated by a series of compounds, to which, in conclusion, I have to draw your attention.

Among the products arising from the action of acids upon alchohol, I briefly mentioned to you in the last lecture, hydrochloric ether, or chloride of ethyl,

$$C_4\ H_5\ Cl$$

When submitted to the influence of chlorine, this substance gives rise to a series of substitution-products, which is represented by the formulæ—

Chloride of ethyl	C_4	H^5	Cl
,, monochlorinetted	C_4	$(H^4\ Cl)$	Cl
,, dichlorinetted	C_4	$(H^3\ Cl_2)$	Cl
,, trichlorinetted	C_4	$(H^2\ Cl_3)$	Cl
,, quadrichlorinetted	C_4	$(H\ Cl_4)$	Cl
,, quintichlorinetted	C_4	Cl_5	Cl

Now you observe at once, that several terms of this series agree in composition with as many members of the Dutch liquid series which we have just now studied. In fact, monochlorinetted chloride of ethyl has the same composition as Dutch liquid; dichlorinetted, trichlorinetted, and quadrichlorinetted chloride of ethyl agree in composition respectively with chlorinetted, dichlorinetted, and trichlorinetted Dutch liquid; quintichlorinetted chloride of ethyl, lastly, has the same composition as quadrichlorinetted Dutch liquid or sesquichloride of carbon. Now, the final products of the action of chlorine upon Dutch liquid and upon chloride of ethyl, are indeed identical in their properties; at all events, no difference has as yet been traced. But the intermediate substitution-products of each series, although exhibiting exactly the same composition, are far from being the same bodies; in fact, it is only necessary to glance at the boiling points, as given in the subjoined Table, of these

several compounds, in order to remove any doubt on the subject:—

CHLORIDE OF ETHYL SERIES.			DUTCH LIQUID SERIES.		
Formula.	Boiling-point.		Formula.	Boiling-point.	
	C°	F.°		C.°	F.°
$C_4\ H_5\ Cl.$	12·5	54·5			
$C_4\ (H_4\ Cl.)\ Cl.$	64·	147·2	$C_4\ (H_3\ Cl.)\ H\ Cl.$	84·	183·2
$C_4\ (H_3\ Cl.)\ Cl.$	75·	167·	$C_4\ (H_2\ Cl_2)\ H\ Cl.$	115·	239·
$C_4\ (H_2\ Cl_3)\ Cl.$	102·	215·6	$C_4\ (H\ Cl_3)\ H\ Cl.$	135·	275·
$C_4\ (H\ Cl_4)\ Cl.$	146·	294·8	$C_4\ Cl_4\ H\ Cl.$	153·	307·4

$C_4\ Cl_5\ Cl. = C_4\ Cl_4\ Cl_2 = C_4\ Cl_6$

Boiling-point, 180° C. (356°F.)

In addition to the difference of the boiling-points, the compounds derived from chloride of ethyl exhibit an absolutely different deportment with alcoholic solution of potassa. They are, in fact, scarcely attacked by this powerful agent, which, as we have seen, converts so easily the substitution-products of Dutch liquid into the corresponding chlorinetted terms of the ethylene group. The diversity of the orginal type has been retained in all the derivatives, except in the last terms, containing only carbon and chlorine, in which the two series merge into one another.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. X.

ON THE TREATMENT OF FRACTURE BY THE GUM BANDAGE.

By EDWARD JAMES FRANKLYN, Esq.
Assistant-Surgeon, 46th Regiment.

Private Daniel Keefe, 17th Foot, a young scrofulous-looking man, aged 20, deficient muscular development, large venous system, white skin, large pupils, tumid upper lip, etc., fell down one of the steps leading to the water from the pier, on the 1st of July last, and, pitching on the most prominent part of the right shoulder, fractured the humerus, about an inch to an inch and a-half above the insertion of the deltoid. He came in holding his arm bent at a right angle, supporting it at the elbow, saying "he had broken his arm," and was even able to point to the exact spot. I found, on examination, the bone to be obliquely and rather extensively fractured. Under these circumstances, I at once placed him in bed, with the injured extremity on a pillow, extending under the shoulder, which was thus rather raised and pressure taken off. Oil-silk was placed beneath the limb, and an evaporating spirit-lotion applied.

In the course of forty-eight hours there was a good deal of discoloration, some tendency to erythema, and some considerable swelling. However, the same treatment being continued, by the seventh day after the accident, these symptoms had all subsided, and the arm was "set" as follows:—The patient was taken to the edge of his bed, his legs hanging down. The injured arm was now placed beside the chest, and bent at the elbow at right angles, the forearm and hand extending across the epigastrium. The whole surface of the extremity and shoulder was now covered with a thickish solution of gum, and a coarse bandage applied from the palm of the hand to the elbow, every fold of the bandage being gummed. On arriving at the elbow, I secured the bandage, and fastened a piece of common bleeding-tape round this joint. To the other end of the tape I attached an iron weight of about eight pounds, and suspended it; by this means a regular extension was kept up, which appears to me more certain than the method of one person fixing the shoulder and the other pulling at the elbow. I had no assistant who knew anything about it, and who would, therefore, very likely have pulled irregularly. The weight answered very well at its end; the hospital sergeant kept his thumb under the armpit (to prevent the shoulder sinking) at the other. Having now ascertained that the ends of the bone had approximated, or rather got back to their normal position, I proceeded to apply a bandage from the elbow to the axilla, gumming every fold as I went on. I passed it over the shoulder; then in a figure of 8 round the other shoulder, back, and chest, bringing it again round under the axilla of the injured side, and, having repeated this four times, brought the bandage down again towards the elbow, encircling the limb, and gumming every fold as I descended, just as I did in ascending. The folds of the bandage going under the axilla answered as a pad, keeping the upper fragment of the broken bone out,—it had a disposition to fall inwards originally. Lastly, I fixed the arm to the chest by a few turns of a bandage, and a sling completed the apparatus. Until the gum bandage had become hard, which it did in a few hours, I fastened four narrow pieces of wood up and down the arm as a support, but removed them as soon as possible.

This apparatus was put on on July 8, and on August 8 I removed it, found all right, and did it up again in the same manner.

On September 8, I finally removed it, and found the man had the use of the arm. It was, of course, a little weak from the long confinement in one position. There was a large deposit of "callus" surrounding the seat of fracture. The arm daily gained strength; and, having seen the man go through the firelock drill, and having also seen him fire from the shoulder perfectly well, I sent him back to his regiment cured, on Sept. 30.

This plan totally does away with the risk of the apparatus shifting (as, once hardened, it never moves or loosens) as splints will do; and it requires some little mechanical skill to make a splint of undressed leather lined with wash-leather, as they do in civil hospitals, even if these appliances were always at hand in military service. A bandage or two and gum, on the contrary, are always to be had. Moreover, the man can walk about at once, instead of being confined to bed for some days; and, in addition, throughout the cure being obliged to be careful not to move much. By the gum-bandage plan, however, all risk is done away with. I think the gum answers better than starch, which I am aware has been used for some time in the treatment of fractures.

The foregoing case would, however, appear to show that the cure may be trusted entirely to the apparatus, even from the first.

The swelling, etc., usually succeeding these extensive fractures, shows the impropriety of putting them up until some days have elapsed.

CASES OF

CHRONIC DISEASE OF THE STOMACH. WITH SARCINÆ IN THE VOMITED MATTERS.

By W. H. RANSOM, M.D. Lond.

[Concluded from page 498.]

Case 4.—Mary Ann Higdon, aged 17 years, works in a factory; parents healthy. General health has been good; once had continued fever, about seven years ago, and three years later had laryngitis; menstruated for the first time ten months since; was regular, two months; has seen nothing since.

The present attack commenced six months ago, with vomiting, chiefly of food, and pain at the epigastrium. This has recurred almost daily ever since; during the last two months the vomited matters have been more watery and more acid. Six weeks since I examined some and found a great number of sarcinæ. She has been treated with vegetable bitters and alkalies without effect till the last week, during which she has taken sulphite of soda, and the quantity vomited has been diminished, and it has been less acid and without the scum which before existed.

May 1, 1853.—She came to see me. I found her thin, but not very. She said she had wasted much; was not very pale. Complained of great pain in the belly, especially after meat or bread, relieved by vomiting. Bowels open; liable to diarrhœa; the stools not observed till last week, and then traces of blood were seen. She goes to work, but complains of weakness; the appetite bad; pulse 84, soft

and regular. No marked tenderness, and no undue resistance in epigastrium; some headache, and shortness of breath on ascending.

June 20.—Seen again; had lost flesh and colour; stated that the sulphite soon ceased to be of service; that she left it off, and had taken dandelion tea with camomile and horehound and some port wine, (her grandmother's suggestion,) under which treatment she was at least as well as with the sulphite, and the vomited matters were less acid and frothy. She described a sense of accumulation and distension for 24 or 36 hours before each attack of vomiting, accompanied with pain, chiefly abdominal. The looseness of the bowels continued; she had heartburn and acid rising in the throat.

On palpation I distinctly felt a hard, lobulated mass, about the size of a walnut, deeply situated, close below the right costal cartilages, in the position of the pylorus; and not very tender on pressure.

July 23.—I saw her again; she expressed herself as feeling better, had rarely vomited since last report, and the vomited matter was little else but food. I have not been able to see any. She was too weak to work, and, I think, had lost flesh. Was continuing the same treatment as before.

This case, though incomplete, points out the necessity of bearing in mind, that these patients sometimes get better without any, or under the most varied or most inert treatment; and further illustrates the temporary benefit to be derived from sulphites.

The attention which has recently been drawn to the occurrence of the peculiar bodies named by Goodsir,—sarcinæ ventriculi in vomited matters,—will, perhaps, be considered a sufficient excuse for the following attempt by analysis to ascertain the conditions of their appearance and their pathological value. I have been able to find notices of thirty-three cases recorded by Goodsir, Bence Jones, Virchow, Todd, Brinton, Hassall, Busk, Hare, Jenner, Frerichs, Miller, and Neale.

Of the 33 cases the sarcinæ were found in the alimentary canal, or in its discharges, in 26 instances, in the lung in 2 instances, in the urine in 4, in the ventricles of the brain in 1.

Of the 26 cases where they were found in connexion with the alimentary canal, they co-existed with disease of some part of its course in 22 instances; with disease of some other part of the body not of the alimentary canal, twice. They were found without evidence of any disease in 2 cases,—1 a dog (Frerichs), and 1 a rabbit (Virchow). It must, however, here be noted, that Frerichs states he has found sarcinæ in the stomachs of persons after death who had not vomited during life, but he gives no numbers.

In 12 cases pain was said to be present at the epigastrium, in 14 the point was not noted, in 17 vomiting was present; in 4 cases, the details of which were not given, it is not mentioned; in 5 it was not present; 2 of these were rabbits, 1 a dog.

Of the 17 cases where vomiting was present, it was acid in 12, and the re-action not mentioned in 5.

Acetic acid was present in the vomited matters in 5 cases (with the normal acids), and butyric acid in 2 cases; in 10 cases it is not mentioned; in 10 cases a scum was noted on the vomited matters; in one of these the gas was shown to be carbonic acid by Professor Graham, but in this case torulæ were also present; in 8 of the 26 cases torulæ co-existed with the sarcinæ; in 15 cases they were not mentioned; in 3 they were not present.

Of the 17 cases of vomiting, the quantity was very great in 12, small in amount in 2, and not noted in 3.

In only 10 cases was the colour of the vomited matter stated; of these it was brown in 8, nearly black in 1, and called dirty in 1.

Of the 17 cases, blood was noted only three times in the vomited matters. Albumen has been twice found independently of blood, by Dr. Hassall, and in the case of Hemm recorded above.

Food has generally been found in the vomited matters. Sugar has been detected, and there can be little doubt it is always present when starch food is present. In a few cases, large quantities of ropy mucus have been said to be present.

The bowels were confined in 8 cases, regular in 2, and not noted in the remainder. The fæces are not noted sufficiently often as to colour, to render any numerical statement of value; they have been noted three times as nearly black, and in two of these I sought in vain for blood, though albumen was present in one of them.

In 9 cases wasting was present; in 2 it was unimportant; in 1 it was not present. In the 22 cases, the duration of the symptoms has varied from 4 months to 23 years. The ages of persons in whom they have occurred have varied from 1 year to 63 years. The urine was found to be alkaline in 3 cases; normal in 2; not noted in 17.

Of the 26 cases, 11 gave *post-mortem* results: 1 a healthy rabbit, Virchow; 1 rabbit with marasmus and icthyosis, Virchow; 1 case of diabetes, Dr. Brinton; 1 of rupture of the diaphragm, Mr. Busk; 1 of pleurisy with vomiting, Mr. Busk; 2 cases of cancer of abdominal organs, the Writer(a); 2 cases of non-malignant ulcer of the stomach, and perforation, Dr Todd and the Writer; 1 case of simple stricture of the pylorus, given above; and 1 mentioned at the Pathological Society, details imperfect.

Of the 12 cases where the vomiting was acid, 3 took carbonate of soda with relief; 2 took carbonate of magnesia with relief; in 1 creosote relieved the sickness; in 7 sulphite of soda was given, in all with relief; in none did a cure result.

We may conclude from the foregoing, that sarcinæ are not peculiar to the alimentary canal as a locality. When they exist there, they are not necessarily attended with notable symptoms. Contained in the above is the conclusion, that they do not necessarily cause vomiting. Sarcinæ are not necessarily accompanied by acid fluids. Virchow found them in an alkaline fluid in the lung, therefore they do not cause the development of acids in the stomach; which is further proved by the continuance of acid vomiting after sarcinæ have disappeared. The sarcina has no constant relation to the torula cerevisiæ, none to copious watery vomiting, none to alkalinity of the urine, none to any single anatomical condition of the organ in which they appear.

Notwithstanding this series of negatives, it may be affirmed, that sarcinæ very commonly co-exist with the following group of symptoms, viz.: obstinate chronic vomiting of large quantities of an acid, watery fluid, which forms a scum on the surface; epigastric pain, constipation, and wasting.

In these cases, the vinous, the acetous, and perhaps the butyric fermentations are set up in the stomach, and probably as a result of the too long delay of the food there.

The cases which have occurred presenting this group of symptoms, have been pathologically most varied; but pyloric obstruction, either proved by *post-mortem* observation, or inferred from the symptoms during life, appears common to all.

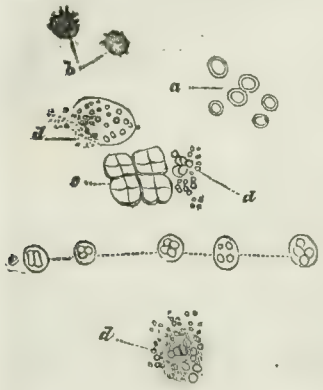
Sulphite of soda has been found useful only as a palliative in these cases; magnesia and carbonate of soda have also afforded relief. Some cases appear to be as much relieved while taking certain bitter herbs; and some have very variable and irregular periods of improvement, traceable to no cause. In those cases where no notable symptoms attended the sarcinæ, the conditions were present which might have caused some delay of the food within the stomach, and thus have permitted some peculiar fermentative process.

Before coming to a conclusion, however, it may be well briefly to consider the question as to the nature of the bodies called sarcinæ; after which it will, I think, be easier to decide on their influence and pathological significance.

Goodsir himself considered them to be vegetable organisms; they have been since considered animals by Busk,—degraded muscular fibre by Schlossberger,—a higher stage of development of torula by Simon; but these views can no longer be entertained. The incorrectness of the latter view has been proved in the case of Hemm, where no torulæ were present; and the supporters of the two former opinions have themselves since changed their views. Meyen, Köliker, Hasse, and the most competent observers in this country, support the original view of Professor Goodsir; Virchow, who has devoted considerable attention to the subject, appears unable to convince himself of their really cellular structure, without proof of which he considers it to be impossible to class them as plants. With hesitation, then, I express the opinion, that their cellular nature can be satisfactorily determined, and feel disposed to support Goodsir's view, which the following observations on the growth and development of these bodies bear out. In the vomited matters of Hemm, examined May 8, I ob-

(a) One of these cases was medullary cancer of the mesenteric glands and small intestines, in which sarcinæ were found after death in the duodenum. It is not given above.

served that the rectangular cleavage had gone on so much more rapidly than the growth of each individual square, that these latter were, in some clusters, reduced to mere points; in these cases, the primary groups of four, near the margin, were a little loose and separated from the cluster; and it was then easy to observe the true cellular structure; for in this stage, the nucleus, which is distinguishable by its high refractive power, and faint greenish yellow tinge, is separated to some distance from the colourless cell wall, which, in the more advanced stage, it is in contact with and obscures.



a Bleached blood-discs.
b Changed mucous corpuscles.
c Sarcina the usual size.
d d d Sarcinæ rapidly growing.
e Free cells in stages of fission.

Floating free, were seen also transparent round cells, which contained sometimes two nuclei, easily recognisable as identical with those of the sarcina, and showing a mark, as if about to split again into four, sometimes three, one of the nuclei having divided before the other, which often occurs in the clusters; sometimes four nuclei, and these in various states of approximation, according to the stage. These appearances seemed strongly to point out, that one mode of propagation of these organisms is the throwing off of single cells as gemmæ, which then, when free, undergo the same series of changes as the parents did.

The conditions necessary to the growth and development of sarcina are of more consequence to the present inquiry; but of these little or nothing is known. No one has yet succeeded in cultivating it artificially, though several attempts have been made; and it would seem very probable, reasoning from analogy, that, like the yeast plant, it occurs in the presence of certain matters essential to its growth, and thus may be characteristic of some peculiar fermentation.

Dr. Todd appears to have entertained this view of its nature, as he considers it to be developed in the stomach when food is too long delayed there, and does not expressly attribute any effects to its agency.

Lehmann, Frerichs, and Virchow also consider it innocuous. Dr. Jenner, to judge from the principle on which he has founded the treatment by sulphites, attributes some effects to it; and Dr. Hassall does not hesitate to say, that "the presence of sarcina satisfactorily explained the intense acidity of the contents of the stomach, upon which, again, the frequent attacks of vomiting depended."

That this latter assertion is incorrect, is, I believe, proved in the foregoing analysis; and it is, at the same time, shown with equal certainty, that the most severe symptoms which often co-exist with sarcinæ depend on other causes, namely, anatomical lesions. It remains to decide whether the sarcinæ produce any unpleasant symptoms when present, in addition to those caused by the disease of the stomach; and if they ever occur as primary causes of gastric disorder.

The relief afforded by the use of sulphites is great and indisputable; and as these destroy the sarcinæ, it appears at first sight strong evidence in favour of the opinion that sarcinæ are the cause of the symptoms relieved; however, when we remember that the relief is but temporary, and all the symptoms return under the use of sulphites, though the sarcinæ are still absent, the evidence becomes weaker; and when we further reflect that sometimes as much benefit is derived from carbonates of alkalies, which do not destroy the sarcina, as the sulphites produce, the action of these latter can no longer be brought forward as important evidence in favour of the active agency of sarcinæ. Indeed, it appears to me not improbable, that much of the benefit derived from the sulphites is due to their action, in the same manner as carbonates, in neutralising the acids of the stomach, and something also to their influence in checking the growth of torulæ and the evolution of carbonic acid gas; subtract these from the sum of relief sulphites afford, and but little remains to be accounted for. From the analogy of sarcinæ with the humbler forms of fungi or algæ, which so abundantly infect the body, living and dead, wherever some decomposition is going on, as in the mouth and in the intestinal canal, I should also conclude that they do not exercise any important influence on the functions of the organ in which they exist. Briefly, it may, then, be stated, that it is proved that sarcinæ do not produce any notable symptoms in those cases where they co-exist with disease of the stomach; and it is not yet shown that they have any—even the slightest—effect. Almost with equal certainty may it be said, that they do not excite primary gastric disturbance.

Nottingham, August 4, 1853.

CONTRIBUTIONS TO ORTHOPÆDIC SURGERY.

By BERNARD E. BRODHURST, Esq.
Assistant-Surgeon to the Royal Orthopædic Hospital, etc.

(Continued from page 323.)

TALIPES.

When distortion has occurred at an early period of uterine gestation, muscular retraction would appear to be greater than when it has taken place at a late period. The soft cartilages then accommodate themselves to the abnormal position of the foot, and present less impediment to muscular retraction; and through pressure one upon the other, or through some adventitious circumstance of formation, irregularities of form occur which are never found to exist when distortion has been first developed at a late period. Individual tarsal bones are similarly rotated in the third and in the fourth degree of varus, but muscular retraction increases in proportion to imperfect development. The tarsal bones in the fourth degree of varus (and perhaps the same may be said of the third degree) are never so perfectly developed as in the well-shaped foot; and although in the third degree development may scarcely have been impeded and the shape of the bones be scarcely affected, in the fourth degree the shapes of some at least, as the astragalus, are abnormal; and not alone the development of the lower extremity is thus impaired, but the entire organism is, in a measure, affected; the infant is small and imperfectly nourished; gestation seldom reaches the full period, and is rarely prolonged beyond the seventh or eighth month. After birth, the child probably soon loses its unhealthy and miserable appearance, and thrives beyond expectation.

The calcaneum, from the vertical position which it is apt to assume, is frequently difficult of replacement, and a long and tedious course of treatment is necessary to develop the heel. The posterior extremity of this bone is frequently wanting in development, and it terminates more or less conically. The astragalus, in a case of this description, which was lately described by Mr. Adams, "was tilted obliquely forwards and downwards, and to a certain extent displaced from its socket, the anterior third of its superior articular facet being thrust on to the dorsum of the foot by the elevated position of the tuberosity of the os calcis. There did not appear to be any lateral obliquity in the position of the posterior half of the astragalus. This bone was the only one presenting any very important deviations from the natural form, and these chiefly referable to its anterior half, which was disproportionately small from imperfect development, the comparison being made with a perfectly-formed fœtal bone of the same period. Instead of the head of the bone, with its articular surface, being developed in a line parallel with, though somewhat to the inner side of, the axis of the bone, the head and neck of the astragalus passed abruptly to the inner side; and the articular surface, instead of looking directly forwards, had a lateral or slightly antero-lateral aspect. This lateral position of the articular surface of this bone was in evident adaptation to the altered position of the navicular bone and anterior half of the foot, by which it appeared to have been determined.

"The superior articular surface of the astragalus was abnormal in form and position; it was elongated by the articular cartilage extending quite to the posterior edge of the bone, which was thin and attenuated, instead of being an obtusely rounded border; the posterior two-thirds of this surface only had entered into the composition of the ankle-joint, the anterior third being thrust on to the dorsum of the foot; this was indicated by a distinct transverse marking at

the junction of the middle with the anterior third; the articular cartilage on the extruded anterior third was healthy, and its boundary well defined, but not so distinctly as the outline of those portions directly entering into the joints."

"The lateral articular surfaces presented similar abnormalities, from the anterior portion of the bone being displaced towards the dorsum of the foot; the articular cartilages were extended towards the posterior border of the bone; the external articular facet was tolerably well developed, but the internal was very defective, being represented by only a very small and imperfectly defined plate of cartilage, close to the posterior edge."(a)

The child from which this astragalus was taken lived only a few hours. It was affected with talipes varus of both feet, of the fourth degree, and with spina bifida.

For all practical purposes, it may be said that dislocation of the tarsal bones does not constitute a part of varus, and that, indeed, it does not occur. Even in the worst forms of distortion, and when the shape of the foot is such as to indicate dislocation of one or more of the tarsal bones, rotation only, and not dislocation, is found; and yet there are very rare exceptions to this rule, as in the instance of extreme varus with dislocation of the astragalus, which was presented by Professor Ehrmann to the anatomical museum at Strasbourg. In this case, the astragalus was dislocated inwards and forwards, and was placed transversely, its posterior extremity being in contact with the external malleolus.(b)

Excepting the calcaneum and the astragalus, the tarsal bones do not undergo any constant or very marked change of form, until the weight of the body has been borne on the feet; then pressure causes absorption, and irregularities of surface sufficiently remarkable. In the first degree, in walking, the sole of the foot is planted on the ground, the inner edge of the foot being slightly raised, and progression is effected without much difficulty. In the second degree, the heel being raised, and the weight of the body transmitted to, and borne upon, the digital extremity of the fifth metatarsal bone, the use of the feet is exceedingly difficult, and the body can scarcely be balanced without assistance; the foot describes an arc before it again touches the ground, the knee being unbent. The child, however, soon learns to increase the plant, by placing the outer edge of the foot upon the ground; and this position, by habit, and the weight of the body, becomes necessary. Now, the superincumbent weight is transmitted to the fifth metatarsal bone and the os cuboides, and a cushion of fat is developed by pressure on the ground, for the protection of the skin. This callosity is composed of fat and cellular tissue; and, between it and the tarsal bones, is placed a bursa mucosa, and frequently a second bursa between the cushion and the skin. In the fourth degree, the extremity of the os calcis is the most depending portion of bone, the phalanges being raised, and the inner margin of the foot perhaps in contact with the leg. The cushion now alluded to is always the most depending portion, and consequently changes its position as rotation of the foot increases. Through undue use it is apt to inflame, and may be entirely destroyed and slough away; but before this provision for the protection of the skin has been fully developed, a very important modification in the disposition of the metatarsal bones, and in the shape of the sole of the foot, will probably have taken place.

In the ordinary (the third) degree of varus, the weight of the body is transmitted to, and in great measure borne upon, the fifth metatarsal bone. The plant of the foot being thus narrow, there is difficulty in balancing the body, and a constant tendency to fall backwards or forwards, so that it requires a great effort to stand erect and motionless. Forward motion, however, is easy, and one foot is lifted over the other even rapidly and securely. But the fifth metatarsal bone is insufficiently supported, and unable for long to bear the weight of the body; it consequently yields, and is pressed into the sole of the foot; and now, together with it, the fourth metatarsal bone bears the superincumbent weight. The external edge of the foot is no longer planted upon the ground, but the dorsum; and thus there is gained a broader and more secure plant. In like manner, the fourth will yield, and the fifth be rotated into the sole of the foot. Thus, rotation from superincumbent pressure having commenced, there is no degree of deformity to which it may not advance. The longitudinal and transverse arches are thus materially altered; being shortened by muscular traction, and compressed laterally by the superincumbent weight. The inner arch, composed of the calcaneum, the astragalus, the os naviculare, the ossa cuneiformia, and the first, second, and third ossa metatarsi, receives the weight of the body; and the external arch, to which the weight is transmitted, is formed by the calcaneum, the os cuboides, and the fourth and fifth ossa metatarsi. But the weight is no longer transmitted to the ground through an arch, as in the normal state of the foot, but through a solid structure, composed of the tarsus and of the fourth and fifth metatarsal bones, as is at once evident on examining the skeleton foot; consequently, after the weight of the body has been long borne on the feet, there are found, superadded to rotation of individual bones, as observed at birth, displacements and alterations in form of different bones, which are produced by attrition of the bony surfaces one upon the other; by the jamming together and wedging asunder of individual bones, which, in this state of the limb, is without alternative.

The os naviculare is, perhaps, more altered than any other of the tarsal bones in a long-standing varus. Being wedged in between the astragalus, the internal malleolus, the os cuboides, and the ossa cuneiformia, the entire bone undergoes considerable atrophy. A new articular facet is developed on its now superior surface for articulation with the malleolus internus. The small diameter of the bone presents the greatest change from the normal state, undergoing occasionally excessive atrophy, through friction against the head of the astragalus. The astragalus retains much the same position and form as in the fœtal state; its double rotation, however, becomes more apparent. Its superior surface is more uncovered, perhaps, than formerly, and, through rotation of the foot, this bone may become the point upon which pressure is chiefly borne in standing. The cartilage on the superior surface of the bone, which does not enter into the formation of the tibio-tarsal joint, which is not covered by the articular extremity of the tibia, presents an irregular, uneven surface. The calcaneum has more or less a vertical position; its posterior extremity being drawn upwards and inwards, and its anterior extremity presenting forwards, downwards, and outwards. It is curved in its long diameter, the convexity being outwards. The posterior extremity frequently offers a conical shape, pointing upwards and inwards. On the posterior half of the external face is an articular facet for the malleolus externus. The cuboideum is separated from the calcaneum by a space which is perceptible in the living foot. The shape of this bone is, perhaps, more affected than any other tarsal bone, if it be not the navicular. Resembling a cone, the apex in the sole of the foot, it would appear, and has been thought to be, one of the principal obstacles to the restoration of the normal shape of the foot. Its removal has even been contemplated as the first step to the reduction of an old varus. Dr. Little says, "the treatment might well be commenced in robust subjects by ablation of the os cuboides, which, in preventing the unrolling of the foot, acts as the keystone of the inverted arch."(a) All these bones at birth, in an extreme grade of varus, vary somewhat in appearance from the natural condition; and even before the body has been borne on the feet, these variations become more marked, comparison being made with the bones of a sound foot of the same age; but, when pressure and attrition have been added to arrested development, the forms of the bones may present serious obstacles to the perfect restoration of the shape of the foot; and with lapse of time there is also added loss of elasticity in the ligaments, and of contractile power, through intrinsic change in the muscles, to form together, perhaps, an insuperable barrier to the successful adaptation of surgical means.

The ossa cuneiformia are less affected by pressure than by impaired nutrition; they are relatively smaller than similar bones in the healthy foot, but their forms are little altered. They are rotated *en masse* with the anterior part of the foot, so that their external surfaces, or their superior surfaces, as the case may be, become inferior; and the same may be said of the metatarsal bones and of the phalanges. The first cuneiform bone, however, is occasionally rotated together with the navicular bone by the tibialis posticus. The tibia and fibula are atrophied, and the internal malle-

(a) "Transactions" of the Pathological Society, Vol. III., p. 457.
(b) Held Dissertat. sur le Pied-Bot. Strasbourg. 1836.

(a) Op. cit., p. 305.

olus is shorter, and more flattened than usual. It presents an articular facet, which corresponds with that of the navicular bone. All the bones of the leg and foot then have undergone atrophy, and, together with the muscles, or after muscular degeneration is complete, oil globules may appear in the bone cells, and the earthy salts, in part, disappear. But concentric atrophy, or that form in which the bones retain their normal texture, but diminish in length and substance, in which the shaft of a long bone, for instance, is reduced in size, and its medullary canal is contracted, is the character of change in the osseous parts that is generally observed. This condition of the bones necessarily increases with age, and as the immobility of the foot increases. Even though at birth the bones of the distorted limb should be of the same size and form as those of the healthy limb, in a few years the forms will have altered, and the size be relatively smaller. The periosteum becomes loosely attached to the bone, and the endosteum is attenuated and softened. Motion may be impaired by anchylosis of the tarsal bones, as is rarely found, or by osseous excrescences on the head of the astragalus, or by the fixed wedging of the tarsal bones, or by loss of elasticity in the ligaments, or by fatty degeneration of the muscles, or by one cause, or by all combined. After birth, the same morbid action may be in force to continue the irritation which was first developed in utero; or, if it be not present, its effects remain. Occasionally, however, this result of irritation will of itself subside, or through carefully applied mechanical means alone. But, although the source of irritation may have been removed, the effects that have been produced generally continue, and a chain of consequences naturally arises out of the continuance of the distortion alone—impaired nutrition, a consequence of immobility—loss of elasticity in the ligaments, and muscular degeneration. Thus, one cause re-acts upon the other. In the first place, irritation, to induce muscular retraction, rotation of the tarsal bones, and, ultimately, a fixed position; and, secondly, the position of individual tarsal bones and of the whole foot, to impair or prevent motion, and to induce defective nutrition and its consequences.

The ligaments which are most contracted are,—Ligamentum deltoideum; l. plantare calcaneo-scaphoideum; l. calcaneo-cuboideum; l. plantare naviculare-cuboideum; l. plantare commune; and, above all, aponeurosis plantaris. And those which are most extended are,—L. fibulæ anterius, medium et posticum; membrana capsularis ossis navicularis et capitis tali; and those on the dorsum of the foot, between the astragalus, the scaphoid, and the cuneiform bones.

All the muscles whose tendons surround the ankle-joint are in some measure affected; the degree, however, depends on the duration of the distortion. Necessarily, opposed sets of muscles are differently affected; the one contracted, the other extended. When clonic spasm has been induced, there is a tendency to its increase, and for it to become permanent. Spasm would seem to increase, not in duration only, and not indiscriminately, but in the course of the nerve which supplies the affected part. This is an observation of very general application, and could be illustrated at great length; it will be sufficient, however, for my purpose, to cite a single case.

[To be continued.]

NEW INVENTIONS.

ON A NEW INSTRUMENT FOR THE REMOVAL OF POLYPI FROM THE EAR.

By JOSEPH TOYNBEE, F.R.S., F.R.C.S.

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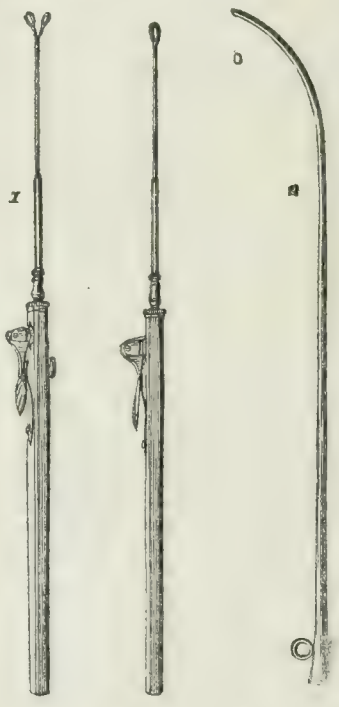
Various instruments have been invented having for their object the removal of the small vascular polypi from the external auditory meatus. Of these, by far the best is the snare of Mr. Wilde, which is thus described at page 420 of that gentleman's work on "Aural Surgery:"—It consists "of a fine steel stem, five inches long, and bent in the centre, with a moveable bar sliding on the square portion near the handle, which latter fits over the thumb. The upper extremity is perforated with holes running parallel with the stem, and loops at the angle serve the same purpose. A fine wire, fastened to the cross-bar, passes through these loops and holes; it should be of such length that, when the cross-bar is drawn up tight to the handle, the ligature is fully on the stretch.....In using it, the cross-bar is pushed forward, and a noose made of the wire at the small extremity, of sufficient size to include the morbid growth, which it is then made to surround, and towards the root of which it is pressed by means of the stem; the cross-bar is then drawn up smartly to the handle, while the point of the stem is pressed downwards; and it never fails of either cutting across or of drawing with it whatever was included in the noose."

The difficulty attendant upon the use of this instrument consists in getting the wire noose around the polypus, which frequently is of a very small size; another disadvantage is, that it cuts off a portion of the growth instead of withdrawing it entire.



The instrument which I have been in the habit of using during several months at St. Mary's Hospital, as well as in private practice, with most satisfactory results, I have called the *lever ring forceps*, and it is on the principle of M. Luer's scissors. In the interior of the ordinary tube is the delicate steel rod, the end of which is split into two portions, to each of which is fixed a small oval ring, measuring four or five lines long, and from two to three broad. These rings, (the inner surfaces of which are flat,) as seen in the left figure of woodcut No. 1, separate from each other when the lever is not pressed; but, as seen in the right figure of the same woodcut, when the lever is pressed, the rings are brought into contact. The instrument is introduced into the meatus with the rings apart; these may be made to enclose the polypus or a portion of it between them, and then, by pressing upon the lever, the polypus is seized, and can be drawn out.

For the removal of the larger polypi, I am in the habit of using the *ring forceps*, which are made after the fashion of ordinary dressing forceps; but, instead of teeth, there is a ring at the end of each blade. The advantage of the rings is, that a portion of the polypus is securely held within them, while, with the ordinary dressing forceps, the polypus is generally broken up, and the removal of the roots is impracticable.

I may take the present opportunity of suggesting, that the Eustachian catheter, as seen in the woodcut No. 2, should be made oval instead of round. The advantages attendant upon the oval shape are, that it passes through the nose with more facility, and with less uneasiness to the patient; and that, when introduced into the faucial orifice of the Eustachian tube, the flattened surfaces are in apposition with the flattened walls of the tube; and the discomfort produced by the pressure of the convex surface in the rounded form of the instrument commonly in use is, at least partially, avoided.

18, Savile-row.

ST. GEORGE'S HOSPITAL.

TABLE OF CASES OF AMPUTATION PERFORMED IN THE YEAR 1852.

NO.	AGE.	SEX.	OCCUPATION.	WHAT LIMB AMPUTATED, AND WHETHER CIRCULAR OR FLAP.	WHY AMPUTATED.	DATE OF OPERATION.	RESULT, AND AT WHAT PERIOD.	REMARKS.—IF FATAL, CAUSE OF DEATH, AND MORBID APPEARANCES. IF NOT, GOOD OR BAD STUMP, ETC.
1	41	M.	Painter.	Thigh. Flap.	Extensive malignant ulceration of the skin of the leg.	Feb. 16.	Died. 18th day after operation.	The parts composing the stump sloughed. He was in a very weak state before the operation, and appeared to die of the exhaustion caused by the discharge. No *post-mortem* examination.
2	19	M.	Draper.	Thigh. Circular.	Necrosed bone in the head of the tibia; ulceration of the cartilages of the knee.	Feb. 26.	Cured. 25 days.	The wound was not quite healed but was healing rapidly, when he left. Was susequently seen with a very good and sound stump.
3	21	M.	Whitesmith.	Thigh. Flap.	Pulpy thickening of the synovial membrane of the knee, and subsequent ulceration of the cartilages.	Feb. 26.	Cured. 34 days.	The wound healed kindly. A very good stump.
4	35	M.	Labourer.	Leg. Circular.	Compound comminuted fracture of the fibula, followed by abscess in the ankle-joint and caries of the tarsal bones.	Mar. 4.	Cured. Out-patient, 55 days.	The wound was not quite closed when he left the hospital. Secondary amputation. (V. Compound fractures, No. 1.)
5	39	M.	Labourer.	Great toe.	Suppurating bunion; dislocation of toe, and destruction of joint.	Mar. 18.	Cured. Out-patient. 55 days.	Useful stump. Recovered the power of walking, which he had almost lost for some time.
6	24	M.	Labourer.	Thumb, two first & ring fingers, with the metacarpal bones.	Extensive laceration of the hand.	Mar. 24.	Cured. Out-patient, 49 days.	Healed kindly. Primary amputation.
7	27	F.	Married woman	Leg. Circular.	Caries of tarsus.	Mar. 25.	Cured. 54 days.	
8	14	M.	Labourer.	Arm. Circular.	Compound fracture of humerus, with great laceration, and hæmorrhage from large branches of the brachial artery.	Mar. 30.	Cured. 21 days.	A wagon had passed over the arm. The dissection of the limb showed very extensive laceration of the soft parts, with great infiltration of blood. No wound was detected in the main artery. Primary amputation. (V. Compound fractures, No. 4.)
9	32	F.	Married woman	Leg. Circular.	Caries of tarsal bones, with abscess in the ankle-joint.	April 8	Cured. 53 days.	
10	3	M.	Child.	Arm. Circular.	Great distortion of the hand and fore-arm, from the cicatrix of an extensive burn.	April 22.	Cured. Out-patient, 26 days.	
11	14	M.	Schoolboy.	Fore-arm. Flap.	Caries of bones of wrist, and of the end of the radius.	May 13.	Cured. 20 days.	
12	26	F.	Straw-bonnet-maker.	Thigh. Circular.	Abscess in the knee joint, and ulceration of the cartilages.	June 3.	Cured. Out-patient, 40 days.	The stump was not quite healed when she left the hospital; it healed but slowly after she left. A small piece of bone necrosed. When seen again, a good stump.
13	33	M.	Twine-spinner.	Arm. Circular.	Necrosis and caries of bones of elbow, after diffuse inflammation.	June 10.	Cured. 34 days.	The disease was too extensive to allow of the excision of the elbow-joint. Exploratory incisions were made to decide this point.
14	17	M.	Boatman.	Leg. Circular.	Compound fracture of the leg, with great laceration of the soft parts, and extensive hæmorrhage.	June 23.	Cured. Out-patient, 98 days.	Had been caught in a barge rope and thrown down. The dissection of the limb showed that the fracture extended into the ankle-joint, with separation of the epiphyses of the tibia and fibula. The soft parts were extensively lacerated, and the anterior tibial artery was torn across. The stump did not heal well; sequestra separated from the tibia and fibula. Primary amputation. (V. Compound fractures, No. 9.)
15	33	M.	Labourer.	Fore-arm. Circular.	Extensive laceration of the soft parts of the hand, with crushing of the various bones	July 7.	Cured. 27 days.	The hand had been crushed by a heavy pile-driving machine. Primary amputation.
16	7	M.	Schoolboy.	Arm. Circular.	Compound fracture into the elbow-joint, with extensive laceration of the soft parts.	July 15.	Cured. Out-patient, 96 days.	The arm had been drawn into a planing machine, and the laceration of the soft parts extended up to the shoulder. There was also great contusion of the parietes of the chest, and over the scapula. Gangrene of the stump and of the soft parts over the scapula followed the operation, and subsequently necrosis of the end of the humerus. This caused the stump to be conical. (V. Compound fractures, No. 11.)
17	40	F.	Housekeeper.	Thigh. Flap.	Ulceration of cartilages of knee-joint, and subluxation.	July 22.	Died. 4 days.	No *post-mortem* examination. Died apparently of secondary pleuro-pneumonia. She had had some chest affection for a few weeks previously, but the thoracic organs were reported free from disease previous to the operation.
18	45	M.	Bricklayer.	Thigh. Circular.	Abscess communicating with knee-joint; ulceration of cartilages, and partial anchylosis.	Aug. 12.	Cured. 76 days.	In the operation, the arteries were found extensively ossified. His digestion and general health were exceedingly feeble. Erysipelas supervened, both on the extremity and over the trunk, and matter burrowed in various directions.
19	13	F.	School-girl.	Leg. Flap.	Caries of tarsus and of articulating extremities of the bones of the leg.	Sept. 4.	Cured. 39 days.	Good stump.

TABLE OF CASES OF AMPUTATION PERFORMED IN THE YEAR 1852.—*Continued.*

NO.	AGE.	SEX.	OCCUPATION.	WHAT LIMB AMPUTATED, AND WHETHER CIRCULAR OR FLAP.	WHY AMPUTATED.	DATE OF OPERATION.	RESULT, AND AT WHAT PERIOD.	REMARKS.—IF FATAL, CAUSE OF DEATH, AND MORBID APPEARANCES. IF NOT, GOOD OR BAD STUMP, ETC.
20	48	M.	Miller.	Thigh. Circular.	Ulceration of cartilages of knee-joint, with extensive suppuration, and inflammation of femur.	Oct. 21.	Died. 9 days.	No *post-mortem* examination. Symptoms of purulent infection, vomiting, rigors, sweats, etc
21	16	M.	Labourer.	Thigh. Circular.	Compound fracture into knee-joint, and separation of epiphysis of femur.	Nov. 17.	Cured. 48 days.	The dissection of the limb showed a large wound in the ham communicating with the knee-joint; the lower epiphysis of the femur had been completely torn off from the shaft, and was partially twisted on itself. The injury was occasioned by a fall of about 80 feet. Primary amputation. (V. Compound fractures, No. 20.)
22	18	M.	Bookbinder.	Leg. Circular.	Extensive caries of bones of tarsus.	Dec. 2.	Cured. Out-patient, 32 days.	He had been under treatment for a long time without much benefit to the local disease. The os calcis had been previously excised at another institution, and the place of this bone was found filled up by fibrous tissue, in which was a small detached nodule of new bone: several abscesses existed at various parts of this tissue. The other bones were extensively diseased, but not exposed.

Total Number of Cases of Amputation, 22 : 3 died.

Of the Thigh, 8, 3 of which died. 5 were circular, and 3 were flap operations; 1 was a primary amputation for an accident; the remaining 7 were for disease.
Of the Leg, 6, all of which recovered. 5 were circular, and 1 was a flap operation; 2 were for accidents, 1 primary, and 1 secondary; the remaining 4 were for disease.
Of the Arm, 4, all of which recovered. All were circular operations: 2 were primary amputations for accidents; 1 was for disease; and 1 for distortion after a burn.
Of the Fore-arm, 2, both of which recovered. 1 was a circular, and 1 was a flap operation; 1 was a primary amputation for an accident; and 1 was for disease.
Of a portion of the Hand, 1, which recovered. It was a primary amputation for an accident.
Of the Great Toe, 1, which recovered. It was for disease of the joint.

TABLE OF CASES OF COMPOUND FRACTURE OF THE THIGH, LEG, ARM, AND FORE-ARM, ADMITTED IN THE YEAR 1852.

NO.	AGE.	SEX.	OCCUPATION AND GENERAL HABITS.	DATE OF ADMISSION.	NATURE OF ACCIDENT.	LIMB.	STATE OF WOUND, AND OF FRACTURE.	TREATMENT.	RESULT, AND DURATION OF DISEASE.	REMARKS—IF FATAL, MORBID APPEARANCES, ETC. ETC
1	35	M.	Labourer. Intemperate habits.	Jan. 15.	Compound comminuted fracture of fibula, from a heavy weight falling on it.	Right leg.	Two small wounds; a good deal of contusion; considerable hæmorrhage; the lower end of the bone much comminuted; emphysema in the neighbourhood.	Good diet; laudanum frequently in small doses; secondary amputation, March 4.	Cured. Out-patient, 104 days.	Suppuration of ankle-joint; consequent dislocation of the tibia inwards; necrosis of part of fibula; caries of astragalus; great disturbance and fever; on this account amputation was subsequently performed. (Amputations, No. 4.)
2	36	M.	Newsvendor. Was very drunk when the accident happened.	Feb. 21.	Run over by a heavy van.	Leg.	... ...	... ...	Died. 2 hours.	Had a compound fracture of one leg, and simple fracture of the other. Was otherwise severely injured, especially about the face. No *post-mortem* examination.
3	21	M.	Bricklayer. Intemperate habits.	March 3.	Fall of about seven feet.	Left leg.	Small wound; little contusion; transverse fracture of both bones.	Assalini's box; no medicines; good diet.	Cured. Out-patient, 48 days.	No symptoms. The wound healed in about a fortnight.
4	14	M.	Labourer. A healthy boy.	Mar. 30.	Fell off the shaft of a cart, the wheel of which passed over his arm.	Right arm.	The upper fragment of the humerus projected several inches; extensive laceration of the soft parts, and hæmorrhage of a severe character.	Amputation; primary.	Cured. 21 days.	Amputations, No. 8.
5	32	F.	Milkwoman.	April 27.	Slipped on the pavement.	Right leg.	Much swelling about the wound, some emphysema; transverse fracture of both bones, about 2 in. from ankle.	Assalini's box, and subsequently gum splints.	Cured. 71 days.	
6	12	M.	School-boy.	April 30.	Run over by a railway truck.	Right fibula.	Other severe injuries, of more importance.	... ...	Died. 6 days.	Had sustained other most severe injuries, and died of the effects of extravasation of urine from rupture of the urethra, caused by fracture of the pelvis. (*Post mortem* Book, 1852, No. 112.)
7	41	M.	Plumber. Probably temperate.	June 9.	Fall of nine feet on the point of the elbow.	Left elbow.	Small wound, much swelling; discharge of synovia; fracture, as well as could be ascertained, through the lower part of the olecranon.	Straight splint; then, erysipelas coming on, angular splint; incisions; diffusible stimulants; tonics.	Cured. 90 days.	Had two attacks of erysipelas. Recovered with partial anchylosis of the elbow-joint.
8	28	M.	Lighterman. Very dissipated habits.	June 13.	The leg caught in the rope of a barge in motion.	Right leg.	Transverse fracture of both bones. Some of the soft parts had got between the broken bones, and it was necessary to enlarge the wound to extricate them.	Incisions into the parts which became affected with diffuse inflammation; a large abscess opened on the nates; morphia; tonics.	Cured. 116 days.	There was great displacement of the fractured bones, and shortening of the limb. The suppuration was excessive. The abscess on the nates was preceded by symptoms resembling those of purulent infection. Was affected with primary syphilis at the time of the accident.

9	17	M.	Boatman.	June 23.	Caught in a barge-rope and thrown down.	Right leg.	Much laceration of the soft parts, and arterial hæmorrhage. The fracture extended into the ankle-joint, and the epiphyses of both bones were separated.	Amputation; primary.	Cured. Out-patient, 98 days.	Amputations, No. 14.
10	48	M.	Labourer. Drunken habits.	July 4.	A heavy wagon passed over both legs.	Right leg.	Small wound: fracture comminuted.	Tonics; then, as delirium came on, opiates, good diet, and wine.	Cured. Out-patient, 164 days.	Recovered, with great distortion of the limb. There was a simple fracture of the same leg, below the upper compound one. The soft parts sloughed on the slightest pressure, so that the requisite extension could not be kept up. Amputation was thought of at the latter end of July, but he did not seem able then to bear it.
11	7	M.	Schoolboy.	July 15.	Arm caught in a planing machine, and drawn in up to near the shoulder.	Right arm.	Very extensive laceration of the soft parts; elbow joint laid open; parietes of chest much contused.	Amputation; primary.	Cured. Out-patient, 96 days.	Much sloughing of the soft parts over the scapula, and of the stump, followed the operation. (Amputations, No. 16.)
12	40	M.	Coachman.	Aug. 7.	Kicked by a horse.	Left fore-arm.	Small wound; slight ecchymosis; fracture of ulna, about four inches from the elbow.	Splints; no medicine.	Cured. Out-patient, 21 days.	No symptoms. The wound healed kindly.
13	30	M.	Carter.	Aug. 18.	The leg was jammed between the wheel of a cart and a bank.	Right leg.	Small wound; transverse fracture of both bones near the lower third.	Assalini's box, and pasteboard splints.	Cured. Out-patient, 35 days.	No symptoms. The wound healed in about three weeks.
14	55	F.	Lace-maker.	Aug. 30.	Kicked by a horse.	Left leg.	Small wound; slight ecchymosis; transverse fracture of both bones, near the upper third.	Assalini's box; the wound closed by lint.	Cured. Out-patient, 50 days.	No symptoms. The wound healed in about a fortnight.
15	41	M.	Labourer. Temperate.	Sept. 21.	Struck by a heavy iron girder.	Left leg.	Small wound; fracture through the outer-malleolus into the ankle-joint.	Side splints; parts over the fracture sloughed; Assalini's box; good diet.	Cured. Out-patient, 190 days.	A portion of the lower end of the fibula became necrosed, and separated very slowly.
16	58	M.	Labourer. Intemperate.(?)	Sept. 29.	Fell more than forty feet on to his feet.	Right leg.	Not much bleeding or ecchymosis; the fracture of the tibia was very oblique, and led towards the ankle-joint.	Assalini's box; good diet.	Cured. Out-patient, 69 days.	He also had simple fracture of the left leg, and of the left os calcis. Had some contusions about the loins, and subsequently temporary retention of urine.
17	42	M.	Carman. Intemperate habits.	Oct. 7.	A van passed over his arm.	Right arm.	Much ecchymosis about the wound; transverse fracture of the humerus, near the middle.	Splints; abscess formed and communicated with the elbow; free incisions; good diet; tonics.	Cured. Out-patient, 89 days.	Recovered, with much deformity. There had been considerable sloughing of the soft parts about the fracture. The elbow-joint was laid open by another wound, received at the same time, and seemed to be anchylosed.
18	38	M.	Labourer. Somewhat intemperate habits.	Oct. 20.	A railway truck, six tons in weight, passed over his arm.	Left fore-arm.	Great bruising of the soft parts; two small wounds; no large arteries injured; the fracture apparently comminuted.	Splints; laudanum occasionally; good diet, porter and wine; incisions to relieve the tension produced by inflammation; bark and ammonia subsequently.	Cured. Out-patient, 83 days.	The superficial parts sloughed in consequence apparently of the extent of the contusion produced by the wheel, but he recovered with a very good limb.
19	32	M.	Chandler.	Nov. 11.	Fell across a form, striking his elbow.	Right arm.	Small wound, apparently caused by the upper fragment of the bone; transverse fracture of lower end of humerus.	Angular splint inside the arm.	Cured. Out-patient, 20 days.	The wound healed in about ten days.
20	16	M.	Labourer. Temperate.	Nov. 17.	Fell from a height of eighty feet.	Left thigh.	Extensive laceration; large wound in the ham, communicating with the knee-joint by a small rent; lower epiphysis of the femur torn off, and twisted upon itself.	Amputation; primary.	Cured. 48 days.	Violent delirium ensued for the first two days after the operation, with great irritative fever, but he recovered favourably. (Amputations, No. 21.)
21	60	M.	Stableman. Temperate.	Nov. 29.	Knocked down and trampled on by a horse.	Left leg.	Small wound on the outer side of the leg, caused apparently by the lower portion of the tibia; transverse fracture of both bones near the lower third.	Assalini's box; the wound subsequently enlarged to extract a loose piece of the fibula.	Cured. Out-patient, 71 days.	There was another fracture below the one which communicated with the wound. The loose piece of the fibula was a long while separating from the soft parts.
22	19	M.	Groom. Temperate. Healthy aspect.	Nov. 30.	Thrown out of a cart.	Left leg.	The wound appeared to have been made by one of the fractured ends, which, however, did not protrude; transverse fracture of both bones.	Assalini's box; eight weeks afterwards gum splints.	Cured. Out-patient, 70 days.	The wound remained open for about six weeks. No other symptoms.
23	45	M.	Messenger.	Dec. 18.	Some planks fell on his leg.	Right leg.	Small wound over the inner ankle, from which the internal malleolus was said to have protruded; fracture of the fibula, with dislocation of the tibia inwards; escape of synovial fluid.	Assalini's box five weeks, and then side splints.	Cured. 53 days.	No symptoms followed the injury.

Total number of cases of Compound Fracture, 23; 2 died.—Of the Thigh, 1. Primary amputation; recovered. Of the Leg, 15 (1 of the fibula only); 2 died, both of other more severe injuries 1, primary; 1, secondary amputation. Of the Arm, 4; 2, primary amputation; all recovered. Of the Fore-arm, 3; all recovered.

TABLE OF CASES OF STRANGULATED HERNIA, OPERATED ON IN THE YEAR 1852.

NO.	AGE.	SEX.	OCCUPATION.	NATURE OF HERNIA, RECENT OR OLD: WHETHER TRUSS HAS BEEN WORN.	RIGHT OR LEFT EXTREMITY.	PERIOD OF STRANGULATION.	DATE OF OPERATION.	CONTENTS OF SAC, WITH THEIR CONDITION.	SAC OPENED, OR NOT.	RESULT, AND AT WHAT PERIOD.	REMARKS.—IF FATAL, MORBID APPEARANCES, ETC. ETC. ETC.
1	45	M.	Labourer.	Inguinal, oblique. 6 years. Truss worn for the last 3 years.	Left.	13½ hours.	Jan. 24.	Serous fluid. Omentum, free from adhesions, in front; small knuckle of dark-coloured intestine behind.	Opened.	Cured. 39 days.	The spermatic cord appeared to lie in front of the sac. He was suffering from bronchitis, and, in a fit of coughing during the night, the gut came down again; the wound was re-opened, and the omentum which also protruded, was cut off.
2	24	M.	Ironmonger.	Congenital, Inguinal. Truss.	Left.	12 hours.	Jan. 24.	Serous fluid. Intestine not much congested. The testicle.	Opened.	Cured. 31 days.	
3	23	M.	Sackmaker.	Congenital, Inguinal. Truss.	Right.	15 hours.	Feb. 28.	Serous fluid. A large coil of small intestine, almost black from congestion. The testicle.	Opened.	Cured. 54 days.	The operation was followed by hiccough. Swelled testicle. Perspirations and much depression, depending apparently on the confinement of some foul matter: this being evacuated he did well.
4	42	M.	Cabman.	Femoral. 1 year. No truss.	Right.	27 hours.	March 12.	... ...	Not opened.	Cured. 40 days.	Recovery was retarded by bronchitis, from which he had been suffering for some time.
5	41	M.	Labourer.	Femoral. 7 years. No truss.	Left.	32 hours.	March 13.	... ...	Not opened.	Cured. 17 days.	Most of the wound healed by first intention.
6	15	M.	Bricklayer's boy.	Inguinal, oblique. 1 year. No truss.	Right.	3hours(?)	April 8.	But little fluid. Small knuckle of intestine very dark coloured, in patches.	Opened.	Cured. 40 days.	Though the strangulation had existed so short a time, he was in a state of excessive collapse at the time of the operation, so much so that he seemed hardly likely to recover from its immediate effect. It was followed by peritonitis, and the formation of an abscess in the abdominal parietes, the result, apparently, of a contusion received in that part some days previously.
7	14	M.	Schoolboy.	Congenital, Inguinal. Truss, fitting badly apparently.	Right.	2 days(?)	April 14.	But little fluid. A large piece of the end of the small intestine, and the beginning of the large intestine, with a considerable portion of the omentum entangled in the coils of the small intestine. The omentum was very much thickened, and so, too, was the large intestine, which presented a leathery appearance. The appendix cœci, of a very large size, was disorganised and perforated by ulceration in several places. The small intestine was but slightly congested.	Opened.	Died. 4 days.	The stricture was not tight. The large intestine and termination of the ilium with the omentum appeared to have been in the sac a long time, and the constriction had apparently been produced by the passage of a contiguous piece of the ilium into the sac, on the other side of the omentum. A large piece of the omentum was removed at the time of the operation, and a ligature having been put round the root of the appendix, the disorganised portion was cut off. The other parts were returned. Symptoms of extensive peritonitis existed previous to the operation; they increased up to the time of his death.—*P.M.* Large quantities of lymph in the cavity of the peritoneum and in the hernial sac: intestines matted together; those parts, as well as the omentum, which had formed the hernia, were very much thickened, especially the serous covering; they were but slightly inflamed. The coverings of the hernia had been much irritated, thickened, and ulcerated by the badly-fitting truss. (*Post-mortem* Book. 1852. No. 95.)
8	38	F.	Housemaid.	Femoral. No truss. Not aware of the existence of the Hernia, until after the strangulation.	Right.	2 days.	April 21.	The gut. A portion of small intestine was adherent to the sac around the whole of its circumference. It was very dark coloured, and broke down during the operation, the contents of the bowel being discharged externally.	Opened.	Died. 3 days.	*P.M.* Intestine gangrenous, with several small ulcerated openings. Quantities of pus and lymph in the peritoneal cavity. (*Post-mortem* Book. 1852. No. 99.)
9	50	M.	Tailor.	Femoral. Recent. No truss.	Right.	2 days.	April 22.	A small knuckle of intestine, not much congested; some thickened omentum.	Opened.	Cured. 34 days.	The omentum was not returned; a small portion of it subsequently sloughed away.
10	48	F.	None. Widow.	Femoral. Recent. No truss.	Left.	16 hours.	June 6.	Large quantity of fluid. Small knuckle of intestine, not much congested.	Opened.	Cured. 24 days.	The operation without opening the sac was attempted, but it did not succeed. Retention of urine occurred after the operation.
11	63	F.	Married woman.	Femoral. Many years. Truss.	Right.	15 hours.	July 11.	A large knuckle of intestine, not much congested.	Opened.	Cured. 59 days.	She recovered very slowly from the operation, which was followed by rather alarming typhoid fever.
12	21	M.	Carpenter.	Oblique inguinal. Recent. No truss.	Right.	24 hours.	Sept. 1.	Little fluid. A knuckle of small intestine, much congested, and having lymph effused on its surface.	Opened.	Cured. 42 days.	The operation without opening the sac, (which had a very long neck,) was unsuccessfully attempted.
13	26	F.	Cook.	Femoral. 4 years. No truss.	Right.	16 hours.	Sept. 18.	A little serum. A small knuckle of intestine a good deal congested, and a piece of consolidated omentum.	Opened.	Cured. 25 days.	The omentum was left in the sac. The operation without opening the sac was unsuccessfully attempted.

14	11 w.	M.	Infant.	Oblique inguinal. Recent. No truss.	Right.	3 days(?)	Oct. 19.	Large knuckle of small intestine, not much congested.	Opened.	Died. 10 days. (Of bronchitis.)	Bronchitis, of a severe character, existed previous to the operation, and the patient was very much emaciated. The symptoms caused by the hernia were completely relieved, and, as far as the operation was concerned, everything was going on favourably. No *post-mortem* examination.
15	54	F.	Married woman.	Femoral. Several yrs. No truss.	Left.	2 days.	Oct. 31.	Small intestine, ulcerated in the course of the stricture—the contents of the bowel escaped during the operation.	Opened.	Died. Same day	A substance resembling omentum was exposed by the superficial incisions during the operation. It turned out to be merely thickened cellulo-adipose tissue, with a large amount of fat, behind which the sac was deeply imbedded. The gut gave way when the stricture was divided, and slipped back into the belly, so that it could not be reached again. *P. M.* Low peritonitis, with effusion of fæces into the cavity of the peritoneum. Portion of small intestine of a deep chocolate colour and ulcerated at one part. (*Post-mortem* Book. 1852. No. 215.)
16	48	F.	Married woman.	Femoral. 27 years. No truss.	Left.	2 days.	Nov. 26.	Small intestine, much congested.	Opened.	Cured. 53 days.	
17	41	F.	Married woman.	Femoral. 4 years. No truss lately.	Left.	2 days.	Dec. 10.	Bloody fluid. Small intestine much congested and thickened.	Opened.	Cured. 25 days.	The operation without opening the sac was unsuccessfully attempted.
18	55	F.	Widow.	Femoral. Recent. No truss.	Left.	4 days(?)	Dec. 27.	Small intestine, not much congested.	Opened.	Cured. 22 days.	The hernia came down for the first time, as far as she knew, on the 23rd, but she was not conscious of the existence of the swelling until a medical man pointed it out to her. Had had constipation and vomiting since the above date: the vomit became stercoraceous the day before her admission. The other symptoms were not marked; she showed but little distress in her countenance, and walked into the hospital.

Total number of cases operated upon 18, 10 of which were males, and 8 females. 3 died of the effects of the disease, and 1 of bronchitis, previously existing.
Inguinal, 7; 4 oblique and 3 congenital. All males. 2 died; 1, an infant, of bronchitis, previously existing, and 1 of peritonitis, symptoms of which existed before the operation.
Femoral, 11; 3 males, and 8 females. In 2, the sac was not opened. 2 died; in both the gut was ulcerated, and gave way during the operation.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

LEEDS GENERAL INFIRMARY.

CHRONIC ULCER OF THE LEG TREATED BY INCISIONS IN THE NEIGHBOURING PARTS.

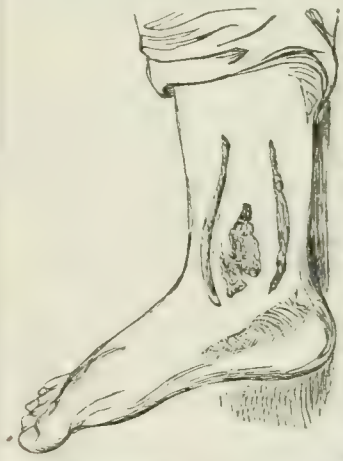
[Under the care of Mr. T. P. TEALE.]

Grace Golipher, aged 64, was admitted into the Leeds Infirmary, August 3, 1853, suffering from chronic ulcer in the leg. Four years ago, she received a blow on the right leg, above the ankle. The bruised skin was discoloured, and soon became ulcerated. Poultices were applied, and the limb was partially rested. The ulcer extended, and became indolent, the edges of it being thick and hard.

In January, 1850, the sore had increased to the size of a crown-piece. For two years after this date, she was under regular surgical treatment, and was once confined to bed for four months, after which the sore was reduced to the size of half-a-crown, but beyond this it could not be made to heal.

In August, 1853, she was admitted into the Infirmary, the sore being of the size of half-a-crown. It had an indolent aspect, the edges were thick and hard, and the surrounding skin appeared shining or glazed, and was perfectly immoveable from adhesion to the subjacent structures. The veins of the leg were not varicose. Confinement to bed, water-dressings, and aperients, were employed for a fortnight without benefit.

August 18th.—Mr. Teale made a free incision in the skin on each side of the sore, after the manner of Mr. Gay. The incisions were carried through the skin and aponeurosis, and a few fibrous bands beneath these structures were divided, so as to loosen the skin on each side of the ulcer. The wounds, and the original sore, were depressed with lint, moistened with warm water, and covered with oil-silk.



In a few days after the operation, the ulcer was much contracted in size, and was freely granulating. The edges of the incisions had separated considerably. The case proceeded remarkably well, and in one month from the time of operation, the ulcer, as well as the incisons, were healed.

The accompanying drawing, made by Mr. W De Fabeck, represents the extent of the cicatrices at the end of five weeks from the time of operation.

The notes of this case were taken by Mr. Hardwick.

MORTALITY NOTABILIA.—The deaths registered in the Metropolis in the week that ended on Saturday, rose to 1192; having been in the previous week 1112. In the ten weeks corresponding to last week of the years 1843-52 the average number was 1028, which, if raised in proportion to increase of population, becomes 1131.—Hence it appears, that the actual mortality of last week was in excess of the calculated amount by 61. The deaths in the present Return show an increase on the weekly numbers of October, arising apparently from greater coldness of the weather, and also in part from cholera. Bronchitis grows more fatal.

Births.—Last week the births of 866 boys and 748 girls, in all 1614 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1376.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 30·155 in. The mean temperature of the week was 45·7°, which is 1·2° above the average of the same week in 38 years. The temperature of the Thames was considerably higher than the dew-point, and the vapour fell in mists and fogs over London. Wind calm. Horizontal movement of the air, 265 miles. Rain, 0·06 in. Electricity positive and tension strong throughout the week.

PRESCRIBING CHEMISTS.—At No. 18, Stephenson-terrace, Islington, on the 8th and 9th November respectively, the daughter and son of a dairyman, aged 2 and 3 years, died of "rubeola maligna." Mr. Sillifant, the medical attendant, writes, "Up to a few hours before the two children died, they had been prescribed for by a chemist, and had not been seen by a Medical man. It too frequently happens in this locality, that the qualified practitioner is not called in till too late to be of service."

Medical Times & Gazette.

SATURDAY, NOVEMBER 19, 1853.

HOSPITAL STATISTICS.

We recently commented on the published opinion of Dr. Latham, "that in hospitals knowledge is perpetually running to waste for want of labourers to gather it." This week we are enabled to afford a convincing proof that in one of our Metropolitan hospitals one of the labourers who have been specially appointed to gather up the knowledge which previously ran to waste has fulfilled his duties in a manner which not only reflects infinite credit upon himself and upon St. George's Hospital, but which is calculated to prove of inestimable service to surgical science,—first, by the additions made to our knowledge of the precise amount of success attending some of the principal surgical operations; and, secondly, by setting an example which other institutions will find it necessary to follow.

The circumstances which led to the preparation of the Tables which will be found in another part of this Number require a few observations. Some years ago several gentlemen holding junior offices in different hospitals in London formed themselves into a friendly Association, for the purpose of collecting information respecting every case treated in each institution, and of arranging the results of their observations in a form likely to be useful to themselves and to their professional brethren. For upwards of a year the members of this Association carried on their useful labours, and the results they obtained still remain in the rooms of the Royal Medical and Chirurgical Society, a lasting memorial of intelligent industry. The reasons which led to the breaking up of this useful Association have been explained to us, but, as it was in confidence, we are not at liberty to make them known.

One of the members of the Association, however, preserved the different forms of Tables which had been drawn up for general use, and the Surgeons of St. George's Hospital determined that the inquiries should not be stopped in that institution.

It soon appeared that the duty of recording the results of medical and surgical practice could not be performed efficiently by the Physicians and Surgeons themselves, whether seniors or juniors. Medical and Surgical Registrars were accordingly appointed; and it is to Mr. Holmes, the Surgical Registrar, that the Profession is indebted for the admirable series of Tables we publish to-day. It is needless to say that Mr. Holmes deserves great credit for the manner in which he has filled up these documents. If similar information could be procured from all the hospitals in London, what a mass of valuable statistics might be laid before the Profession annually in our columns! As it is, we have nothing like the systematic reports which proceed from the Continental hospitals every year, from any of our London institutions, except the Consumption Hospital. The Profession is almost entirely indebted to this Journal for all knowledge of the actual results of the practice of the Physicians and Surgeons of the London hospitals. The information is collected with considerable trouble, and under limitations which have hitherto materially impaired its completeness and interest; but we have no doubt that the example set by the Surgeons of St. George's Hospital, in the publication of their First Annual Report to-day, will do more to remove the difficulties under which we have laboured than all the Leading Articles the united Medical Press could fulminate in a whole series of volumes. After this, the fear of shunning comparison between large neighbouring hospitals will be too apparent. Any disparity must be boldly acknowledged, its causes ascertained, and, if possible, removed. The smaller institutions must not be deterred, by the publication of the limits of their field of observation, from openly confessing the limitation, and resting their claim, as educational establishments, upon the means they really possess, and the manner in which those means are employed. It would be easy to prove that students should not look so much to the number of beds or cases, as to the manner in which they are worked. Scarpa never had more than fifteen beds in his hospital, yet he worked them so well, that they furnished him with the information which enabled him to write the works on "Hernia," "Aneurism," and "Diseases of the Eye," which made him the most successful teacher of his day, and procured for him a European reputation and an honourable position in the history of surgical science.

MORE "COFFINISM."

The Lobelia and Cayenne Pepper Tragedy has again been enacted in the Metropolis of the civilised world, and the sacrifice of two more human lives has been the result. It is indeed lamentable to reflect, that, in an enlightened community such as that in which we live, protected as we imagine ourselves to be by laws for the preservation of person and property, the most reckless traffic is allowed to be openly carried on by pretenders who vend and administer deadly poisons, under the pretence of curing disease. It is yet more painful to reflect that their very ignorance and audacity form the most effectual shield to guard these evil-doers from the authority of the law; for it has been pronounced from the judgment-seat, that, although a qualified practitioner would be liable to punishment for the mal-administration of powerful and poisonous drugs, yet that the quack and the pretender may wield those destructive weapons with impunity.

Two inquests have been lately held by Mr. Baker, the particulars of which appeared in our Journal; one was upon a person who seems to have suffered from an attack of cholera, and another upon a child who laboured under paralysis. In both these cases, lobelia was given in large quantities by agents of Coffin, and the patients rapidly sank. The history of such cases is now so well known, that it is almost unnecessary to relate the particulars of the evidence. The patients die; the bodies are opened; enormous doses of poisonous drugs are found in the stomach, and the identity of the lobelia-seeds is clearly proved. It is also shown that lobelia is rarely employed in legitimate practice, and then only in small quantities and with great caution. The jury return a verdict of manslaughter, and the delinquents are sent to take their trial at the Central Criminal Court. In all previous cases, the sequel of the tale has been of a uniform character. The prisoner is placed at the bar. The witnesses give the same evidence as they had previously given before the Coroner. The case appears to be complete to all ordinary minds; but no sooner does it appear that the prisoner is totally ignorant of medicine, than the majesty of the law steps in to rescue him from conviction, and the jury is directed to acquit him, on the ground that he is a quack, and *therefore* under the protection of the judicial bench. The accused leaves the Old Bailey, not as a culprit, but as a

conqueror; and he returns in triumph to the scene of his former iniquities, to practise his nefarious arts upon new victims.

In one of the recent instances, however, which have called from us our present remarks, Mr. Baker, the coroner, has deviated from the established rule, and has adopted a plan which, we hope, will be carried out to the advantage of the public. Struck with the utter inutility of sending the criminal to be tried by one of the Judges of the land, who invariably in such cases distort the law for the benefit of the accused, Mr. Baker has taken the novel course of forwarding the depositions to the Secretary of State for the Home Department and to the Board of Health, in the hope that Government will take some steps for the protection of the public against the arts of the botanical quacks.

We understand that Lord Palmerston has caused the evidence to be transmitted to the authorities at the Royal College of Physicians, and the Apothecaries' Society; and that the particulars of the whole case have been placed in the hands of the legal adviser of the latter Society, with a view of discovering some plan by which the reign of Coffinism may be brought to a speedy termination.

It is quite impossible for us to foresee what may be the issue of the investigations now commenced; but we cannot help expressing an opinion, and a very strong one, that the Act of 1815 affords full grounds for a prosecution and conviction of Coffin and his gang. The difficulties which may, on former occasions, have deterred the Apothecaries' Society from prosecuting unlicensed Practitioners, do not here exist; for inasmuch as attending patients, administering or sending medicines, and receiving money for such attendances and medicines, are clearly offences against the law if committed by an unqualified person, we do not see how Coffin and his agents can escape; for they have committed, on numerous occasions, those very acts which render them liable to punishment, and the evidence against them appears to be as conclusive as human testimony can ever be.

We trust, therefore, that the Society will do their best to abate this intolerable and growing nuisance; and, although we think that the Coffinites deserve a conviction at a criminal court, rather than the milder one adjudged at common law, yet we cannot help hoping that the infliction of fine and imprisonment may prove to be efficacious in putting down one of the most gross and flagrant forms of quackery with which we are acquainted.

We subjoin a list of cases in which a coroner's jury have previously returned a verdict of manslaughter:—

1. Thomas Wilson, treated by *John Wood*, a shoemaker, of Maryport, in Cumberland, April, 1849.
2. Frances Waters Bates, who was treated by *her husband*, a newsman, of Northampton, June, 1850.
3. William Hewitt, of Parton, treated by *William Tait*, a blacksmith, August, 1850.
4. John Siddall, of Oldham, treated in February, 1850.
5. Henry Steward Davis, treated by *John Stephens*, a greengrocer, of Ratcliff-highway, July, 1851.
6. Charlotte Cardwell, treated by *George Palmer*, an ostler and porter, of Dalston, in February, 1853.

THE MEDICAL BENEVOLENT COLLEGE.

It may be seen in our Advertising columns, that, on the 3rd of December, the ninth List of Subscribers to this admirable Institution will be published. There are numerous reasons which induce us to urge upon any of our readers who have not yet contributed to it, the importance of doing so without further delay. The contract for the building has been signed, and the works are rapidly progressing. Calls for payment will, of course, be made very shortly. Now, as the money hitherto subscribed has been principally invested in the public funds, and Consols were bought when nearly at par, it is quite clear that if any of the money invested be sold out now they are so low, that there will be a loss of from five to ten pounds upon every hundred paid to the builders. This loss would be so considerable, that we trust the Honorary Local Secretaries, and the friends of the College generally, will be stimulated to fresh exertion to prevent it.

One of the most gratifying circumstances attending the establishment of this College, is the manner in which the clergy have come forward to assist the Medical Profession. The constant gratuitous assistance to the poor during sickness, and the suggestions originating sanitary precaution to prevent disease, so freely offered by Medical men, have been witnessed and appreciated by the clergy, and in return the cause of medical benevolence has been warmly advocated from the pulpit. We are glad to find, that a collection will be made for the benefit of the College, after a sermon to be preached by the Rev. W. Harrison, at St. Michael's, Chester-square, to-morrow; and we trust that the Medical men in the western district will attend to testify their approbation of the establishment of a great National Institution, which was so much needed for the relief of their poorer brethren and those most dear to them in life, and to show their appreciation of the fraternal efforts of the Clergy in its support.

ST. THOMAS'S HOSPITAL.

On Wednesday last, at a General Court of the Governors of this Hospital, Mr. Josiah Wilson moved, pursuant to notice:—

"That, in consideration of the long services of Mr. Solly and Mr. Le Gros Clark, both in the School and the Hospital, the rule of Court reducing the future allowance of the surgeons be suspended as regards those gentlemen; and that they receive the same remuneration for their services, upon becoming one of the three senior surgeons, as Mr. South and Mr. Macmurdo at present enjoy."

It appears that the salary of the surgeons used to be 100*l.* per annum, but when the system of paid-dresserships was abolished, another 100*l.* was added to the salary as a compensation for the loss, and the sum paid has since been 200*l.* But, on the nomination of Mr. Solly, Mr. Clark, and Mr. Simon, to the surgeoncy, under the circumstances we explained in the first Number of the present Volume, the Treasurer proposed that those gentlemen should only receive the old salary of 100*l.* per annum. We are happy to be able to state, that his parsimony was defeated on Wednesday, and that, out of fifty Governors present, thirty-eight voted for Mr. Wilson's motion, which was accordingly carried. Treasurers of hospitals may imitate the conduct of Poor-law Guardians, but the general body of Governors must see that Medical men, as well as the rest of the community, are entitled to a fair remuneration for their services.

Medical Charity.—At a recent meeting of St. Pancras Sanitary Board, the vicar remarked that Mr. Wildbore, one of the parish surgeons, had a notice in his surgery, that all persons suffering from diarrrhœa or cholera, could have medical assistance and medicines gratuitously. He (the vicar) thought this was an excellent example for the other medical officers. Doubtless; and the rich and extensive parish of St. Pancras would willingly, during the prevalence of the epidemic, avail itself gratuitously of the services of its Medical staff, and let them exhaust their energies, mental and bodily, incur great danger, and employ their drugs for the poor on the gratis plan; perhaps, in their generosity, when the disease had disappeared, a vote of thanks might be given to the survivors. Meanwhile, would the vicar and his reverend colleagues bury the dead without charge?

THE CHOLERA.

We have been requested to state, that the queries we published last week to be circulated by the Cholera Committee of the Epidemiological Society, had not received their final revision. When they were sent to us, we supposed it was for publication, and were not aware that any further alteration was intended. Some emendations, however, have since been made, which we shall notice when the queries are ready for circulation.

DR. MACLOUGHLIN has continued his important inquiries into the question of the possibility of cholera occurring without premonitory diarrhœa. The following copies of letters he has addressed to the Registrar-General show how very loosely in many cases the statements upon which the official reports are drawn up have been made.

(Copies of Letters.)

"TO THE REGISTRAR-GENERAL.

"Sir,—I have been to No. 12, Foxlow-street, Bermondsey, and I have seen the medical attendant and the friends of the woman who died on the 7th inst. of cholera, and who is reported in yours of the 8th instant as a case of cholera without any premonitory symptoms.

"From the records, I learn that she was taken ill at four p.m. on the 7th. She had then a very copious liquid evacuation; that she had several from that hour till about half-past seven, when spasms and vomiting came on; and, being very urgent, the medical attendant was sent for; he arrived about nine o'clock. She was then fast running into collapse.

"Neither the medical attendant nor her relatives had inquired as to the state of her bowels previous to four o'clock; therefore, no one knew whether she had a diarrhœa or not previous to that hour.

"However, it is certain that diarrhœa, spasms, vomiting, etc., did not come on simultaneously; but that a period of at least three hours elapsed from the first liquid evacuation to the first attack of spasms. Therefore this case proves the rule laid down in your Weekly Return of September 24, 1853, that a few hours, a few days, or a few weeks, elapse from the first liquid evacuation till cramps come on.

"Oct. 14, 1853."

"TO THE REGISTRAR-GENERAL.

"Sir,—With reference to the case of the mate of the Anna Christina, reported in your Return of October 1, who died on the 26th of September of cholera, reported without premonitory symptoms, and with reference to my report of the case, as stated in your return of the 8th of October,—and, further, with reference to the statement of the physician who attended the case, and inserted in your return of the 15th October,—I beg to say, that, as soon as I had seen Dr. Bains's letter, I called on the Swedish Consuls, Messrs. Tottie and Sons, Alderman's-walk, Bishopsgate-street, with the view to have the vessel followed, and to obtain from the captain and crew further particulars. As soon as I made known to the Messrs. Tottie the object of my visit, they told me that the captain had called on them on the 25th of September to obtain his bill of health, and he informed them that he had on board several severe cases of diarrhœa; that they strongly advised him to send for medical advice or he would get into trouble, and be obliged to return to them for another bill of health; that he did return the next day for another bill of health, informing them that he had lost that morning one man from cholera; but they, of course, knew nothing of the case of the mate, whether he was or was not one of the cases of diarrhœa to which the captain alluded the day before. The vessel, however, is to return here in a month or six weeks, when the point will be cleared up, whether the mate had or had not a diarrhœa previous to two o'clock on the morning of the 26th of September.

"I gave the above information to Dr. Bains, and I requested him to call on the Messrs. Tottie and Sons and satisfy himself whether there had not been, on the part of the captain, an interest to mislead him.

"I may add here, that when I had the pleasure to see Dr. Bains, he distinctly told me that he did not inquire at what time the spasm had come on after the diarrhœa had begun; and I had reason to be surprised at this oversight, as, when I had charge of Poplar during the outbreak of cholera in 1849, he has heard me often and often lay particular stress on this very point; therefore, an oversight of this importance was not to be expected from him; and much less was it expected from a gentleman of his experience in this very disease, that he should state that spasms, vomiting, and purging, came on in a most violent form, followed by collapse; which implies a sudden attack of cholera without a premonitory diarrhœa, and which is contrary to all etiological pathological inquiry, whether at the bedside, or whether by a *post-mortem* investigation.

"Of course, when the Anna Christina returns, I will see the captain, and report to you the result of my interview.

"Oct. 24, 1853."

"TO THE REGISTRAR-GENERAL.

"Sir,—With reference to the cases of cholera reported in your Weekly of the 22nd instant, without any premonitory symptoms. By reading the report of death made to you in the case No. 27, Downham-street, Islington East, as having occurred on the 17th October, it was evident that that Report was not drawn up by a Medical gentleman, therefore not entitled to confidence; but, however, as I had made it my duty to inquire into every case of cholera which would be reported to you without a premonitory diarrhœa, I went to the house of the deceased, and I there saw the nurse who attended him, and from her I learnt that this gentleman had gone to bed about half-past nine the night he was taken ill, not feeling well, and having refused his supper; that about one o'clock next morning he called her up, stating he had a violent diarrhœa, and felt very unwell; that while speaking to him he began to vomit; that his wife, who was in the next room, requested him to come to her, which he did, and sat some time by the fire; that he then was again sick, and again vomited; and that about half-past two o'clock cramps came on, when the Medical attendant was sent for; that neither she nor any one of the house had observed that he had been more frequently than usual the day before to the water-closet; that she did not ask him anything about his health previous to being called up by him at one o'clock in the morning.

"I then called on the Medical attendant, who informed me, that he had seen the patient at three o'clock on the morning fast running into collapse; but that he had not made any inquiry as to the state of health of his patient previous to one o'clock that morning, and he, therefore, could not tell at what hour the first liquid evacuation had taken place, nor at what hour the first symptoms of spasms; and that he had no knowledge of the case beyond what he had seen at the moment of first visiting his patient; nor had he given the certificate of death which had been forwarded to you.

"Therefore this case falls to the ground as not having been properly inquired into as to the state of health previous to the morning of the 17th Oct., at one o'clock. We are, however, certain that the patient was ill when he went to bed the night before—with what no one knows.

"The next case, in your Weekly of the 22nd October, is that which occurred at the London Hospital on the 17th October.

"I went to the hospital, and I saw the gentleman who had admitted the patient. Her parents were Germans, and he could not understand them, or make himself well understood; but he told me he could not say whether the child had had a diarrhœa or not previous to an attack of spasms.

"34, Bruton-street, Berkeley-square, Oct. 28, 1853."

METROPOLIS.

The rate of mortality from cholera has been nearly stationary during the last three weeks; the number of fatal cases last week was 98. Of these 16 occurred in the West Districts, 15 in the north, 22 in the east, and 45 on the south side of the river. None occurred in the central districts.

DEATHS from SCARLATINA, TYPHUS, DIARRHŒA, CHOLERA, and all Causes, Registered in LONDON in the last Thirteen Weeks, with the Mean Temperature for the same periods.

	Aug. 20.	Aug. 27.	Sept. 3.	Sept. 10.	Sept. 17.	Sept. 24.	Oct. 1.	Oct. 8.	Oct. 15.	Oct. 22.	Oct. 29.	Nov. 5.	Nov. 12.
Deaths.....	1053	1021	1029	1015	949	969	1212	1001	1039	1054	1144	1112	1192
Scarlatina..	27	18	32	43	34	48	47	58	54	46	44	52	56
Typhus	48	37	48	37	39	49	57	49	52	47	50	49	43
Diarrhœa and Dysentery..	131	144	157	137	80	94	71	72	55	48	43	42	50
Cholera	10	18	16	7	16	29	47	66	45	83	99	102	98
Mean Temperature	60·4	58·6	55·7	56·1	57·6	54·6	52·4	48·6	52·0	48·6	55·5	48·9	45·7

DISTRICTS.—The following are the Deaths from Cholera in Districts, with the Population, as compared with that of the same period of 1849.

DISTRICTS.	Population.	Area in Square Miles.	Total Deaths from Cholera in 1848-9.	WEEKS ENDING Aug. 26, 1848.	Aug 27, 1853.	Sept. 2, 1848.	Sept. 3, 1853.	Sept. 9, 1848.	Sept. 10, 1853.	Sept. 16, 1848.	Sept. 17, 1853.	Sept. 23, 1848.	Sept. 24, 1853.	Sept. 30, 1848.	Oct. 1, 1853.	Oct. 7, 1848.	Oct. 8, 1853.	Oct. 14, 1848.	Oct. 15, 1853.	Oct. 21, 1848.	Oct. 22, 1853.	Oct. 28, 1848.	Oct. 29, 1853.	Nov. 4, 1848.	Nov. 5, 1853.	Nov. 11, 1848.	Nov. 12, 1853.
West.....	376,427	17·2	1258	1	1	2	3	1	...	1	3	1	2	1	3	1	9	5	6	4	2	4	16	2	11	2	16
North ..	490,396	20·5	965	2	5	3	6	...	...	2	3	1	4	...	6	...	5	...	3	4	5	1	3	1	9	3	15
Central..	393,256	2·8	1739	...	3	...	3	1	...	2	2	2	2	2	2	3	2	1	2	4	3	...	1	...	2	2	0
East.....	4·5,522	8·8	3218	2	5	1	2	2	3	...	3	2	3	1	4	1	8	7	6	5	24	5	24	3	21	4	22
South....	616,635	66·2	7048	2	4	1	2	3	4	1	5	1	18	...	32	5	42	21	28	28	49	24	52	59	59	51	45
			Totals...	7	18	7	16	7	7	6	16	7	29	4	47	14	66	34	45	45	83	34	96	65	102	62	98

PROVINCIAL.

	Nov. 8.		Nov. 9.		Nov. 10.		Nov. 11.		Nov. 12.		Nov. 13.		Nov. 14.	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D
Arbroath	...	...	...	...	1	...	...	...	...	..	...	...	...	...
Coupar-Angus...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Darlington	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Dartford.....	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Dundee	5	...	14	...	...	...	9	...	...	...	...	...	...	...
Edrom	...	1	...	...	...	...	...	1	...	...	...	...	...	...
Forfar	...	...	...	...	...	...	...	...	5	...	...	...	...	...
Gorleston (Suff.)	...	...	...	...	5	...	...	...	1	...	...	...	...	...
Harwich	...	...	2	...	...	...	...	...	...	...	...	...	...	...
Kircaldy	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Leicester	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Merton and Mitcham	...	...	3	...	...	...	...	...	...	...	...	...	...	...
Soham (Cambs.)	...	...	2	1	...	...	1	...	...	...	3	...	...	...

LIVERPOOL.—Since the 24th of October there have occurred in Liverpool 21 cases of cholera and 14 deaths. In five cases the patients were German emigrants. The mortality of the town is below the average, and diarrhœa not prevalent.

NEWCASTLE.—Dr. Thomson, of St. Thomas's Hospital, has analysed a specimen of the Tyne water, and he reports, that "on separating the mechanically diffused flocks, which, on agitation, have imparted a muddiness to the water, they were found to consist of organized forms, similar to the appearances presented by infusorial animals, or diatomaceous beings, which have been claimed as belonging, according to some, to the animal, and, according to others, to the vegetable world. These animal or vegetable beings were infested with large numbers of very distinct animalculæ or vibrios, which were sporting about with immense activity, and courting the shade of the living flocky masses. The presence of those living forms in water used by the inhabitants of a city, it appears to me, cannot be viewed as otherwise than highly objectionable in a sanitary point of view, acquainted as we now are with the influence which the lower forms of animal and vegetable life exercise in nature. In addition to these forms presented by the organic matter described, I found no less than 2·68 grains per gallon of vegetable matter dissolved or finely diffused throughout the water, and which was in a condition approximate to that of organization, since it contained a considerable amount of siliceous inorganic matter. The total quantity of matter, therefore, observed from organized sources which I found to exist in the water amounted to no less than 7·172 grains per gallon. This must be viewed as a large amount when we take into consideration the fact, that the total solid constituents in the gallon were 15·662 grains."

CHOLERA AND THE WATER SUPPLY.

Dr. White read a paper, at a meeting of the Pathological Society of Newcastle-upon-Tyne, held on the 27th of October, 1853, T. M. Greenhow, Esq., in the chair, on the "Cholera and the Water Supply of Newcastle." After citing various cases, Dr. White observes:—

"From the above cases, taken at random throughout the street, it appears, that 47 were consumers of the water supplied by the Company, and that 11 had suffered from cholera and diarrhœa, being 23 per cent.; and that 13 were supplied with spring water from the pant on the New-road, out of whom 4 had been attacked with diarrhœa, or 30 per cent.

"Westgate-street, and part of Clayton-street West, were the next places examined, the residence of some of the wealthier classes of the inhabitants, and situate in one of the best parts of the town. Many of the houses are in the immediate vicinity of a well of pure spring water, which is generally much esteemed, called the Vicar's Pump.

In Westgate-street, and Clayton-street West, it appears that out of 97 persons who used the Company's water for all purposes, 17 have been attacked, 1 with cholera, and 16 with diarrhœa, or nearly 17 per cent.; that out of 32 who used the Vicar's Pump, and well water on their premises for drinking, and the Company's water for cooking, 3 have suffered, 1 from approaching cholera, and 2 from diarrhœa, or about 13 per cent.

"The next place examined was Greenhow's-terrace, in the township of Elswick, which is not supplied by the Water Company, the inhabitants obtaining their supply of water for cooking and all other domestic purposes, and for drinking, from a well of excellent spring water in the vicinity.

"Out of a population of 117, supplied with water of unexceptionable quality, there were no fewer than 11 deaths, 4 cases of approaching cholera, and 16 cases of diarrhœa; making the total number attacked 31, or 26 per cent. It is proper to observe, that in this street, although situated in a healthy locality, and perfectly open, there was not, until after this fatal visitation, a single convenience; and a large middenstead at the end was stated to have been very offensive.

"A summary of the foregoing observations presents the following results:—

"SUPPLIED BY THE WATER COMPANY.

	Number of Inhabitants.	Cases of Cholera and Diarrhœa.
Lime-street	47	11
Westgate-street and Clayton-street West.....	97	17
Total	144	28

Being 19 per cent.

SUPPLIED WITH SPRING WATER.

Lime-street	13	4
Westgate-street and Clayton-street West.....	32	3
Greenhow-terrace	117	31
Total	162	38

Being 23 per cent.

"In consequence of the observations which fell from some of the medical gentlemen present at the meeting of the Pathological Society, I was induced to extend my inquiry to two of the largest establishments in the town, the union workhouse and the military barracks, one of which is supplied by the Water Company, and the other from wells of spring water on the premises. Both establishments are situated in open, elevated localities outside the town, and as each is distinguished for order and cleanliness, the comparison appears to be in all respects perfectly fair.

"The consumption of water at the union workhouse, supplied by the Company, is upwards of 2,000 gallons per day, and the number of inmates averages about 540. The following is the return of deaths and cases from Sept. 1 to this day:—

MALES.	FEMALES.
5 deaths.	2 deaths, cholera.
4 cases of approaching cholera.	3 ,, diarrhœa.
13 cases of diarrhœa.	3 cases of approaching cholera.
	13 cases of diarrhœa.
22	21

The total amount of disease, in proportion to the number of inmates, has therefore been 8 per cent. It may be noticed, as a

curious fact, that the men on their side of the house draw their supply for drinking from a well of spring water, while the women are confined to the use of the water supplied by the Company; yet the men have suffered slightly more than the women.

"The Military Barracks are entirely supplied from wells of spring water on the premises. The strength of the garrison inside the walls is 519, out of whom no less than 415 have been attacked with diarrhœa, being 79 per cent."

CHOLERA ON BOARD SHIP. — Since our last, seven further deaths have taken place among the passengers of the Guiding Star, at Belfast, making a total of 22, 18 remaining under treatment in the Union Hospital. It appears that a larger proportion of the German emigrants were attacked by the cholera than of the Irish, and the number of passengers of each nation was about equal.

REVIEWS.

The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERICHSEN, Professor of Surgery in University College. London. 1853. 8vo. Pp. 951.

SINCE the days when Cooper's "First Lines" was the text-book of the Surgical student in London, Mr. Fergusson's admirable manual has been the work of reference in Practical Surgery, both to students and practitioners; and we have been indebted to the Edinburgh school for the best treatise on the principles of the science. The aim of Mr. Erichsen appears to be, to improve upon the plan of Samuel Cooper, and, by connecting in one volume the science and art of Surgery, to supply the student with a text-book, and the practitioner with a work of reference, in which scientific principles and practical details are alike included.

The work before us accordingly contains the substance of the author's lectures on Surgery at University College, arranged in three divisions. Under the head of First Principles, he treats of inflammation, and gives some general observations on operations, more particularly on amputations. The second division includes Surgical Injuries, the third Surgical Diseases, the various operations being considered as part of the treatment of the different injuries and diseases for which they may be required. Diseases of the eyes and skin are omitted, as being special subjects.

It would be impossible for us to enter into any detailed analysis or criticism of a work of this extent; but we may say, after a careful perusal of some of the chapters, and a more hasty examination of the remainder, that it must raise the character of the author, and reflect great credit upon the College to which he is Professor, and we can cordially recommend it as a work of reference, both to students and practitioners. It is illustrated by 250 woodcuts, many of which are very good, and is well got up.

An Expository Lexicon of the Terms, Ancient and Modern, in Medical and General Science; including a Complete Medical and Medico-legal Vocabulary, and presenting the Correct Pronunciation, Derivation, Definition, and Application of the Names, Analogues, Synonymes, and Phrases (in English, Latin, Greek, French, and German) connected with Medicine, and employed in Anatomy, Astronomy, Botany, Chemistry, Comparative Anatomy, Conchology, Crystallography, Entomology, Geography, Geology, Geometry, Ichthyology, Materia Medica, Medical Jurisprudence or Forensic Medicine, Medicine, Microscopy, Mineralogy, Natural History, Natural Philosophy, Nosology, Obstetricy, Ornithology, Pathology, Pharmacy, Phrenology, Physiology, Surgery, Trigonometry, and Zoology. By R. G. MAYNE, M.D., Surgeon to the Leeds Lock Hospital, Surgeon to the West-Riding Female Penitentiary. Part I. London. 1853.

WE have given the title of Dr. Mayne's Lexicon in full, in order to state, that, in the part before us, which extends from A to CAM, the promise of the title-page appears to be very fully accomplished. The pronunciation, however, is only indicated by accent. There is nothing to show, for instance, when the *ch* is hard or soft. Probably this omission may be supplied in subsequent parts. It is to be completed in six; and, as no similar work exists in English, we believe it will prove a most valuable addition to the literature of our language.

On the Prevalent Treatment of Disease. Two Lectures delivered in the Theatre of the Royal College of Surgeons in July, 1853. By F. C. SKEY, F.R.S. 8vo. Pp. 68. London, 1853.

MR. SKEY says that the principles he inculcates differ widely from those adopted by the large majority of his professional brethren. His chief points appear to be, that it is absurd to combat disease by lowering treatment or the agency of depletion, that almost all diseases are "founded on a basis of *weakness*," and that a tonic principle of treatment is that which should be generally adopted. We do not believe, that, in the present day, bleeding, low diet, purgatives, and other lowering measures, are abused to anything like the extent which Mr. Skey imagines them to be, although his statement, that out of 1500 recorded cases in sundry public institutions, depletive treatment either predominated or largely entered in 1261, may show that his ideas of the extent of the abuse are perhaps more correct than our own. While agreeing with him entirely in the importance of country air, a nourishing diet, rest, and amusement in the treatment of disease, we must object to the large quantity of stimulants he so usually appears to order. With these limitations, we can recommend his two lectures as well worthy of careful perusal and attentive consideration.

Thirty-third Annual Report of the Directors of the Dundee Royal Asylum for Lunatics; with the Report of the Medical Officers. Pp. 43. Dundee. 1853.

IT appears, from this Report, that the Dundee Asylum is in a very satisfactory condition, and that the proportion of cures is above the average. The mild and humane system of treating insanity in the present day is fully adopted, and with the happiest results; and we learn, that the patients are occupied in various useful pursuits, both in-doors and out of doors, their labours being alleviated and diversified by occasional music and dancing. The cases of acute mania are treated successfully upon the plan recommended by Brière de Boismont, which consists in placing the patient in a warm bath, while leeches are applied to his head, and a stream of cool water is kept flowing upon the same part.

Introductory Lecture to the Medical Session at the Charing-cross Hospital, London, Oct. 7, 1853. By FREDERICK W. HEADLAND, B.A., M.R.C.S., Lecturer on Botany at the Hospital. Pp. 22. London. 1853.

THIS is a very able and judicious address, alike creditable to Mr. Headland's scientific and medical talents, and to his powers of composition. He very properly omits any allusion to the unfortunate disputes at this School, which have excited so much public attention within the last few months; and he gives to the students an outline of the labours in which they will be called upon to engage, and exhorts them to diligence and perseverance in their career.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

INFUSORIA IN WOMAN'S MILK.

By Dr. VOGEL.

No general directions can be given as to whether a woman may suckle or not. In every case the question must be determined by an examination of the milk; and here the microscope proves eminently useful. The author found in that milk which produced sickness in the child, and destroyed the health of the mother after prolonged lactation, immediately after its removal from the breast, infusoria similar to those found in the incrustations upon the teeth (*vibrio bacillus.*) Such vibriones are found especially in women who menstruate or suffer from hæmorrhages during this period, the good or bad aspect giving no important indication. The milk has often a fine thick white colour, or is of paler hue; its consistence may be either thick or watery; its re-action is often alkaline, but generally neutral. Under the microscope it exhibits, according to its richness, sometimes but few, at other times many, milk and cream corpuscles; these differ from the corpuscles of healthy milk by

their pale yellow colour, their want of metallic lustre, and their speedy decomposition. As regards the infusoria, they are little rod-shaped bodies, dark in the middle, surrounded by a lighter line, but exhibiting neither head nor tail under a magnifying power of 600 diameters; there are, however, feet in great number and of considerable length. The movement of these animalcules was swimming, and occasionally it was very active. Forward movement was worm-like, and an annular structure of four rings was observed. Mostly they twist, screw-like, upon their axes. When they swim in a circle, they always move from right to left. The length is $\frac{1}{100}$ mmtr., their breadth four times less. They are best seen when the milk is diluted with water. In ammonia, diluted acids (even the lactic) they die immediately.

Children fed upon milk containing these infusoria, become sooner or later attacked by diarrhœa, and the evacuations are of a green colour. This condition disappears as soon as healthy cow's milk is substituted. The author believes that this effect does not proceed from the infusoria as such, but from the same cause which produces the infusoria, namely, a process of fermentation in the milk itself. The ferment is, according to him, the congested and increased heat in the breasts, connected with the general excitement of the sexual system.

But a fermentation, as Jul. Clarus observes, cannot be present, because the author always found the milk alkaline or neutral, and never sour. Were there fermentation, the evolution of lactic acid would, upon the author's own showing, have immediately destroyed the infusoria. — *Schmidt's Jhrb.*, 1853.

UPON SO-CALLED "WITCHES' MILK" (HEXENMILCH).

By Dr. SCHLOSSBERGER.

A specimen of the white milky fluid, often secreted from the mammary glands of new-born infants of both sexes, was lately obtained by the author from a boy who yielded about a drachm during the course of a few days. The fluid had the appearance of milk which had been watered; it reacted alkaline, and exhibited under the microscope the normal milk-corpuscles. It reacted strongly upon sugar; but did not coagulate by heat; it did so, however, upon the addition of acids and rennet. It consisted, in 100 parts, of water, 96·75; fat, 0·82; ashes, 0·05; casein, sugar, and extractive matter, 2·38. It was, in fact, a very thin, but truly chemically-constituted milk. The physiological signification of this secretion is unknown.— *Würtemb. Corr. Bl.*, 1853.

LUTRONOMIC EXPERIMENTS TO ILLUSTRATE THE ABSORBING POWER OF THE SKIN.

By W. KLETZINSKY.

The author endeavoured to elucidate some of the important physiological and therapeutical questions connected with the absorbing power of the skin in the following manner:—He ascertained the loss of weight which his body underwent, when fasting, during an hour's stay, in a vapour-bath of 14—16° R., in the recumbent posture. It amounted to 3·43 ounces; which corresponds with the results obtained by Andral, Gavarret, Valentin, and Seguin. Some days afterwards, at the same hour, he took a warm-water bath of 28—30° R. for an hour, when, after drying the body, he found that he had lost weight to the amount of 6·81 ounces, (as a mean in eleven experiments.) The warm vapour-bath was, in another series of experiments, taken immediately after the warm-water bath, when a loss of weight was observed, amounting to 5·72 ounces. The loss of weight after the vapour-bath varied between 4—7 ounces; after the warm-water bath, between 5 and 9 ounces. The urine at the end of these experiments was concentrated, its specific gravity varying from 1025 to 1030. The body was next immersed in warm water for three hours. There was an additional loss of weight of 2 to 3 ounces after the second hour, but an increase of an ounce or more after the third hour,—a fact explained by the imbibition of fluid by the cuticle. Mineral salts dissolved in the bath were not detected in the urine. Sulphate of manganese, iodide of potassium, borax, sugar of lead, etc., were tried in succession. The experiments were not more successful when a portion of the cuticle had been removed by a blister; but the author found, that, after five minutes' gargling the throat with solutions of some of these salts, of the same strength as the bath-water, he could detect their presence in the urine next evacuated. Hence he concluded that the skin is impermeable to fluids within a reasonable time; that, during a bath, the weight of the body diminishes more quickly than in the air; that substances easily taken up by the mucous membranes find no passage through the uninjured skin; and that the bath is not applicable as a means for introducing therapeutical agents into the organism.—*Wien. Med. Wchnschrft.*, 1853.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, Nov. 10, 1853.

UNIVERSITY OF EDINBURGH.

On the 3rd of November, the several medical classes in the University were opened by their respective Professors; and, on Thursday and Friday, the clinical teaching recommenced. The number of pupils present at the opening of the Medical Clinic was smaller this year than usual.

There was nothing particularly striking in any of the introductories; with little variation, we have heard the substance of them over and over again. Surely, after the opening address by the Principal, the introductory lectures in the separate classes might be done away with, and one day more added to the serious duties of a session, generally quite short enough for the importance of most of the subjects. Dr. Christison suggests, one Professor might be deputed to open the medical department, and the rest commence at once with the duties of their course.

The loss of Professor Goodsir—for the winter, at least—will be much felt; his superior qualifications as a teacher of anatomy, and his kindness to students, have endeared him to both past and present pupils; and few who have attended his class will forget the enthusiastic "ruffing" of the students when he has taken leave of his class at the end of a session. Professor Goodsir is to winter at Nice, hoping to recruit his health, which for some time past has been giving way.

His anatomical class is one of the largest in Great Britain; this session it numbers about 300. So much had it increased during the last two or three years, that application had to be made to the Town Council for an enlargement of the anatomical theatre and dissecting-rooms. Dr. Struthers, from the Surgeons' Hall, who is appointed to supply for him, was on Wednesday introduced by Mr. Syme, in a neat speech, and then burst *in medias res* at once, feeling, no doubt, some difficulty in attempting to fill the place of so esteemed a Professor as Mr. Goodsir. It was rumoured at one time, that Dr. Alison, who may justly be designated one of the patriarchs of physic, would be unable to lecture; it seems, however, the report was unfounded; he is recruited by the vacation, and it is hoped he will yet often again be spared to lecture ten minutes past the hour.

The Chair of Natural History is yet supplemented; the venerable Jameson had offered his resignation before the session, if two conditions were complied with; the first, that a pension of 300*l.* a-year should be granted him for life; and, secondly, that his nephew should be elected Professor, or at least Curator, with a fixed salary.

It appears, however, that the first condition could not be complied with by the University, on account of the present pending lawsuit with the Town Council; nor had Government power to grant the pension without a meeting of Parliament. Again, Mr. Lawrence Jameson, the Professor's nephew, was thought less competent than others who would be willing to take the Chair; and to appoint a keeper to the Museum separate from the Professorship, would be to limit the powers of the latter, as had been experienced by Professor Trail on a former occasion, when lecturing for Mr. Jameson. If an election for the Chair of Natural History had taken place, there can be no reasonable doubt that Professor Edward Forbes would have been elected; he is certainly better qualified than any other candidate, and we see no reason that Mr. Lawrence Jameson should be elected on the strength of his uncle's reputation.

Dr. Gairdner has been created one of the Physicians of the Royal Infirmary, in the place of Dr. Halliday Douglas, whose period had expired. Dr. Rutherford Haldane is appointed Pathologist to the Royal Infirmary, in the room of Dr. Gairdner. Dr. Gairdner commences this session an extra-academical course of lectures on the Practice of Physic; he is probably looking forward to a University appointment, which, after his careful investigations in pathology, he has some right to expect.

MONTHLY JOURNAL.

The period of collapse which the *Monthly Medical Journal* some little time experienced seems to have been followed by at least a temporary reaction. Its vital powers seem resuscitated; and, it is said, papers enough have been already contributed to make full Numbers for at least two or three months to come. Dr. Bennett is one of the chief conductors, and is thought to be the sole proprietor. The same supporters are to keep it above water as heretofore, without their names being again published on the cover.

There are several interesting articles in the last two numbers, one by Dr. G. Wilson on "Colour Blindness;" and Dr. Bennett is said to be particularly sore that Dr. Simpson's appetite should be so omnivorous as to include oil treatment in scrofula and phthisis.

In January next, the old *Edinburgh and Surgical Journal* is to re-appear under entirely new management, and we are looking forward with some anxiety to see the strength of its first number, after emerging from its temporary grave, and unfolding its winding-sheet. Dr. Seller is expected to be editor, endowed with full power in the selection of articles. Dr. Alexander Wood, Dr. Begbie, etc., are among the proprietors. We, in fact, never expected to see Drs. Bennett and Wood pulling together at the same cord. A union of the two journals was for some time talked of, but it has been decided otherwise, and we are content to see Drs. Bennett and Wood pulling at two separate cords, if each advances our medical and scientific knowledge.

SANITARY MEASURES.

Dr. Gavin has paid us a visit in Edinburgh, and we hope he may be of service in bringing more forcibly before the notice of the public the degrading misery and poverty of some of our streets and wynds. It appears from his report, that, in one house in the Lawn-market, where the cholera had appeared, six people were in the habit of sleeping in one bed placed in a closet no more than seven feet by four and a half square, and with no other ventilation than that afforded by the doorway, which opens into the room. This, unfortunately, is not a solitary case; hundreds of such places are to be found in the various wynds of the Lawn-market, Cannon-gate, and Cow-gate. If the clergy would stir up the people to improve the condition of some of the inhabitants of these places, it would, as Lord Palmerston avers, be more powerful in the prevention of disease than fasts and inaction. Dr. Grey, a venerable minister of the Church of Scotland in Edinburgh, once declared, that he had in no place seen such degrading poverty as he had witnessed in his own city.

Dr. Gavin unfortunately seems to make no attempt to gain the goodwill and cordial co-operation of the medical men in the towns he visits; in Edinburgh, as in other places, his dictatorial manner is complained of. The Medical men will willingly act in consultation with him; but if he issue commands to them, they will refuse to assist him.

GENERAL CORRESPONDENCE.

MR. WILDE AND THE "LANCET."

[To the Editor of the Medical Times and Gazette.]

SIR,—England was in former days famed for its *civilitie*, and at all times noted for its love of "fair-play;" and in the latter particular, it may still be said to stand pre-eminent among civilized nations. This generous trait of the people of England is forcibly instanced by the public Press—the expositor of the opinions as well as the guardian of the people's rights. It is, I believe, a general rule for newspapers and periodicals not to copy one portion of a correspondence without also inserting the other,—not to give publicity to the charge without affording the reply; and when the editor of a periodical deviates from this rule, people naturally inquire the reason. The *Lancet* inserted Dr. Kramer's charges against my "Aural Surgery," and added two refined and elegant criticisms thereon, so graphic in description, so disinterested and gentleman-like in tone, and so scientific in discussion, that they must have charmed and convinced its readers. The *Lancet* not having inserted my reply in its last Number, I will now proceed, in accordance with my promise, to afford the Profession some inkling of the cause thereof. In the Introductory Chapter of the "Aural Surgery," I have thus alluded to the substance denominated glycerine,—

"The virtues of glycerine were first made known to the Profession through Mr. T. Wakley, who published an account of it in the *Lancet* in 1849. Since then glycerine has had 'a run,' particularly among the members of the Profession not specially engaged in the treatment of aural diseases; and we may, therefore, well imagine in what a variety of cases, arising from the most opposite causes, and presenting a totally different set of symptoms, this remedy has been applied. Cases of nervous deafness of long standing, thickening and opacity of the membrana tympani, inflammation and mucous engorgement of the cavity of the tympanum, thickening of the cuticular lining of the meatus resulting from otorrhœa, the various inflammatory affections of the ear, as well as simple impaction of the meatus with cerumen, are constantly forwarded to me by Practitioners with the following note:—'We have applied the glycerine, as lately recommended for the cure of deafness, for some weeks past; but the patient not having experienced relief, we wish to have your opinion,' etc. When the case does not turn out favourably, it is said by its supporters, that the remedial agent is not pure; and when its purity has been tested and proved, then it turns out that the remedy was inapplicable to that particular case.

"Time, and the experience of the Profession, which test all such remedies, no matter how vaunted or how popular, will, no doubt, develope the therapeutical effects of this substance in diseases of the ear, if such it possesses beyond those which I have already stated. Its powers are already beginning to be questioned; a book has, however, been written on the subject,—the last in connexion with diseases of the ear which has appeared in Great Britain,—and in accordance with the principles of this chapter, it must be referred to.

"In 1851, there appeared 'Clinical Reports on the Use of Glycerine in the Treatment of Certain Forms of Deafness, by T. Wakley, F.R.C.S. Edited by W. Tindal Robertson.' Any proposition to relieve so serious and so widely-spread an infirmity as deafness, emanating from a legalised Practitioner, should be hailed by the Profession as a benefit conferred upon science and humanity; but at the same time it behoves the propounders of such cures to show that their cases are well worthy of credence, and that their descriptions of disease, details of symptoms, diagnosis and prognosis, are in accordance with the present state of medical science bearing upon such affections. Now, I do not think this work is in that position. For the application of glycerine the author recommends an instrument resembling a porte-crayon, for holding a piece of cotton saturated with the new remedy. The external meatus being washed out with tepid water, and thoroughly dried, which appears to be a necessary preliminary, we are gravely informed that the cotton 'should be so fixed, that in moving the instrument to and fro in the external meatus, the free passage of air should be provided for, otherwise an imperforate tympanum might be ruptured'! The book contains the record of twenty-eight cases, in the majority of which the streets, but not the numbers, in which the patients lived, are given. The hearing distance before the application of the remedy is not stated, although the author has, he states, invented an instrument, which he styles a Sonometer, for the purpose of measuring the hearing distance, and which, he says, 'has proved of the greatest value in practice,' and 'has done service to the Profession.' But what the amount of that value and that service is, beyond what may be acquired by an ordinary loud-ticking watch, is not recorded (a).

"Among the cases related, is that of a boy, deaf and dumb, in which the author says:—'The ears are very small.' We then hear that 'the ears were well saturated with glycerine,' and the hearing distance tested, when, marvellous to relate, the boy seemed 'to signify with his fingers the number of times he was called by his father.' 'It is evident,' says the author, in concluding the report of this case, 'that he received a certain amount of benefit from the glycerine.' Here now is a fair case:—E.M., Dean-street, London, a deaf-mute, who is said to have derived benefit from this remedy. Let the boy be produced to the Profession, and to the instructors of the deaf and dumb, and let them decide upon the amount of benefit derived from this or any other remedial agent in curing a case of true muteism. These cases, however, in which even 'a certain amount of benefit' is said to have been derived from treatment of any kind by an unhappy deaf-mute, have their effect upon the public mind, as was instanced some years ago in the Turnbull cures related in *Chambers's Journal*.

"In a second section of this book, consisting of a clinical lecture on the use of glycerine, illustrated by eleven cases, in which the remedy is most advisable, we find that four were instances of simple impaction of wax, which might have been removed in a few minutes by some warm water and a syringe. In the first portion of the work, dry cotton is the substance recommended for the application of the glycerine; in the latter section, however,

(a) I saw a similar instrument used by Dr. Schmalz, in Dresden, in 1840. He claimed the invention of it, and has described it in his various writings.

at p. 64, sheep's wool is that deemed most advisable by the author. I have already alluded at p. 3 of this chapter to the old Irish remedy, which partakes more of the nature of a superstition than a therapeutic agent for a cure of deafness, in a bit of wool, taken at a particular time, and under particular circumstances, from the left fore-leg of a six years old black ram. In the Metropolis of the world, during the middle of the nineteenth century, with science, philosophy, and common sense influencing the actions of mankind to the extent which at present prevails, one did not expect to find the surgeon of a London hospital recommending as a portion of the new cure for deafness, 'the finest curled wool on the sheep's head, carefully cut with scissors, and washed in hot water,' and adding, 'the best wool is that procured from a small German sheep;' age unspecified.

"I have dwelt thus long upon the present (then) popular cure for deafness, and endeavoured to expose its fallacy, in the hope that the eyes of the Profession may be opened to the ineffiacy of such modes of treatment, and that our Continental neighbours may not have an opportunity again of writing such critical reviews of British authors as those which formed an introduction to Dr. Kramer's book."—*Aural Surgery*, pp. 38 to 43.

The decease of Dr. Kramer, as reported in the journals, precludes all further discussion upon the original cause of this controversy. It is to me, however, a source of no small satisfaction, that although I differed from him in points of practice, I invariably, and in the strongest terms, bore public testimony to the good he effected in the particular branch on which he wrote; and I have now little doubt, that it was mere defect of memory that made him deny, at the time he did, those passages and opinions in his works to which reference has been already made in the columns of this Journal. Although a severe critic, and a great despiser of English surgery, he was a truly earnest, science-loving, truth-seeking, and learned man, and would, I am certain, have reformed, had he lived, many of those opinions he lately advocated with such determination. I am, &c. W. R. Wilde.

Dublin, Nov. 14, 1853.

TRACHEOTOMY.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having seen several cases of tracheotomy in the *Medical Times and Gazette*, No. 167, perhaps you will allow me to add another to the successful number.

At five p.m., September 5, I was called to see a fine, stout child, aged two years and two months, who had inhaled the steam from the spout of a boiling tea-kettle, a few minutes before I arrived. On examining his mouth and tongue, there were no blisters. I advised the mother, if she found the breathing affected, to apply bread and mustard poultices to the throat, and give him small and repeated doses of oil, and to let me know if she saw any change. About eleven o'clock the same night, my assistant being in the neighbourhood, I got him to call in and see the child: he found him heated and restless, with some difficulty of breathing. I gave him an aperient powder, and an antiphlogistic mixture, and put on two leeches, which bled freely, without relief. A little before five the next morning, I was informed that he was much worse, and, on visiting him, I found his lips blistered from the steam, and perfectly insensible; his breathing most laboured, and gasping as though the glottis was all but closed. Under such circumstances not a minute was to be lost, and I proposed the operation, which was at first refused by the parents. I told them there was no time for delay, as it was the only chance of saving the child's life. With their consent I immediately operated; directly the trachea was opened, the breathing was instantly relieved. The child had been for some time troubled with a cough, and a good deal of mucus escaped from the opening. Having no tracheal trocar or canula, I used a common dressing-case knife, and enlarged the opening of the trachea with a blunt-topped bistoury, and inserted a hydrocele canula, but, from the spasmodic coughing, it could not be retained, and, after waiting more than an hour, I obtained about two inches of a No. 9 catheter, and introduced it, which, for a few minutes, produced considerable irritation, and the expulsion of a great quantity of mucus. After that he fell into a sound sleep, and slept for three hours, when he woke up quite conscious and refreshed, and made his mother understand he wanted drink. I had ordered cold thin gruel to be ready for him when he required anything, and he drank freely and frequently of it, and continued to do so for a week, and nothing else. He continued his mixture, and progressed daily, without a bad symptom, to recovery. The canula was removed several times to clean it, and it was withdrawn altogether on the 13th. The wound closed up in a short time, and was completely healed on the 2nd of October.

I have only to remark respecting the operation, to any one who may be placed in my situation not having instruments proper for it at hand, after cutting through the skin, to remove the fat which fills up the opening with a pair of forceps and scissors. By doing so the wounding of vessels and hæmorrhage is avoided, and the trachea being laid bare will give a clearer sight for the insertion of the knife. Had I not done so, the operation would have failed, as the child would have been suffocated with blood and mucus, although he did not lose more than ʒss. of blood during the time I had to wait for the canula. The space being clear, I could wipe away both with a cold sponge as fast as either appeared.

Basingstoke. I am, &c. Charles Webb.

CASE OF FARCY IN THE DEVON AND EXETER HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having read in the *Medical Times and Gazette*, of the 22nd October, a report of an instructive discussion at the London Medical Society, on disease of the blood and secondary purulent deposits, in which, among other causes, glanders was adverted to, may I beg the favour of your insertion of the following brief particulars of a case of "farcy" now in this hospital, under the care of Mr. De la Garde? I am, &c.

William Clapp, House-Surgeon.

Devon and Exeter Hospital, November 14, 1853.

William Lee, aged 43, was admitted on the 11th of August last. He stated that he was in the possession of perfect health until thirteen months previously, when two days after making a *post-mortem* examination of a horse which had been destroyed on account of glanders; a sore which he had on the right forefinger became inflamed, and an abscess formed in the part. This was immediately followed by another on the outside of the forearm about its middle; shortly after by a second in the left forearm; and ultimately by a third in the calf of the left leg. At the expiration of five months these abcesses were healed, and he remained well in this respect, though much impaired in health, for the period of three months, when his illness was much aggravated by an attack of what he describes as "fever," and four days afterwards the right knee became affected with redness and swelling, terminating in suppuration, for which he was admitted into the hospital. The integuments around the joint were considerably swollen, and of a deep red colour, and from an incision which was made a few days after his admission a large quantity of unhealthy sanious discharge escaped. Subsequently three smaller abscesses formed a little below the joint, which were opened, and a similar discharge from them took place. With this disease his constitution sympathised severely; his pulse and respiration accelerated, with occasional slight cough; he perspired at night, and his tongue was white and coated. On the 26th of October another deposit took place in the direction of the internal saphæna vein of the right leg, which, with those over and below the knee, are still discharging, the surrounding integuments being undermined, reddened, and congested. Lee's general health has, within the last month, improved, but he is occasionally subject to feverish exacerbations, which continue for several days, and are followed, in some instances, by fresh deposits of unhealthy pus. The constitutional treatment since his admission has consisted in the use of the compound decoction of sarsaparilla, with nitric acid, a liberal allowance of nutritious diet with ale, and the local applications of poultices and ointment of iodide of lead.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Copland, President, in the Chair.

Tuesday, November 4, 1853.

A paper was read

ON CERTAIN PATHOLOGICAL STATES OF THE BLOOD,

ESPECIALLY CHARACTERISING MANY DANGEROUS DISEASES, AND OF THE INTENTIONS AND THE MEANS BY WHICH THESE STATES ARE MOST SUCCESSFULLY TREATED.

By JAMES COPLAND, M.D., F.R.S., President.

In this communication the President gave a description of many pathological changes of the blood, leaving the consideration of the treatment of the diseases caused by them until the next meeting. He stated, that the fact of the alteration of the circulating fluid in various severe and malignant forms of disease had greatly engaged his attention, and referred the Society to many articles in his

work upon practical medicine, entitled, "Abscess, Absorption, Erysipelas," etc. etc., and remarked that his views had been long before the Profession. He hoped, by bringing them in a clear and connected form before the Society, that important information might be obtained relative to the source of disease of blood, and of the avenues and channels by which this disease was diffused. Particular attention was directed to that morbid state of the blood termed "contaminated" or "vitiated." He divided the origin of these morbid changes into six classes. First, from causes acting upon the digestive system, and, consequently, upon the vessels connected therewith; secondly, from agents taken in by respiratory action; thirdly, from causes acting upon any external surface or tissue of the frame; fourthly, from the arrest, or even from the impeded action of any eliminatory function; fifthly, from the absorption of any morbid product into the circulating system; sixthly, from the abnormal condition of the vital force, or of the nervous centres acting upon the heart and blood-vessels, having a reciprocating influence upon the hæmato-globuline circulating in the blood. Copious illustrations were given on each of these heads. The effects of food, emanations from various sources of pollution, absorption of "sanies," and of any puriform secretion into the circulating channels, were fully discussed. Attention was directed to the evils caused by defects of the various excretory functions, the due performance of which was necessary to the healthy state of the blood; and lastly, to the agents, extrinsic or intrinsic, which either excite or lower the nervous system, and thus influence the vascular system. The author remarked upon the operation of these agents upon the blood, manifested by a degeneration or waste of the red blood corpuscles. The changes they caused were said to be the following:—1st. A complete metamorphosis or change of the hæmato-globuline. 2nd. A portion of the red blood corpuscles being transmuted into bile. 3rd. The change of epithelial cells from the kidneys and mucous follicles into red blood corpuscles. 4th. Their gradual expenditure in the elaboration of the genital secretions in both sexes. Reference was made to Mr. Simon's nomenclature of blood diseases, and a review passed upon some of the most striking malignant diseases arising from an altered state of the blood. In conclusion, some illustrative cases were given.

Mr. Lloyd hoped that the President would lay before the Society his ideas concerning the treatment of this blood disease, expressing his opinion, that, owing to the inquiry and experience of the author, they would be of value to the Profession generally.

The President said that he had only been prevented from touching upon the treatment by the shortness of time allowed to him to prepare the paper, and promised to furnish the Society with the required information at its next meeting.

Mr. Statham, after paying a high tribute to the vast information and extent of research exhibited in the President's paper, wished to obtain a clear definition of the word "sanies." He alluded to the large collections of pus that occurred in psoas, and in other chronic abscesses, where the patient might suffer for a length of time without any symptoms of poisoning of the system occurring. He remarked, that although these collections of pus were often present in the most vascular parts of the body, absorption did not seem to take place in the manner described.

The President defined "sanies" to be altered or diseased pus, secreted from an ulcerated or putrified surface, which, when it became absorbed, caused typhoid symptoms. He remarked how cuts received by cooks while dressing "high" game, or by students while dissecting, caused distressing ailments, while inoculation from a recent subject caused no evil effects. It was also to be remarked how much more serious such accidents were when the vital force was deficient, and the absorbents consequently active, than when the body was in a vigorous state of health.

Mr. Holmes Coote wished, with every deference for the President's great learning, to remark, that no *positive* proof existed of such diseases of the blood as those here described. It was impossible to detect purulent infection, inasmuch as white blood corpuscles could not be distinguished from pus globules. The absorption of matter into the veins did not always poison the blood. Virchow had traced portions of decomposed lung in the superior mesenteric artery, but the composition of the circulating fluid remained normal.

The President remarked, that the discharge of this sanies from an internal ulcerated surface was continually accompanied by febrile symptoms, especially when the animal powers were low. Arguing thus from analogy, that the absorption took place more rapidly, he must lay the cause upon the discharge from the ulcerated part, leaving the microscopical test to younger Fellows of the Society.

After a vote of thanks to the President, proposed by Dr. Parker, the meeting adjourned.

MEDICAL SOCIETY OF LONDON.

November 14, 1853.

Dr. Forbes Winslow, President, in the Chair.

Dr. Hawkesley presented to the Society a piece of solidified lung, into which, as he conceived, air had never been admitted; as also some fibrinous and bloody clots found in the heart and venæ cavæ of a child, aged two years, which had died asphyxiated in croup. The whole of the mucous membrane of the trachea was filled with pus, and a fibrous cast occupied the upper part of the larynx. A discussion followed, in which Drs. Snow, Willshire, and Routh, and Messrs. Dendy and Richardson, took part, as to whether the solidity of the lung was incompatible with the more probable supposition, that it had breathed; and whether the clots were formed antecedent to death, and were due to the super-oxygenation of the blood. Dr. Snow had seen this fœtal solidity induced in the lungs of cats which had been exposed for a day to the action of the air, and as the experimentum crucis, viz., artificial inflation, had not been performed in this case, Dr. Willshire could not admit the opinion promulged by Dr. Hawkesley. Mr. Richardson was of opinion, from the bloody state of the clot, that it was not a dying, but a *post-mortem* occurrence. Mr. Dendy related the particulars of an interesting case, in which vascular, but non-inflammatory solidified lung, was found in a child aged four years, which had been subject to asthma from its birth. The child was pigeon-breasted, but every organ had been fully formed. The right ventricle was of stony hardness.

Dr. Semple then read a paper on

THE PATHOLOGY AND DIAGNOSIS OF CEREBRAL DISEASES.

He commenced by observing, that the present paper might be considered as a continuation of a former communication to the Society on the same subject. He did not intend to present an elaborate essay on cerebral pathology, nor to avail himself of the opinions of authors who had written upon the subject, but merely to present the results of his own experience and observations; particularly selecting those points which were the most obscure, or on which a difference of opinion still existed. It was often a matter almost of impossibility to connect the symptoms of cerebral disease observed during life with the appearances found after death; but, as the term "pathology" included the morbid phenomena of the living structure, as well as the lesions traced after death by the scalpel, it was necessary to consider them in their relations to each other, however obscure the relationship might appear. In some cases, the relation of cause and effect was sufficiently manifest; and Dr. Semple drew attention, in the first place, to diseases of the osseous structure as causes of cerebral disorders. In one case which had come under his notice, and which he had observed for about ten years, the patient had been subject to continual attacks of epilepsy, which had resisted all treatment, and which had at last proved fatal: on a *post-mortem* examination, it was found that the internal table of the skull was thickened, and all the prominent bony processes in the interior of the cranium were much increased in thickness and asperity, as the crista galli, the clinoid processes, the ridges on the petrous portion of the temporal bone, and on the occipital bone. In another case, he attended a patient who suffered from constant pain and heaviness at the anterior and inferior part of the forehead, and who had occasionally had epileptic fits. These inconveniences became so troublesome by their long continuance, that the sufferer was obliged to abandon his business, and life became a burden to him. Acting upon the supposition that this was a case of thickening of the internal table of the skull, mercury was given to salivation, and the iodide of potassium was administered in large and repeated doses for a very long period, and under this treatment the patient eventually recovered, and is now in active occupation. In a third case, a man presented a manifest thickening of the root of the nasal bones; and notwithstanding the vigorous employment of the means pursued in the last case, he became comatose and died; and on a *post-mortem* examination, there was found to be thickening of the bones in the region indicated, and an abscess in the brain corresponding in situation to the osseous lesion. Another circumstance which Dr. Semple had occasionally observed in cerebral diseases was a want of symmetry in the two sides of the cranium; and although he was not yet prepared to prove that this was a common cause of cerebral disease, yet he thought it worthy of attention, and believed that other cases might be found in which similar deviations from symmetry might prove to be associated with disordered cerebral manifestations. The morbid anatomy of the cerebral membranes is a subject involved in great obscurity,

because the most violent symptoms during life often leave very few traces observable after death, and, on the other hand, appearances usually described as morbid are sometimes wholly unconnected with any cerebral symptoms during life. In order to arrive at correct views on this subject, however negative the results might be, the author was in the habit of examining the brains of all cases, whenever it was practicable, whether these had been symptoms of cerebral disorder during life or not, and the conclusion at which he had arrived by these investigations was, that much error and misapprehension existed among authors on this branch of pathology. Such terms as "more or less opacity of the arachnoid," "effusions on its surface," "effusions beneath its surface," and other similar vague expressions, were by all means to be deprecated, because it was doubtful whether these appearances were really morbid at all in many instances, inasmuch as they are often found in cases where no cerebral disease has existed. The disease called acute hydrocephalus in children, was a well-marked instance of meningeal inflammation, and the results of such disease were apparent in the effusion of coagulable lymph between the opposed layers of the arachnoid, and of copious serous deposit upon the surface and in the cavities of the brain; but in adults the effusion of coagulable lymph was comparatively rare, and the only appearances observed were vascularity of the membranes and effusion of lymph beneath the arachnoid. Dr. Semple inclined to the view of Rokitansky, that inflammation of the pia mater is the usual form of meningeal disease, the apparent vascularity of the arachnoid membrane being due to the injection of the vessels of the pia mater seen through the transparent serous structure lying above it. Four cases were then related, in two of which the author considered that meningeal inflammation undoubtedly existed, and yet after death nothing was found beyond a slight effusion of lymph beneath the arachnoid, and in the two others no cerebral disease had existed during life, and yet the *post mortem* examinations revealed thickening and vascularity of the arachnoid, accompanied by copious effusion. The diagnosis of cerebral diseases is a point of great difficulty, but of immense importance, and upon a correct judgment in this particular the life or death of a patient often depends. Insensibility and coma depend upon various causes, such as hysteria, poisoning, drunkenness, apoplexy; and all these conditions require very different and often opposite treatment. Again, delirium is produced by opposite states of the brain,—by congestion and inflammation, on the one hand; by exhaustion of nervous energy on the other; and some well-marked cerebral disorders are produced by diseases in remote organs, and without any disease of the brain whatever. Two cases of what might be called pseudo-cephalic disease were then related, in one of which the most violent and long-continued convulsions were caused by the eccentric irritation of teething and intestinal derangement; in the other, an infant a fortnight old, the convulsions were apparently due to previous intra-uterine influences, and to the weak and nervous condition of the mother. In such cases, it was exceedingly important that a correct diagnosis should be made; for, although convulsions in infants were always dangerous, and a prognosis must be given with great caution, yet the gravity of the issue was most materially influenced by the nature of the existing disease. The convulsions springing from cerebral inflammation must be promptly treated by leeching, calomel, purgatives, cold to the head, warmth to the extremities; but all these remedies are utterly improper in those forms of convulsive attacks which originate from teething, intestinal derangement, renal obstructions, and other forms of eccentric disease.

The chief point in the discussion was the degree of difficulty attending the diagnosis of cerebral diseases.

Dr. Fuller was of opinion, that in true meningitis there is always great congestion, with effusion of lymph, pus, or serum, and that in the absence of these products, we could not infer the existence of the disease from the symptoms. In poisoned blood from disease of the kidney, or from the presence of a narcotic poison, as belladonna, as also in certain rheumatic affections, he had observed great cerebral excitement, with injection of the conjunctiva,—that is, all the mere symptoms of meningitis,—but these were not cases of true inflammation. Moreover, the opacity of the arachnoid which arises from an effusion underneath the membrane, is not an evidence of inflammation. He then referred to the probable cause of the greater violence of the cerebral irritation in meningitis than in cerebritis, and believed it to be the rapidity with which the various disturbances take place in meningitis. He had observed cases in which very great injury had been done to the substance of the brain without any violent symptoms having been induced, and this he attributed to the slowness with which the injury had proceeded. Thus in the case of a medical friend, who for many years had suffered only from symptoms resembling tic, and from slight epileptic attacks, he had found a pint of serum effused within the skull, with the circulation through the right vertebral artery impeded by the pressure of a scrofulous tumour, and the left vertebral artery nearly obliterated. He agreed with the author in his remarks upon disease of the calvarium, and instanced the case of a young lady who had suffered for many years from intense headache and epileptic fits, and who could not bear any jolting exercise, in whom a spiculum of bone, two inches in length, was found projecting into the brain.

Dr. Theophilus Thompson considered that thickening of the calvarium was not a likely cause of meningitis, for he had observed that thick-skulled people were dull, and not prone to inflammation; but if it were a cause, he did not think that iodide of potassium would remove it. He believed that affections of the dura mater are among the most obscure of cerebral diseases, while inflammation of the other membranes of the brain is at present well understood. He thought that Mr. Rainey's statement as to the ganglionic character of the arachnoid, would clearly account for the great violence of the symptoms met with in arachnitis, and that it is the locality affected, and not the slowness of the progress, which renders the symptoms of cerebritis less prominent.

Dr. Druitt highly eulogised the Paper, and inquired if the author had been accustomed to connect rheumatism with disease of the skull. He (Dr. Druitt) had given colchicum and calomel with great advantage in such cases, and believed those remedies to be more beneficial than iodide of potassium. He considered that thickening of the skull is rarely, if ever, a primary disease; as also meningitis, when not preceded by external injury. If in any case he should observe great cerebral excitement, with congestion of the eye, he should consider the case to be one of poisoned blood, and not of true idiopathic meningitis.

Dr. Sibson believed it to be impossible to arrange the diagnostic symptoms of each cerebral disease in clearly-defined categories, for he had learnt from practice, and an analysis of almost all the recorded cases, that every kind of symptom has been found in every variety of cerebral disease. A few cases of epilepsy have thickening of the calvarium, but it is only a small minority; and, in general, he believed it to be impossible to guess even at the existence of such an obscure morbid condition. He also considered that inflammations of the arachnoid, and of the pia mater, could not be separated, just as it is impossible to state that the subpleural cellular tissue is not involved in a case of pleuritis. Further, in such cases, the surface of the brain is always implicated, and it is from this cause alone that the symptoms become more energetic. He regarded the effusion of lymph in a fatal case of meningitis, as essential to the disease, and had seen cases in which this effusion had extended greatly, and yet only a slight stupor had indicated the presence of inflammation.

Mr. Richardson, Dr. Hawkesley, and Mr. Milton, made some observations, after which

The President expressed his objection to the statement that we have no clear knowledge of the distinguishing symptoms of cerebral disease, and affirmed, that although certain diseases of the brain are obscure, we yet have very extended and correct information as to the symptoms, and causes of the symptoms of inflammation of the various parts of the brain. The Profession, and especially that part of it which had had experience in mental pathology, could state with great certainty whether the grey or white matter was affected, and the precise position of the disease as in the optic thalamus and corpus striatum, and could also make a correct diagnosis between inflammation of the arachnoid and that of the dura mater.

A Paper will be read at the next meeting (this evening, November 19) by B. W. Richardson, Esq., on the "Fibrinous Constituent of the Blood in relation to Disease." Part III. Clinical (in place of Mr. Walton).

PHYSIOLOGICAL MEETING.

NOVEMBER 14, 1853.

Dr. FORBES WINSLOW, President, in the Chair.

SOURCE OF MOTION OF FLUID IN URETER AND THORACIC DUCT.

Mr. Richardson invited the opinion of the Fellows as to the moving power of the fluids through the ureter and thoracic duct He considered the question a novel one, and believed that it could not be answered by reference to the anatomical characteristics or the relations of the parts to the centre of the circulation, or on the dynamical principle of gravitation.

TESTS FOR IODIDE OF POTASS.

Dr. Cogswell, Hon. Secretary, exhibited a number of chemical tests for iodide of potass in the urine, and stated that a single dose of that salt would manifest its presence in the excretions. He used starch with pure, and then with impure sulphuric acid, to show that the blue reaction was owing to the presence of nitrous acid in the impure sulphuric acid of commerce; then chromate of potass and sulphuric acid; and, lastly, starch with the fuming nitric acid, which he proved to be the best test.

VOLUNTARY MUSCULAR FIBRE ATTACHED TO AN ADVENTITIOUS GROWTH.

Dr. E. Smith, Hon. Secretary, exhibited a bony growth in the fibrous tissue of an old pleuritic effusion, which had the rare peculiarity of the true attachment of voluntary muscular fibre. The patient from whom it had been removed was a Colonel in the East India Company's Service, and had spent forty years in India. He had also suffered from pectoral affections from the period when he was six years of age. On a *post-mortem* examination, the pleura pulmonalis was found attached throughout its whole surface to the ribs and the diaphragm, and this plate, having the size of four inches by five inches, occupied a perpendicular position on the right side, terminating below, near to the diaphragm. The cause of the attachment of the muscular fibres was the point of interest. The muscular fibres were not presumed to be a new growth proceeding from any change in the effused lymph, and since the pleura would intervene between the diaphragm and the intercostal muscles, it was difficult to imagine how any attachment of these muscles could have been effected. It was quite clear that this growth was not a part of the original attachment of the muscle to a rib; and, assuming that the pleura had been destroyed, and the fibrinous deposit thus permitted to approach the muscular structure, it was not even then easy to show how any true tendinous attachment should connect the body of the muscle with the adventitious structure. Dr. Sibson had attended the *post-mortem* examination, and Professor Quekett had examined the structure.

DOG WITHOUT A SPLEEN.

Dr. Crisp exhibited a dog, the spleen of which was removed two years and a half since by Dr. Leared, of Finsbury-circus. The animal was in good condition, and did not appear in any way to have suffered from the loss of the organ. The blood, which was exhibited under the miscroscope, presented no abnormal appearance.

Dr. Crisp then read a paper on

THE WEIGHT AND FORM OF THE HEART, THE DIAMETER OF THE AORTA, AND THE SIZE OF THE BLOOD-CORPUSCLES IN THE VERTEBRATA.

The paper was illustrated by numerous drawings and preparations, and the deductions drawn from a table before the Society, of the weight of the heart and of the body of more than 400 animals. The blood-corpuscles of 100 of the vertebrata (taken with the steel disc) were depicted. Among these was the blood of the giraffe, capybara, tree-kangaroo, Tasmanian wolf, weka-rail, condor, sacred ibis, alligator, chameleon, rattle-snake, puff-adder, cobra, viper, walrus, seal, shark, and proteus. The comparative thickness of the left auricle and ventricle, the diameter of the aorta, and the breadth of its coats, were given in various animals, and a comparative estimate made of the length and weight of the body and of the heart in different species. The heart of a skate, removed twelve hours before the meeting, was still pulsating. A heart of a large rock-snake (Python Molurus) was exhibited for the purpose of showing the two ventricles, which were perfectly distinct, a strong valve, like that between the right auriculo-ventricular orifice in birds, guarding the opening. Some of the conclusions of the author were the following:—

1. That the size of the heart bears no important relation to the size of the blood-corpuscles, nor to the rate of pulsation.
2. That birds have the largest hearts, and fish the smallest, in proportion to the size of the body.
3. That in birds and mammals (excepting some of the cetacea) the consistence of the muscular parietes of the heart is firm and dense, while in reptiles it is generally cellular and spongy.
4. That the form of the heart varies more in fishes than in any other class of animals.
5. That the hearts of the chimpanzee and ouran bear the greatest resemblance to that of the human species.
6. That animals with a lax ventricle and with a large and thin auricle (as the Batrachians) have the largest blood-globules.
7. That it is more than probable that the size of the blood-globule depends much upon the comparative size of the cardiac cavities, the consistence of their muscular walls, and upon the form and mechanism of the breathing apparatus.

The characteristic of the paper was the vast multitude of separate facts which it contained, and as no theories were propounded, and but little generalisation attempted, the discussion was mainly restricted to the asking of questions. The paper was repeatedly eulogised, and Drs. Winn, Thompson, Snow, Chowne, Winslow, and Leared, with Messrs. Bishop and Richardson, took part in the discussion.

The following questions, in reference to comparative anatomy, were proposed by the various speakers:—

1. The relation of the heart and lungs; of the size and strength of an artery; and of the size, with the rapidity of pulsation of the heart.
2. Is the admirable valvular arrangement existing in the septum of the ventricles in the rock python a type of the whole order of reptilia?
3. The variations in the rapidity of the pulse at different periods of the day, and in different positions of the body.
4. Does the change which occurs in the outline of the blood corpuscle when left upon the field of the microscope, occur more rapidly in the lower animals than in man?
5. As the thickness of the walls of the heart is relatively greater in swift than in slow moving animals, what is the proportion, in this respect, between the heart of the hare (an animal living in the open air, very swift, and having red flesh,) and of the rabbit (an animal living in holes, less swift, and having pale coloured flesh)? Dr. Crisp replied, that in the rabbit, the left ventricle is three lines, and the left auricle ⅓ of a line in thickness, and that the thickness in the hare is the double of that in the rabbit.
6. As the heart in fishes bears but a very small proportion to the body, may we not infer that there are other motor circulating powers than that of the heart?
7. The relation between the size of the blood-globule, and the rate of pulsation of the heart.

Mr. Bishop suggested that the author should reduce the linear admeasurements to those of decimal fractions.

Dr. Snow advised the author to count the number of pulsations of the heart in the elephant, deer, etc., by the application of the stethoscope. He (Dr. Snow) had seen the radial artery of an adult lion pulsate 60 per minute.

Dr. Chowne stated, in reference to the motions of the fœtal human heart, that slight maternal mental excitement did not influence the action of the heart in the fœtus, but that every motion of the fœtus increased the pulsations fully twenty beats per minute.

The President referred to recorded cases, showing that violent maternal mental shocks had arrested the fœtal circulation.

Dr. Crisp, in his reply, referred to a recent dissection of the Canadian porcupine, in which an enormously distended stomach appeared to have caused death—a circumstance which he had also seen in the human subject.

A great many preparations, drawings, and diagrams greatly interested the Fellows after the President had vacated the chair.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations, were admitted Fellows of the College at the last meeting of the Council:—

Gowlland, Peter Yeames, Finsbury-square; diploma of membership, dated January 28th, 1848.
Martyn, William, Brompton-road; May 6, 1839.
Thompson, H., Wimpole-st., Cavendish-sq.; October 4, 1850.

The following members of the College having undergone the necessary examinations, were admitted licentiates in midwifery:—

Argent, Samuel, Hinchley; diploma dated July 1, 1853.
Cornelius, Henry Thomas, Northampton; July 9, 1850.
Duncan, Thomas, Chelsea; October 28, 1853.
Dunn, Charles, Scarborough; July 4, 1853.
Hudson, John, Newport, Yorkshire; April 15, 1853.
Lovell, James, Canterbury; June 17, 1853.
Powell, Thos. Joseph Cookson, Bristol; October 28, 1853.
Powell, Frank, Chichester; October 14, 1853.
Rains, John, Bonsall, Derbyshire; May 20, 1853.
Walker, John West, Spilsby; October 11, 1850.

Apothecaries' Hall.—List of the names of gentlemen who passed their examination in classics and mathematics, on Tuesday and Wednesday, the 15th and 16th November, 1853:—

Brown, William A., Kineton, Warwick.
Carey, F. E., Nottingham-place.
Chalk, Frederick M., Kennington.
Cumming, S M'D., King William's College, Isle of Man.
Downs, Peter, Stockport.

EDWARDS, T. M., Llansaintffraid, North Wales.
FOWLER, JOSEPH T., Winterton, Lincolnshire.
GARNER, ROBERT C., Stoke-upon-Trent.
HARKNESS, WILLIAM W., Hampstead.
HASLEHURST, THOMAS W., Claverley.
HETT, HENRY N., Brigg, Lincolnshire.
HILL, THOMAS M., Bristol.
JONES, WILLIAM JAMES, Portugal-street, Lincoln's-inn-fields.
JOSEPH, EDWARD, Great Marylebone-street.
LA MERT, LIMA ABRAHAM, Bedford-square.
LEWIS, HENRY, Lowndes-square.
LUDLOW, CHARLES E., Kennington.
MEADOWS, ALFRED, Newman's-row, Lincoln's-inn.
MEERES, EDWARD E., Whitechapel.
PALK, HENRY, Manchester-street.
PEARCE, STEPHEN H., Lewes.
PICKESS, THOMAS, Brydges-street, Strand.
POWELL, JOHN, Wandsworth.
QUENNELL, JOHN C., Brentwood.
ROGERS, ROBERT J., Brighton.
RUTHERFORD, GEORGE S., Portland-place.
SMITH, WILLIAM HENRY, Holland-place, Clapham-road.
SYMON, ROBERT R., Canonbury.
WATTS, JOHN, Haverfordwest.
WHITFORD, ANTONY, New North-street.

Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Nov. 10, 1853 :—

MOSS, WILLIAM BOYD.
SMITH, WILLIAM ARMSTRONG, Bedford.
SHARD, AUGUSTUS CHARLES.
STILLMAN, WILLIAM.
THOMAS, WILLIAM WILLIAMS, Fishguard, Pembrokeshire.

APPOINTMENTS.

MEDICAL.—Mr. Charles Hawkins, of Saville-row, has been appointed Surgeon of the "Solicitors and General" Assurance Company, vacant by the death of the late Bransby B. Cooper, Esq.

METROPOLITAN DISPENSARY.—Dr. Winn was unanimously elected Physician to this Institution on the 15th inst.

DEATHS.

WOODWARD.—On the 7th inst., at Alton, where he was passing a few days with his brother-in-law William Curtis, Esq., Thomas Charles Woodward, Esq., surgeon, of Penton, near Andover, in his 60th year. For many years Mr. Woodward was engaged in the practice of his Profession at Alton, where he earned for himself great celebrity as an accomplished surgeon and successful Medical Practitioner. Subsequently, from ill-health, he was compelled to leave Alton, and for some twenty years has been a resident either in or near Andover, where latterly he has principally carried on a consulting practice. We are rarely called on to record the demise of one who more universally enjoyed the confidence of his professional and lay brethren, and whose loss will be more deeply deplored by all who knew him.

LAMBERT.—Nov. 8th, at Brightstone, Isle of Wight, W. J. Lambert, M.D., of Thirsk, Yorkshire, aged 36.

COMPULSORY VACCINATION ACT.—COLCHESTER UNION, Nov. 9.—At a meeting of the Guardians of this Union, summoned especially to consider the above matter, it was resolved,—"That the existing vaccination contracts be annulled, and that contracts be formed with every duly-qualified Medical Practitioner in the Union who shall notify to the Clerk of the Union his desire to become a contractor. The fee for each case of successful vaccination, as first mentioned in the 6th section of the new Act, to be 2s., and 2s. 6d. for each case, as provided for in the latter part of the same section."

NORTH STAFFORDSHIRE MEDICAL SOCIETY.—This Society held its first anniversary meeting on the 10th instant, at the Athenæum Rooms, Stoke-upon-Trent. It already numbers twenty-five members, and during the year has held four meetings. The objects contemplated at the formation of the Society, namely, to afford means of friendly intercourse between the medical practitioners in the district—improvement in medical science, by the reading of papers, the detail of cases, and discussions thereon—and the protection of their general interests, by endeavours to suppress the evils resulting from the practice of unqualified persons,—have all been carried out to a satisfactory extent. The meeting was well attended, most of the leading Medical men of the Potteries and Newcastle being present. Dr. Wilson delivered an able and interesting address, on his retirement from office as President. The following gentlmen were chosen officers for the present year :—Mr. Garner, Stoke-upon-Trent, President; Mr. Goddard, Longton, Vice-President; Mr. Boothroyd, Hanley, Treasurer; Mr. Walker, Burslem, Secretary. Several morbid specimens and some surgical instruments were exhibited. A letter from Dr. Charlton, of Newcastle-upon-Tyne, relating to the recent outbreak of epidemic cholera in that district, was read. It is intended to hold a special meeting for the consideration of epidemic cholera on the 24th inst., to which Medical men who may not be members of the Society are invited.

CITY DISPENSARY, QUEEN-STREET, CHEAPSIDE.—A large number of the female patients of this charity attended at the Dispensary lately, for the purpose of presenting to Dr. Habershon a handsome silver vase, as a testimonial of their appreciation of his services.

ROYAL ACADEMY.—Mr. Partridge, the new Professor of Anatomy at this Institution, who was prevented by illness from delivering his inaugural course of lectures last year, has now recovered, and commenced his course last Monday.

PARKS FOR LONDON.—A Deputation from the Committee to Secure Parks and Open Spaces in London had an interview with Viscount Palmerston on Friday, Nov. 11, at the Home Office, to solicit the immediate grant of Albert Park for the central districts of London and the borough of Finsbury. The Deputation consisted of Mr. Tyler (Chairman), Messrs. Sandon, Vincent, Reynolds, Downes, Thomas Dix, Bowerbank, Lloyd, Barnett, Parson, and Leonard.

MR. CAYLEY HUTCHINSON, Assistant-Surgeon of the Bengal Army, informs us, that the result of his experience in the treatment of cholera during thirteen years service in India is, that the following gives the patient the fairest chance of recovery :—"To remove the distressing vomiting which so often exists at the commencement of a bad case of cholera, and which, until subdued, renders the exhibition of medicine by the mouth useless, I have employed, with great benefit, hot terebinthinate stupes, flannels wrung out in water as hot as can be borne, and then sprinkled with turpentine, and applied steaming to the abdomen and epigastrium. This causes great warmth, amounting to pain, and often blistering; but, where used early, and the case not too far advanced, is a valuable agent in checking vomiting, and producing re-action in the whole system. I have then given from 30 to 56 minims of tinct. opii, with a dessert-spoonful of brandy, and a little nearly boiling water, in doses of a tea-spoonful at a time, watching carefully any tendency to sickness, in which case I have stopped all medicines until its cessation."

DR. MOIR.—The town of Musselburgh has laid the first stone of the foundation on the site selected for a monument to the memory of its townsman—the "Delta" of *Blackwood*.

HANDBILL.—Dr. Pattison has removed from 28, Bedford-square, to 31, Grosvenor-street, where he can be consulted daily upon all cases of cancerous disease, lupus, tumours, or ulcers. [This gentleman's name does not appear in the "Directory."]

SINGULAR SUICIDE BY SMALL-POX.—The *Western Times* records the death of a small farmer, named Mason, 60 years of age, at Ravenstondale, Westmoreland, of small-pox, under the following singular circumstances. He obtained the virus of the disease from a man suffering from it, and inserted it in his hand. He slept in a bed previously occupied by a small-pox case of the worst form of the disease; and when taken ill would not adopt any measures for a cure, nor take any medicine whatever. He ought to have been treated as a suicidal monomaniac.

A WOMAN, named Hayes, at Kilbritain, near Bandon, has been committed for trial charged with manslaughter, she having inoculated four children with small-pox matter, two of which subsequently died from the disease thus conveyed into their systems. It was reported, that numerous other deaths had previously resulted in her practice.

ACCIDENTAL POISONING BY ACONITE.—A sad and fatal accident occurred lately at Bristol by the accidental use of the aconite root in mistake for horseradish. A bookseller, at Chard, Somersetshire, named Russell, repaired, a few days since, to Bristol to receive a legacy, and, while there, dined with his brother on roast beef. A remark being made that there was not any horseradish, the servant was sent to the garden to pull a root. On her return, Mr. Russell scraped it into a plate, and observed that it was very dead and devoid of taste. Both brothers partook of it, and also noticed its want of strength, but had no suspicion. Some time after dinner, the legatee complained of a strange tingling of the lips, which soon increased and extended around the neck. He then went to call on another brother, the one he had dined with accompanying him, but, before he arrived there, he became much worse, and, on entering the house, said he was sure he had taken poison, the deadness was creeping all over him. Some brandy was then given, but the symptoms increased, and soon the sight was lost. Medical assistance was sought, and a mustard emetic ordered, but in vain, the victim expiring in a little while. The remainder of the root was examined by Dr. Taylor, who at once recognised it to be the aconite. Similar cases have occurred before, particularly one, some ten years since, in Lambeth, where the root of the aconite was mistaken for that of horseradish, a fatal result following. The aconite should not be cultivated in private gardens, as this, and other cases, show it to be a very dangerous root, so many persons being unacquainted with its botanical and physiological qualities.

VENTILATION OF SEWERS.—A Correspondent of the *Times* newspaper having recommended that the street-lamps should be made hollow shafts, for the purpose of ventilating the sewers, Mr. Viccary, of Southampton, was induced consequently to point out that the first floors of houses opposite these lamps would be poisoned thereby, and to recommend the plan adopted at Southampton, which appears a very good one. He resides in a house in one of the main thoroughfares, built on land the property of the Corporation, leased by them, as thirty-four feet frontage, but one foot more is granted the lessee, under an agreement that he carry up by the side of the chimney-stack a six-inch drain-pipe, thus requiring only one more chimney-pot than is really necessary for the house; while the pipe being connected with the main sewer, acts as its ventilator. He adds, that when the ground is fully built upon, there will be 300 houses and two ventilators, the expense of each being about 3*l*. There are many places in London where this plan might be adopted with advantage, without causing any unsightliness. It ought to be tried.

MORTALITY IN PUBLIC INSTITUTIONS for the week ending November 12:—

	Males.	Females.	Total.
Workhouses	44	77	121
Military and Naval Asylums.. ...	3	...	3
General Hospitals	49	9	58
Hospitals for Special Diseases ...	4	2	6
Lying-in Hospitals	...	...	...
Lunatic Asylums	3	3	6
Military and Naval Hospitals ...	4	...	4
Hospitals for Foreigners, &c. ...	2	...	2
Prisons	...	...	...
	109	91	200

DEATHS *in the Metropolis for the week ending Saturday, November* 12, 1853.

CAUSES OF DEATH.	Nov. 12. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	617	387	187	1192	10275
SPECIFIED CAUSES	615	387	187	1190	10266
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	232	85	32	349	2482
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	7	23	17	47	461
3. Tubercular Diseases	76	114	6	196	1680
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	78	24	26	128	1131
5. Diseases of the Heart and Blood-vessels	6	20	10	36	362
6. Diseases of the Lungs and of the other Organs of Respiration ...	122	36	31	189	1797
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	22	29	11	62	618
8. Diseases of the Kidneys, etc. ...	...	9	3	12	104
9. Childbirth, Diseases of the Uterus	...	12	1	13	114
10. Rheumatism Diseases of the Bones, Joints, etc.	2	6	3	11	89
11. Diseases of the Skin, Cellular Tissue, etc.	1	...	1	2	26
12. Malformations	7	...	...	7	31
13. Premature Birth and Debility ...	24	1	...	25	227
14. Atrophy	24	1	6	31	178
15. Age	...	...	33	33	517
16. Sudden	...	3	2	5	93
17. Violence, Privation, Cold, and Intemperance	14	24	5	44	296
CAUSES NOT SPECIFIED	2	...	...	2	69

BOOKS RECEIVED.

Dublin Quarterly Journal of Medical Science. Nov., 1853.

Monthly Journal of Medical Science. Nov., 1853.

A Manual of Domestic Medicine. By a Doctor's Daughter. London: Saunders and Otley. 1853.

The Human Hair. By A. Rowland. London: Piper. 1853.

A Few Sober Words on Table Talk. By J. Prichard, F.R.C.S., Leamington, 1853.

An Account of some Cases of Epidemic Cholera Successfully Treated by Hot Water Applications. By F. H. Bully, F.R.C.S., Reading. 1853.

Pharmaceutical Journal. Nov., 1853.

Hand-book of Natural Philosophy and Astronomy. By D. Lardner, D.C.L. London: Walton and Maberly. 1853.

Chemistry. By D. S. Muspratt. Part I. Glasgow, 1853.

American Journal of Medical Sciences. Oct., 1853.

Proceedings of the North London Medical Society. Oct. 12, 1853.

The Chemist. Nov., 1853.

TO CORRESPONDENTS.

ACID. SULPH. DIL. AS AN ASTRINGENT.

[To the Editor of the Medical Times and Gazette.]

SIR,—Having lately been the medical superintendent to a large asylum, where we admitted nearly two hundred inmates, I had ample opportunities of testing the efficacy of the diluted sulphuric acid as an astringent. At the time, I published the result of its employment in such cases, which was quite successful in effecting a speedy cure. Since I have been in practice in London I have almost invariably employed it when the bowels have been very much purged, and the discharge has been profuse, slimy, and streaked with blood. In one case lately it proved signally valuable in stopping the purging, where the patient had previously been to a chemist's, and had taken, but in vain, quantities of catechu, chalk, kino, etc. Where the prostration is great, I combine the tinct. capsici; and where the tenesmus is urgent, I combine the tinct. opii. I am, &c.

RICHARD MARLEY, L.S.A.
Late Medical Superintendent to the Fisherton Asylum, Wilts.

31, Great Pulteney-street, Golden-square.

[To the Editor of the Medical Times and Gazette.]

SIR,—I cordially agree in your remarks regarding Insurance Offices in general, and the London Life Offices in particular; and I thank you for your clear and able exposition of the injustice of the procedures of such institutions; and I feel sure that, if the whole body of the Profession will follow the plan I have adopted recently, in a very short time this crying evil will be remedied.

On signing one of their certificates, I return it to the Office, with an enclosure requesting the usual fee, and if I receive an answer in the negative, I reply with the intimation, to which I rigorously adhere, that I refuse to notice any similar application without the proper honorarium.

If every practitioner will follow this plan, there will soon be an end of this imposition on our knowledge and time, of which it may be said, that its injustice is only equalled by its meanness. I am, &c.

M.D.

[To the Editor of the Medical Times and Gazette.]

SIR,—I lately received from my bookseller a catalogue of "Mr. S. Highley's Scientific Works." Among the Works I noticed the following:—"Lectures on the Principles and Practice of Modern Surgery. By Sir Astley Cooper, F.R.S., etc., etc. With Cases. 8vo, 2s. 6d." Thinking that the Work was remarkably cheap, I felt desirous of possessing a copy of that learned surgeon's lectures, and therefore ordered one. Judge of my surprise and disappointment at receiving, not the Work I expected, but a book thirty years old, clothed in perfectly new binding, and not by Sir A. Cooper. The title-page is as follows:—"A Series of Lectures on the Most Approved Principles and Practice of Modern Surgery, principally derived from the Lectures delivered by Astley Cooper, Esq., at the United Hospitals, etc. etc. By Charles Williams Jones. Second Edition by Charles Mingay Syder." The date of publication is 1821, and the book is dedicated to "Astley Cooper, Esq., F.R.S."

Now, Sir, is not this a gross piece of imposition? In the catalogue one is led to suppose that the lectures were actually delivered by Sir A. Cooper. But such is not the case. They were delivered by a Mr. Jones. It is only on obtaining possession of the work that the deception is discovered.

Is it possible, and would any one have supposed, that Mr. Highley, a respectable man, and publisher to the Royal College of Surgeons, would have been guilty of palming off his old stock of books in this disgraceful manner?

I hope this may serve as a warning to those who purpose obtaining "Mr. Highley's edition." I am, &c. HONESTUS.

P.S.—I send my real name and address, but not for publication.

T. R. Jones, Esq.—The notice arrived too late.

Dr. Kirk, Glasgow.—As soon as possible.

D. Hartley, Esq., Cheltenham.—Mr. Fowler's paper from India has arrived safely.

R. H. Meade, Esq., Bradford.—Many thanks.

Chirurgus.—The degrees are equally respectable.

A Subscriber will find what we know of the New Charter of the College of Physicians in a recent leading Article on the subject.

R. G. Hill, Esq.—If the letter is published in the Journal which admitted the attack, there will be no necessity for our publishing it also.

A Subscriber, Norwich.—The lectures will probably be continued when brought up to the present state of the science.

Dr. Borrett.—The delay was unavoidable.

Omega.—Dr. Snow's work is not very recent. It is used constantly.

T. R., Surgeon.—Golding Bird on "Urinary Deposits;" Bence Jones's "Animal Chemistry."

H. T.—If you forward your name and address, you shall receive a private note.

Mr. Henderson.—The report was received too late. Such matters lose their interest as *News* after so many days' delay.

W. C. can scarcely be in earnest.

Dr. Black's letter on the Administration of Chloroform at St. Bartholomew's Hospital shall appear next week.

An important communication from *Mr. Gibb*, of Newcastle, on the recent epidemic in that town, is in type, and shall appear next week.

Communications are in type from Dr. SMITH and Mr. HILL; also Reports of the Pathological Society, King's College Medical Society, and Newcastle and Gateshead Pathological Society.

COMMUNICATIONS have been received from—

Mr. H. W. LEY; Mr. BAILLIERE, Paris; C. J. GIBB, Esq., Newcastle; Dr. HAWKSLEY; S. A. PHILBRICK, Esq.; E. COUSINS, Esq.; SECRETARIES OF NORTH LONDON MEDICAL SOCIETY; J. WALKER, Esq.; Mr. MACKENZIE; J. M. GOODINGE, Esq.; H. J. ANDERSON, Esq.; H. LEE, Esq.; T. P. HESLOP, Esq., Birmingham; J. PRICHARD, Esq., Leamington.

ORIGINAL LECTURES.

CLINICAL LECTURES

ON THE

RELATION OF RENAL DISORDERS TO DISORDERS OF THE STOMACH, AND TO OTHER ACUTE AND CHRONIC DISEASES.

By H. BENCE JONES, M.D., F.R.S.

Physician to St. George's Hospital.

Lecture IV.

ON BRIGHT'S DISEASE.

The subject of this lecture is far too extensive for a single hour; and, as I last year took the opportunity of dwelling upon the history and treatment of some cases of albuminuria then in the hospital, I shall on this occasion occupy your attention with remarks on the state of the urine in different cases, as regards quantity, specific gravity, amount of albumen, colour, and microscopic appearances, chiefly in relation to prognosis and treatment.

In the three preceding lectures, I have brought before you the results of congestion of the kidney. You have seen that congestion causes the effusion of albumen, fibrin, and blood-globules, and that a decrease in the specific gravity of the urine at the same time occurs, in consequence, probably, of the congestion hindering the escape of some substances out of the blood. By Bright's disease, precisely the same effect on the urine is produced. Between the urine passed by a patient after the cholera, or after scarlet fever, and the urine of a patient with Bright's disease, I see no difference whatever, either chemically or microscopically. The low specific gravity in Bright's disease is to me produced by exactly the same cause as the low specific gravity when the kidneys are inflamed after injury of the spine, or when they are congested in cases of chylous urine. Generally, the decrease of specific gravity may be taken as the index of the extent to which the kidney is affected; that is, the lower the specific gravity of the urine when albumen is present, the greater the alteration in the circulation through the kidney, the greater the congestion in chylous urine and after cholera; the greater the inflammation in spinal cases, and the greater the so-called degeneration (the effect of congestion and inflammation) in Bright's disease.

There are two opposite classes of cases of Bright's disease which require to be pointed out as exceptions to this law. In one class of cases there is considerable thirst, and very large quantities of urine are passed daily, and the specific gravity is consequently thereby reduced. In the opposite class of cases, the quantity of urine passed daily is exceedingly small, and hence the specific gravity rises sometimes very considerably above the healthy standard.

I shall illustrate both these classes by some examples.

A medical man was sent to me from the country, under the impression that he was suffering from diabetes as well as Bright's disease. He had no urine with him, and I asked him to come the next morning with the urine made at night. The following day he brought four quart bottles full, which, he said, was about the usual quantity passed in twelve hours. It contained no sugar; had a specific gravity of 1006, and was highly albuminous.

A woman, aged 43, who had œdema of the legs two months, was in the habit of passing three quarts of urine in twenty-four hours; the specific gravity usually was from 1007 to 1010. She always complained of great thirst. On one occasion, the quantity of urine was three quarts in fourteen hours; the specific gravity was then 1004.

A farmer, aged 50, was brought to me for diabetes. The urine was highly albuminous, contained no trace of sugar. The usual quantity was seven pints in twenty-four hours; the specific gravity was 1010. His only complaint was of headache.

Many similar cases I might bring before you; but these are sufficient to show that the quantity of urine must be taken into account before any conclusions as to the extent of the degeneration of the kidneys can be drawn from the specific gravity of the urine.

[No. 739.—New Series, No. 178.]

I pass on to the opposite exception, to the law that the specific gravity indicates the degree of disease of the kidney.

A woman, aged 38, had swelling of the legs for three months. She had a healthy, florid look. The dropsy was excessive. At one period of her illness, only three ounces of urine were secreted during one night; the specific gravity was 1036·2. It was intensely albuminous, loaded with urates, and contained many fibrinous casts. For six weeks after her admission into the hospital, the quantity of urine was seldom more than half-a-pint in twenty-four hours; the specific gravity was from 1027 to 1033. In six weeks more, the urine became more plentiful, specific gravity 1017·4. She gradually became comatose, and died.

A woman, aged 21, had swelling of the legs for ten months. They were always most swelled when the catamenia were present. The face was flushed and full. In twenty-four hours, half-a-pint of urine was made; it was exceedingly albuminous, loaded with urates, specific gravity 1035. She complained of sickness and drowsiness. By aperients and the vapour-bath, the urine became clear. The specific gravity fell to 1030, and the dropsy was lessened. After she left the hospital, I lost all knowledge of the progress of the disease.

Other cases like these I have seen, and from them I cannot but warn you from founding a favourable prognosis from urine of high specific gravity, even when urates are precipitated.

These exceptions lessen considerably the value of the knowledge to be derived from the specific gravity of albuminous urine; but, by accurately observing the quantity of urine as well as its weight, you may approximately determine the amount of congestion in the kidney; and, if this be frequently determined, the existence and degree of the disease of the kidney may be foretold.

Having spoken of the quantity and specific gravity of the urine in Bright's disease, I will pass on to the quantity of albumen in the urine.

In my last lecture, on chylous urine, I showed you how rapidly the urine may vary in the quantity of albumen which it contains; and in this, as well as in at least one other disease (mollities ossium), large quantities of albuminous substance may be thrown out by the urine without the existence of any serious disease of the kidney. The quantity of albumen is a test of the amount of congestion of the kidney at that time; and if at all times a large quantity is found in the urine, it indicates that the kidney is always highly congested, and it becomes most probable that this is produced by organic changes in the texture of the kidney. Thus the amount of albumen in the urine is often considered as bearing a direct relation to the amount of degeneration in the kidney. If this were so, then little albumen in the urine would, on the other hand, indicate slight affection of the kidney; whereas there may be the most extensive disease of the kidney, and some cause may be in action which temporarily prevents the congestion of the kidney, (as, for example, some determination of blood to some other part of the body); then the amount of albumen in the urine may be very much diminished, and sometimes none at all may be detectable.

A labourer, 55 years old, was admitted, on the eighth day, of acute pleurisy of the left side. The heart was displaced, the cavity of the chest being full. There was a history of œdema some months previously, and as his heart was healthy, the urine was carefully examined, but no trace of albumen could be found. The effusion increased; the day but one after his admission the urine was again examined; it was quite free from albumen; specific gravity 1025; it was not nearly so deep-coloured as it usually is found to be in cases of pleurisy. A week after his admission the difficulty of breathing increased; he had an epileptic fit; the urine was still not deep-coloured, contained a little urate of ammonia; specific gravity 1022; it gave a precipitate of earthy phosphates by heat, nearly clearing with a drop of dilute hydrochloric acid; nitric acid alone gave a slight cloudiness. On account of the difficulty of breathing, paracentesis was performed; eighteen ounces of purulent fluid were drawn off. Shortly after the operation, the breathing was free; two hours after the pulse was irregular and unequal, and the difficulty of breathing was nearly as bad as before. During the night he had three attacks of convulsions; in the last he died.

Feb. 9, 1847.—On examination, both kidneys were highly granular.

Sometimes the albumen is absent only at the commencement of an acute inflammation of another part.

A youth, aged 16, was in St George's Hospital, under Dr. Chambers. He had some œdema and much fever, with rigors. In a day or two he complained of excessive pain in the left side; the urine did not coagulate with heat alone, and very slightly with nitric acid. In four days the heart was pushed to the right of the sternum; the fever was diminished; the urine was more coagulable by heat and nitric acid; one specimen had specific gravity 1015, another 1010. At the end of another fortnight the urine remained still coagulable by heat and acid. On account of the difficulty of breathing, paracentesis was performed, and about four ounces of pus were drawn off from the chest; the difficulty of breathing increased, and he died forty-eight hours after the operation.

When the capsules of both kidneys were removed, the surface appeared quite smooth; the vessels were injected; the substance looked more white than natural. On section being made, there was an increase of cortical structure, which was much more mottled than natural.

These, and many such cases, prove that the quantity of albumen does not indicate the amount of disease in the kidney, but it does show the amount of congestion at the time of the observation. A highly diseased kidney may be very slightly, or not at all congested, and a highly congested kidney may be very slightly diseased. The quantity of albumen may be very small in the first case, and very great in the last.

The general rule, that the quantity of albumen is proportioned to the state of the congestion of the kidney, is of great importance for treatment and prognosis; and the exceptional cases mentioned above only confirm the general rule, that the quantity of albumen indicates the degree of congestion, and not the degree of degeneration. Such cases are also instructive, because they show the necessity for making more than one or two examinations for albumen before it is concluded that no disease of the kidneys exists.

In the first of the two last cases, I have mentioned the pale colour of the urine at the time when acute inflammation of the pleura was present. This paleness of colour may be very frequently observed when blood is not present to discolour the urine. When the kidneys are healthy, acute inflammation causes the urine to become deep coloured, almost proportionately to the intensity of the inflammation; but when the kidneys are diseased this proportion ceases. In Bright's disease the most intense inflammation of a serous membrane may exist, and yet the urine throughout may show no alteration of colour or appearance.

Among many examples of this, perhaps one of the most striking that I have seen was in a medical man, who for many months had pale, straw-coloured urine, highly albuminous, specific gravity about 1010. He was attacked by acute pericarditis, with delirium and loss of sleep. His symptoms exactly resembled those which occasionally occur in the pericarditis of rheumatic fever. He died about the tenth day of the inflammation; the urine throughout presented no change whatever in colour or specific gravity; it had no resemblance to the urine of acute inflammation.

Such, then, are some of the facts which may be derived from observation of the specific gravity, the coagulability, and the colour of the urine, in cases of disease of the kidney. You will see from this, that chemistry cannot tell the exact state in which the kidney will be found after death, but that it does give much help in determining the state of the circulation through the kidney during life.

That which chemistry is unable to effect, the microscope professes to make clear. According to the microscopic appearances of the urine, the appearances observed in the kidney after death have been subdivided into many different diseases; and, instead of a single disease in different states of congestion and stages of deposit, we are asked to recognise as many different diseases as there are different microscopic appearances in the urine. Thus, in urine may be found, 1st, tube-casts, with recent gland-cells; 2ndly, waxy tube-casts; 3rdly, fatty tube-casts; 4thly, casts with fibrin; 5thly, casts with pus or blood. These are said to be the distinctive signs of nearly as many distinct diseases. First, of acute or chronic desquamative nephritis. The second disease is, waxy degeneration of the kidney. The third, fatty degeneration; and this is divided into two perfectly distinct diseases,—(a) granular fatty degeneration, and (b) mottled fatty degeneration. The fourth disease, corresponding to the fourth microscopic appearance, is acute and chronic non-desquamative nephritis. The fifth disease is suppurative nephritis. This subdivision can scarcely fail to remind you of the proposed subdivisions of some cutaneous diseases founded on the appearances of the eruption. There is no practical gain in subdividing scabies or erysipelas into different diseases, according to the appearances of the eruption. What, think you, was gained by assuming as many different syphilitic poisons as there were different forms of secondary syphilitic eruption? I shall keep to the simpler view, which appears to me to be truer, simpler, and more practical,—a single disease, in different states and stages of congestion, deposit, and wasting, not arising from the elimination of any peculiar animal poison, but produced by a diseased state of nutrition, leading to the deposit of fibrin, fat, or pus, and ultimately to the wasting of the structure of the organ.

Such are the broadest outlines of the different views of Bright's disease. There are, at present, four cases of this disease under my care in the hospital. You will see how little assistance, in regard to their treatment, can be derived from the microscopic examination of the urine. Nevertheless, with the hope of arriving at more certain knowledge, the microscopic appearances of the urine should be carefully observed. You may thus help to determine whether there is a vital process of desquamation; a rapid formation and shedding of renal gland-cells; whether the so-called large granular fat kidney and the small contracted kidney are the result of two essentially different morbid processes; whether the epithelium in this last state is disintegrated and swept away, and in the former state transformed into fat; whether the smooth, mottled, fatty kidney bears no relation to the granular fat kidney; or whether the deposit of fat is not unessential in both states of kidney, appearing as pus may appear in any stage or state of the disease.

Those of you who may have the opportunity of seeing much of scarlet fever will, by careful microscopic examination of the urine, be able to add importantly to our knowledge. The late Dr. Miller, than whom I know no one who had so carefully watched the sequelæ of scarlet fever, and from whom, if his life had been spared, more valuable knowledge would have been obtained, told me that he had seen in the urine every variety of microscopic appearance attributed to Bright's disease, and that in *post-mortem* examinations no distinction could be made, for all forms of deposit were to be found after scarlet fever. The microscopical questions regarding the state of the urine after scarlet fever will repay the minutest and most extended research. Whatever you observe note it carefully, and publish it slowly, for premature publication leads only to corrections and ends in disputes.

You will say, what is to guide me in my prognosis and treatment? I reply, do not trust alone to the microscopic appearances in the urine, but take the case as a whole. In a case of consumption, it is rarely that you can determine by the stethoscope alone the course which the disease will follow or the best treatment to be adopted. The stethoscope may give most important assistance, but the history, the general symptoms, the special circumstances, will still more correctly determine your judgment as to the duration of the case and the most suitable treatment. So, also, in renal diseases. The microscopic examination may give most valuable knowledge regarding the state of the kidney, *e.g.*, the pus may indicate suppurative inflammation; the blood, a loaded state of vessels; the fibrinous casts, the degree of recent congestion; the fatty matter, the duration, perhaps, of the evil; but it is far more important to take all the features of the case than to make the microscope the sole foundation for your prognosis and treatment.

In albuminuria, as in other diseases, take the history first. If you can trace the complaint to scarlet fever, to sudden cold, or to pregnancy, the chance of recovery is far more favourable than if the disease has insensibly approached. I could give you many instances of recovery where the disease commenced from such causes; but I know of no perfect recoveries where a bad state of health has given rise to disease of the kidney as a secondary consequence of a previous cachectic state. You will see in my last year's lecture some examples of the first commencement of the disease at the end of phthisis and chronic pleurisy.

I must refer you to that lecture for a warning regarding mercurials, and for the benefits to be derived from elaterium and vapour baths, and though I must repeat that the total and continuous removal of the albumen from the urine is rarely accomplished, still I have seen no symptoms, not even the most violent epilepsy, which should lead the physician to despair of temporary relief, while scarcely a week passes in

which you may not see a patient who came in with dropsy and albuminous urine leaving the hospital with the dropsical symptoms temporarily, though not permanently removed. It is rarely that such cases can be afterwards kept in view. One or two of these are of sufficient interest to be mentioned here.

A gardener, aged 32, was admitted with œdema of the face and legs. He had been ill a fortnight, during which time he had passed very dark-coloured urine. It was highly albuminous, contained many blood-globules and many fibrinous casts; specific gravity 1010. He was cupped twice on the loins. He took tartarised antimony and digitalis with sulphate of soda as an aperient. In a fortnight, the dropsy and the albumen were much diminished. A grain of sulphate of iron was given with sulphate of soda thrice daily. In six weeks from his admission, the dropsy was gone. The urine contained very few blood-globules. Much less albumen. The specific gravity remained as before, when he became an out-patient. After three months and a half, he came to me; his health was very much improved. The urine still contained a very large quantity of albumen; he had no return of the dropsy, and had resumed his work. A year after he had gone out of the hospital, he came again. He said he was quite well. There was much less albumen in the urine. Six months after this, there was still albumen. The specific gravity of the urine was 1020. He had walked, he said, above a dozen miles to the hospital, and was quite well. Two years after he had gone out, there was still albumen in the urine; four months after this he came to the hospital, just recovering from a sharp attack of gout in the foot. It had lasted a fortnight. During the next three years, I saw him less frequently; he had no return of the gout or dropsy, but I always found albumen. His last visit was five years and six months after he went out of the hospital; he said he had been suffering from bleeding piles, which caused him to lose much blood. He was weak, but had not fallen away. He had no dropsy, the urine made at the hospital, at 2 p.m., was clear, contained more albumen than had been present for some visits. Specific gravity 1016·6. It gave crystals of uric acid on standing. Five months after this, (that is, six years nearly after his discharge,) he again came to the hospital with a severe attack of gout. Urine, specific gravity 1015, albuminous, with blood globules.

In another case, the patient was frequently in the hospital during ten years; he ultimately died of ascites.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. IX.

EXTRACTS FROM A REPORT ON THE VENTILATION OF SHIPS.

From the Official Journal of H.M S. Modeste, for the Year 1852.

By T. SPENCER WELLS, F.R.C.S.

In accordance with the 39th article of the Instructions for the Surgeons of Her Majesty's Fleet, in which directions are given to each surgeon to "communicate his observations upon any points that he may consider beneficial to the Service, and to propose such measures as he may think likely to conduce to the health and comfort, as well of those under his immediate care as of seamen in general," I beg leave to offer the following observations upon the ventilation of this ship, and of Her Majesty's ships in general.

When first I joined this ship, I found that the space allotted to the seamen was 54 feet in length, 6 feet 6 inches in height between the beams, and 28 feet 8 inches in its greatest breadth. In this space, 130 seamen had to live, cook, eat, and sleep. So far from being clear, it was occupied by the galley, chests, mess stools and tables, hawsers on reels, etc.; so that when hammocks and bags are below, the men must have far less breathing space than is enjoyed by the inhabitants of the lowest lodging-houses in the narrowest alleys of London, still further less than is secured to felons condemned to imprisonment in any gaol in Great Britain.

The sole means of supplying air to this space were two hatchways, and four scuttles, two on each side. In dry, windy weather, windsails can, of course, be carried through the hatchways, and supply an adequate amount of air, although not in such a manner as to distribute it equally; but in calms, these windsails are useless; in wet weather they are inapplicable; and, consequently, the hatchways at these times are the sole means of ventilation. When they are protected from the rain by hoods, the supply of air must be very defective; and when it may become necessary to batten them down in a heavy sea, there is absolutely no means whatever of conveying air below or of removing the foul air generated by the men.

[Mr. Wells, after detailing the steps he took to improve the ventilation of the Modeste, proceeds:—]

It must be unnecessary to point out here, that when a number of persons breathe in a confined space, the carbonic acid gas exhaled from their lungs must be collected in that space to pass again through the lungs of the breathers in a more or less diluted condition. Each candle burning in the same space forms about the same quantity of carbonic acid as a man breathing. Thus, if the place be air-tight, sudden death by suffocation must necessarily follow. This, however, only occurs in such extreme cases as the Maria Somes and City of Londonderry. Injury to the general health by a process of slow poisoning by carbonic acid I believe to be very general in the Navy. This is now well known both to men and officers. Many of the best men-of-war's men now serving in yachts declare that the bad ventilation of ships in the Navy is one of their principal reasons for wishing never again to enter the service; and I have heard many executive officers state, that when they have had to go round the lower decks at night, they have often been obliged to rush into the open air to remove the sickness caused by the foul air in which the men have to sleep several hours every night, suspended in that portion of it which must necessarily be the most poisonous, the gas issuing warm, and therefore light, from the lungs, and collecting in the upper part of the sleeping space. A healthy man requires four cubic feet per minute of pure air to ensure the changes which should take place in his blood during respiration, and to remove and sufficiently dilute the carbonic acid he exhales.

The only plan adopted in the Navy for ventilating the lower decks of flush-decked vessels, or the decks of line of battle-ships, when the ports are closed, is that of canvas wind-sails carried through the hatchways. But these supply either too much air or too little. They are almost useless in a calm. In a strong breeze they are blown down, or send powerful draughts of cold air in certain directions only. They are not adapted for rainy weather. They cause cold or rheumatism in the person exposed to their direct action, so that these persons often tie them up, and thus cut off all supply of fresh air to the deck during a whole watch. It is clear, therefore, that some other plan should be devised.

By means of a series of tubes properly disposed, an abundant supply of fresh air may be easily conveyed to the lower deck, and distributed over every part of the ship, whenever there is a fresh breeze, or a ship is going fast through the water. The impure air may also be easily removed by another series of tubes, communicating with a large one, which is heated by a lamp, or by passing near the galley fire. Thus, by means of a double set of tubes, a self-acting system of ventilation will secure removal of impure, and supply of pure air, which, under ordinary circumstances, would be quite sufficient to preserve the health of the crew. Lieutenant Gilmore's patent air-funnels are filled with a movable cowl, ranging in height with that of the bulwarks.

The cowl of the supply-tube is trimmed to windward; that of the discharge-tube to leeward. But the great objection to this arrangement is, that persons in one part or other of the ship must suffer from impure air of another part being driven towards them. For instance, in a steamer going against a head-wind, or in a ship beating to windward, the hatches in either case being covered, the pure air comes down the fore air-funnel, and blows towards the stern, carrying with it all the exhalations of the persons congregated forward. It has been found, in practice, that the air which escapes from the discharge-tube is exceedingly offensive, and it is evident that many persons in the after part of the ship must have been exposed to this offensive air before it was discharged. The case would be the same, except that those forward would suffer when a ship goes before the wind. If, in men-of-war, a pair of these tubes

were supplied to each deck, opening with air-channels running all round the upper and lower part of the deck, the lower communicating with the supply-tube, the upper with the discharge-tube, the objections would be in a great measure removed. The tubes themselves might be either placed in the sides of the ships, with the cowl upon the bulwarks, or they might pierce through the deck in some convenient situation near the hatchways or masts. If a lamp were placed in the discharge-tube, the current of air along it would be considerably increased, the tube then resembling a chimney with a fire in the grate. The size of the tubes should vary with the number of men to be supplied with air, the rule being to make the tubes about the size of the united wind-pipes of the men. Three inches may be taken as about the size for ten men; but in calculating the rate of increased size for additional number of men, it must be remembered, that a tube six inches in diameter will convey nearly four times as much air as one of three inches. Two three-inch could be put within one six-inch tube, and large side spaces would be left free.

But, in addition to the simple arrangement of tubes and air channels, it is necessary to be able, under all circumstances of wind or weather, to possess the means of supplying as much air to all parts of the ship as the human beings congregated below may require. This can only be effected by some form of air-pump, which, in cases of emergency, can be fitted to the supply and discharge tubes. Dr. Arnott has devised two forms of air-pump which fulfil the desired object most simply, beautifully, and effectually, with so little expenditure of power, that the labour of one man is sufficient to supply as much air as a thousand persons may require for breathing. Two boys can work one easily for two hours with so little fatigue, that they are fit for any other duty at the close of this labour. And in steamers, half-horse power from the engine would be more than sufficient. Any carpenter could make such a pump out of materials found in every ship, at the expense of a few shillings.

The chief peculiarity in Dr. Arnott's pumps is, the use of the curtain valve. These are so light, that, without limit as to size, no valvular obstruction is offered to the passage of air. They consist simply of pieces of oiled silk, dreadnought, painted canvas not too thick, or cloth of a close texture hanging across an opening, through which they are prevented from passing by wire lattice work. If the pump be very large, the valve is formed of several pieces of cloth or dreadnought, so fastened as to overlap each other, like the slates of a house, or the scales of a fish. A draught of air blowing against a piece of cloth fixed on one side of lattice work would blow it open, while a draught in the opposite direction would close it. Thus, by nailing these curtain valves within or without the upper part of openings in the side of a box, air may be drawn in in one direction, and forced out in another by strokes of the same piston of flap.

When a piston is used, the pump is simply a square box, closed on all sides except where the valvular openings are, and where the piston-rod passes through. The piston is merely a piece of wood, fitting closely to the sides of the box, but still loose enough to move up and down inside with but little friction. It is made so that it can only move in the part of the box between the upper and lower valvular openings, in order not to interfere with the action of the valves. One side of the box must communicate with the open air, either directly or by means of a tube; and the other side with the tube which is to distribute the air throughout the ship. It thus becomes a supply-pump of fresh air; and, by reversing the action, it may be made a discharge-pump of impure air. It is not necessary, however, to keep two pumps in action; for, if a tube communicate with the upper part of each compartment, the impure air will escape without pumping, when fresh air is freely supplied, especially if a lamp be kept burning in the discharge-tube. A pump of this kind, with the space in which the piston works three feet square, will easily distribute 1000 cubic feet of air per minute. This is an allowance of four cubic feet per minute for every person in a crew of 250, a quantity quite sufficient to afford pure air for breathing, as well as for the dilution and removal of all impure exhalations.

On the same principle, a swing-flap or pendulum-pump may be made. This is a cubical box, divided into two equal parts by a hanging flap or partition. The flap is so hung, that it may swing backwards and forwards like a pendulum, from one lower corner of the box to the other. The bottom of the box is concave, to correspond with the sweep of the pendulum, which is made to fit the box all round, to within the twentieth of an inch. This flap forces the air before it, just like the sweep of a fan, or the piston in the pump just described. The valves also act in the same manner. It may be worked either by a handle connected with the axis of the pendulum, or by pulling ropes acting upon it, just as in the act of tolling a bell. It should not be worked more quickly than the usual rate of a clock pendulum, unless springs be fixed inside, near each lower corner, to assist recoil, and prevent injury to the apparatus from hard striking.

This pump, like the other, is both a forcing and a drawing pump, and acts either as one or the other, according to the arrangement of the valves and air-channels. It is peculiarly adapted for ship ventilation, because it may be easily fixed in any part of a ship, and serves the double purpose, at the same time, of supplying pure and removing impure air. For example, one might be fixed in every cabin of a large steamer, and the whole kept working night and day by a crank from the engine, at less than the expenditure of half-horse power. The lower half of a pump of this kind, a foot square, projecting through the top, in one of the corners of each cabin would not occupy useful space. The upper half would communicate with air admitted by openings in the deck or bulwarks, or open into an air-tube. Nothing would be easier than to carry a double tube all round the ship between the timbers. Into one compartment of this tube the pump would discharge the impure air from the top of the cabins, while the other compartment would supply pure air, to be distributed by the pump round the bottom of the cabin. When hatches or ports remain open, there could be no necessity for the supply by the pump; for, if the impure air were effectually removed, the pure air would find its way in to supply its place. In cold weather it would be very easy to warm the air before its admission into the compartment of the tube destined for the supply by the pump.

Besides their utility as ventilators, either of these forms of pump would also be exceedingly useful in steamers, to keep up a current of air upon the fires. At present, the draught of the funnel is absolutely necessary to keep the fires burning; and, if the funnel were injured by a shot, or in any other manner, so that the draught were prevented, the fires would go out, and the steamer be rendered powerless. A very small expenditure of power from the engine employed upon one of these pumps would insure a constant draught of air under all circumstances.

CONTRIBUTIONS TO ORTHOPÆDIC SURGERY.

By BERNARD E. BRODHURST, Esq.
Assistant-Surgeon to the Royal Orthopædic Hospital, etc.

(Continued from page 526.)

Sir Charles Bell, Case 175, has written thus:—"There is, at this date, a young woman in the hospital, with an obstinate contraction of the tibialis anticus muscle, which draws up her foot into the shape of the club-foot of children. At one time the spasm in the leg became more general, drawing her thigh up to the abdomen with severe pain. This young woman was relieved and dismissed, and has just returned to the hospital with her great toe permanently dislocated."(a) Congenital varus is, perhaps, never alone of a clonic character. Spasm, whether it be manifested in the muscles of the hand, foot, neck, or other part, is usually tonic, and persists probably as long as the irritation lasts; and after the cause is withdrawn, its effect may remain, the impression yet remaining. This is witnessed in club-hand. In varus, the bones, having been rotated by muscular action, become more or less fixed in their non-natural positions, and thus become in themselves a cause why the limb should not be returned to its normal position by muscular action alone, the antagonistic force of the muscles which oppose those which are retracted being insufficient, through the non-natural positions of the tarsal bones, to restore the shape of the limb. But, when muscular force is opposed to muscular force alone; when increase is equal to loss in the opponent muscles; when this is the consequence of irritation alone, and not combined with paralysis, as in cheirismus, as in congenital

(a) "On the Nervous System of the Human Body." Ed. 3., p. 429.

varus, without rotation of tarsal bones; when this is the result only of irritation, but irritation now absent, distortion is not permanent if position be not added, as in walking, to perpetuate this distortion. It is an error to suppose, that because the adductors of the foot are in effect shorter than their opponents, their apparent want of length is the cause of distortion. Shortening has resulted in virtue of a physical law which is obeyed at every turn; through which, muscles in a state of health are powerless to resume their functions, after even a short period of cessation; through which retraction of one set is equal to loss of power in the opponent; through which a condition of permanent unyieldingness is assumed after fracture and dislocation, so that sudden traction after death is not more available than during life to cause them to resume their normal length. Even with opponent paralysis, retraction is always proportionate to the amount of paralysis. And when, through sudden increase or diminution of power in a given set of muscles, distortion is produced, this is not permanent when it is the result of irritation only, and neither combined with inflammation nor paralysis.

Although the muscles are the agents through which distortion is produced, they are not the only structures which undergo shortening. Functional shortening—retraction, by creating immobility, causes loss of function through impaired nutrition.

In the commencement, the muscles are alone retracted, and the vessels are found to accommodate themselves through one or more curves corresponding to the distortion; but, after a series of years, when structural change, and consequently structural shortening, has taken place in the muscles, the vessels, the nerves, and parts adjacent, are likewise found no longer to be uneven in their course, but to be essentially shortened; and at the same time that the muscles undergo fatty degeneration, the fasciæ lose their glistening aspect, the ligaments soften, lose their elasticity, and elongate, the tendons diminish in size, the vessels in calibre, the nerves as though reduced to their neurilemma, the skin its softness, elasticity, and smoothness. The following account of a dissection of congenital varus, by Cruveilhier, will be read with interest. It occurred in a female, who died of pulmonary apoplexy, aged 41. The limb was first injected through the popliteal artery. "The thigh of that side on which was the deformity was nearly of the same size as that of the other side; the leg, however, was evidently atrophied. The subcutaneous layer of fat was of very considerable thickness. The skin was hard; that is to say, the dermis was thickened, and the epidermis composed of several layers over the tuberosity of the calcaneum, which projected considerably. An irregular synovial capsule allowed the skin to move freely over the tuberosity. The skin of the sole of the foot was thin, as that which has not been subjected to friction. The aponeurosis of the leg was much thinner than usual, and had in part lost its glistening appearance. The nerves, especially the muscular branches, were extremely small, as though reduced to their neurilemma. The tibial arteries had not half their usual calibre, and only one muscular branch was injected. The veins, in like manner, were diminished in size. All the muscles had passed into a state of fatty degeneration. The tibialis anticus, extensor longus digitorum, the peronei, longus et brevis, the soleus, and the external head of gastrocnemius, and the tendons themselves, were very much attenuated. The tendo Achillis was certainly not half the size of that of the other foot; and the aponeurosis, having undergone a similar amount of atrophy, showed that exercise is as necessary to the tendons and the fasciæ as to the muscles. The traction which the muscles make on their tendons during contraction is the exercise that is requisite for them, and the distension which is caused by the same contraction is that which is necessary to the aponeuroses."(a)

Because inaction is of itself sufficient to induce fatty degeneration, it would reasonably be expected that those muscles which are most inactive—namely, those which are most extended—should first undergo degeneration; and such is, indeed, the fact. But impaired nutrition is induced by disordered nervous influence, as well as by inaction. In the case quoted of Mr. Adams, varus of the fourth degree, complicated with spina bifida, and which died a few hours after birth, the external head of gastrocnemius, the extensor longus digitorum, and the peroneus tertius, were "degenerated and degenerating into a kind of fibro-cellular tissue, mixed with oil-globules. Dr. Quain considered both the general and microscopical appearances to indicate a state of arrested development of the muscle, and subsequent decay and degeneration;"(a) while the contracted muscles—viz., m. tibiales, posticus et anticus, the inner half of gastrocnemius, extensor proprius pollicis, and peronei longus et brevis, were well-developed, and even hyper-developed. The flexors and the abductors are the muscles which first undergo change; and it is not improbable that such change as is described above is not rarely developed with extreme distortion *in utero*. Such complete change as that described by Cruveilhier is doubtless rare; in the anatomical museum attached to King's College, however, is an instance even more complete than that of Cruveilhier. I know no circumstance which pleads more forcibly the spastic character of club-foot than muscular degeneration. If distortion depended, as is thought by some, on mechanical pressure from without, as by the walls of the uterus, or through position of the fœtus, of one part upon the other, then one set of muscles would be relaxed, while the others were extended, and both would, perhaps, be equally well-disposed for the development of fatty change. And, although contraction of the relaxed muscle would take place in virtue of a law which has already been alluded to, it cannot be conceived that a muscle which is allowed to contract upon itself can be in the same position as one which is tonically retracted. Now, in a paralytic limb, there is no predilection for the commencement of fatty transformation; but, while a muscle is active, there would appear to be no disposition to structural change. In talipes those muscles alone are affected which are inactive, while the retracted muscles become even hypertrophied. On restoring motion to muscle in which this change has commenced, by restoring position, healthy muscular fibre will again take the place of that which was degenerating. Again, rotation of the tarsal bones, and congenital dislocation, demonstrate clearly, that retraction, to which allusion is now made, is no passive contraction, but spasmodic action. Never was a bone dislocated by the healthy action of its proper muscles.

From what has gone before, it may be deduced, that the most prominent marks of difference between an ordinary pes varus at birth, and after the weight of the body has been long borne on the foot, are, 1st, the folding of the metatarsal bones into the sole of the foot. 2nd. Separation of individual tarsal bones, through elongation of ligaments. 3rd. Alterations in form, through attrition, of individual tarsal bones. 4th. Retraction of the plantar fascia and of the muscles of the sole of the foot. 5th. Atrophy of the osseous and soft parts of the foot and leg. And, further, of the muscle; that clonic spasm has a tendency to increase and become permanent; that tonic spasm may exist without opponent paralysis; that muscular retraction is proportionate to opponent paralysis; that loss of function induces structural change. Many other deductions necessarily follow in this train; their consideration, however, will perhaps be more properly deferred, to be spoken of together with the treatment. It must be obvious that so many and various conditions can scarcely admit of a single mode of treatment, and that science might well be dispensed with, did she not afford indications both for diagnosis and treatment.

(a) "Anatomie Pathologique," Tome I., p. 3. 1835. Paris.

REPORT OF THE CASES OF CHOLERA AND CHOLERAIC DIARRHŒA,

TREATED AT THE NEWCASTLE-UPON-TYNE INFIRMARY DURING THE PRESENT EPIDEMIC,

WITH OBSERVATIONS THEREON,

By CHARLES JOHN GIBB,

House Surgeon, Lecturer on Anatomy and Physiology in the College of Medicine in connexion with the University of Durham, etc.

(As read before a Meeting of the Newcastle and Gateshead Pathological Society, held Nov. 11, 1853; T. M. Greenhow, Esq., President, in the Chair.)

Mr. President and Gentlemen,—About a fortnight ago, I was requested by the House Committee of this Institution, to draw out a short report of the cases of cholera treated at the infirmary during the recent epidemic, and I have to offer you this evening a similar report, modified, of course, to suit the professional

(a) Loc. Cit.

nature of this meeting. I would not not have obtruded it upon the Society at the present time had any important communication relative to the fearful plague which has so lately devastated the town been presented to its notice. I am induced to do so now, because I feel assured that the meetings of the Society can be most usefully occupied at this period in the consideration of the nature and treatment of cholera, as each Medical man's experience is fresh, and his memory still forcibly impressed by the vast amount of disease witnessed during the epidemic.

In addition to this reason, communities that have hitherto escaped unscathed are impatiently waiting to hear the opinion of the Profession of the town on many points, which, notwithstanding the experience afforded by former epidemics, still remain clouded in doubt and mystery.

It is unnecessary for me to enumerate the disputed points connected with the disease; they are numerous and important; and I can scarcely conceive that, after the Profession of this town and neighbourhood has had such ample opportunities of observing the disease in all its phases, it will be unable to shed some additional light on the subject, and to clear away some of those clouds which surround the disease with so great an air of mystery as to infect the minds of even many intelligent persons with the idea that it is a supernatural visitation. True it is, that at present it walks in comparative darkness; but such might have been said at one time of many or most of those epidemic diseases whose laws are now clearly defined, their nature intelligible, and their treatment, both in a preventive and a curative light, clear, and based on well-established facts.

I may, in the first place, observe, that the Report embraces those cases of cholera and diarrhœa occurring within the infirmary among the in-door patients and officials, together with the preventive measures put in force against the extension of the disease during the epidemic; and, secondly, the relief given to the out-door poor.

Firstly, then, with regard to the relief given to the in-door patients and officials of the infirmary. I believe I am correct in stating, that the first fatal case of cholera occurred in Newcastle on the 31st of August last. It was a few days previous to this, namely, on the 25th and 30th, that two isolated cases of the so-called choleraic diarrhœa presented themselves in the wards of the hospital. The fluid rice-water motions were well marked; and those characteristic feelings of weakness and sinking, together with that peculiar pallid, deadly complexion which quickly supervenes upon the occurrence of any well-marked symptoms of choleraic infection, were also so evident, as to leave no doubt of the nature of the attacks. Those cases recovered, and similar ones presented themselves almost daily during the whole of the month of September. They numbered forty-two in all, and, although in many the motions did not assume the rice-water appearance, as, indeed, they sometimes do not in even fatal cases of cholera; yet, in all, there were constitutional signs of epidemic infection. I shall confine myself at present to a simple enumeration of the cases, reserving to the end of the report any observations I have to make upon the treatment, and other points in the disease.

The first fatal case of cholera in the infirmary appeared on the 7th of September, and recovered from the collapse, but died on the fourth day, of the secondary fever. The second commenced on the 10th, and lingered until the 12th. The third on the 15th, and died in thirty-eight hours. The fourth on the 16th, and died on the 18th. The fifth on the 18th, and died on the 20th. The sixth and last occurred on the 25th, and died in the short space of three hours and a half after the setting in of the premonitory diarrhœa. During the month of September, there were in all forty-two cases of choleraic diarrhœa among the inmates of the hospital, (who numbered about 250 during that period,) together with six fatal cases of cholera.

With regard to the preventive measures used in the infirmary to check the poisonous effects of the epidemic influence, the most laudable efforts were made by the matron, nurses, and servants, to keep every part clean and sweet. All refuse provisions, water, etc., were removed at once; the plumber examined and purified the water-closets; the wards, lockers for the patients' provisions, and furniture, were washed daily; the bedclothes frequently changed; chloride of lime sprinkled about the floors, and vessels containing it laid in each room; the patients enjoined to cleanliness by the frequent use of the tepid bath, and the tone of their bodies strengthened as far as possible against the influence of the disease, by an increased allowance of diet. Periodical visitations were made, and appropriate medicines lodged with each nurse, to exhibit to the patients on the first appearance of diarrhœa; and I can testify to their promptness in doing so. As soon as the first fatal case occurred, I felt it my duty to discharge as many of the inmates as possible, seeing that in the overcrowded condition of the infirmary, the epidemic might be expected to find its inmates in the most favourable condition to fall under its influence. After the first two fatal cases occurred, an additional number of patients, dreading a further outbreak of the disease, solicited, of their own accord, to be discharged, and thus, by their desertion, materially added to the salubrity of the atmosphere. Two wards were emptied of their inmates for the special reception of the bad cases of cholera, in order that, if the disease should actually be contagious in the slightest degree, those affected with it might not form centres from which others might catch the disease. Great care was taken in properly stoving the wards, and preserving everything in them from contact with unaffected parts of the hospital.

So much, then, for the inmates of the infirmary, and the sanitary measures used within it.

Secondly, with regard to the out-door relief afforded to the poor.

I may remark, that, previous to the 7th of September, at which time the infirmary was publicly announced to have been made free to the poor, we had observed a more than usual number of diarrhœa cases among the casual poor who attend during the morning, and are relieved of slight ailments. I may be permitted, in this place, to remark, that, in this department, the wisdom of the makers of the liberal laws of the infirmary is pre-eminent, for the rule relating to the immediate relief of casualties enables the Institution to be thrown open to the poor in the freest manner, during any emergency like that of the prevalence of cholera, and, indeed, at all times opens its portal to the relief of accidents, or persons attacked suddenly by disease.

From the 7th of September to the 13th, about 250 cases of diarrhœa were relieved. On the 14th, there were 109 cases; and, on the succeeding days, there followed, 125, 147, 146, 101, 151, 129, 98, 41, 23, 17, 14, 11, 22, 26, 17, 17, 8, 7, 10, 12, 17, 11, 6, 7, 5, 3; and also 3 on the 11th October, when the record ceases.

1523 was the total number prescribed for; and it is to be regretted, that of the first 631 treated between the 7th and 16th of September, no record is preserved of the relative number of cases of simple or rice-water motions passed by the patients. Of the remaining 892 cases, 750 were found labouring under diarrhœa in which the motions were bilious, and 142 in which they were rice-water like. In addition to the numbers mentioned, I may add, that we visited about 24 cases of cholera at their own homes surrounding the infirmary, many of whom died; and that I visited other patients along with, and through the kindness of, some of the district medical officers; but I do not intend to notice these further than as a means of enabling me to form better ideas on which to found my general observations. We likewise found that numbers of the workmen at the surrounding manufactories resorted to the Institution with diarrhœa, so that, a few days after the epidemic fairly set in, we regularly supplied, at their own request, the foremen, or others in charge of the manufactories, with stores of anti-cholera medicines, by which means we anticipated the attack, so to speak, and the workmen lost no time in taking appropriate medicines to check the disease at the very onset of the complaint. It was surprising to behold the fervour of their faith in the efficacy of the medicines, and the feelings of comparative security with which they worked when in possession of medicines they could at once fly to; and I must confess, that no one with a proper love of his profession could help nourishing some degree of pride in the exercise of it, when he perceived the deep feelings of thankfulness with which his assistance was received.

It will be inferred, from the sudden manner in which the disease attacks its victms, and from the number who applied for relief at the infirmary, that the night applicants were very numerous; and we accordingly carried out arrangements, for upwards of a fortnight, by which we secured constant attendance in the dispensary, and regularly relieved each other during both the night and day.

I may, in the next place, observe, that we preserved a

number of specimens of the rice-water evacuations, vomited fluids, and blood, and submitted them to microscopic and chemical examinations. It would be tedious for me, at present, to enumerate in detail the varying qualities of the fluids examined; suffice it to say, we found the blood so thick and tar-like as scarcely to be able to extract it from the punctures made through the living skin, and, in some instances, were not able to do so. Such as we procured did not present any abnormal constituents by the microscope, but showed the red blood-globules were, relatively to the fluid parts, in very great excess, and that there was not, perhaps, so many of the colourless lymph corpuscles as are usually met with in healthy blood. Of course, this is as might have been expected from the immense draining off of its liquid parts in the motions and vomited fluids.

The *rice-water evacuations*, according to their purity, (if I may be allowed to use the term,) were found to consist of the diluted serum of the blood, variously mixed with the natural secretions and fæcal contents of the bowels. The white shred-like pieces of membrane consisted of fibrine, with numerous colourless lymph corpuscles intermixed; and the clear fluid presented in some instances a few blood globules, with lymph corpuscles, fatty exudation granules, and the various appearances caused by fragments of half digested foods and other fæcal products. It appeared to me that the number and quantity of lymph corpuscles, and what might be termed exudation products, were much greater than ought to have existed in the fluid parts of the blood, if we assumed, that the fluid escaped from the vessels by a process similar to that of simple exosmosis. One specimen of cholera motion taken from out of the utensil used immediately before death, by an old person who died poisoned by the disease without much, or, indeed, with scarcely any fluid evacuations, was to all appearance healthy fluid motion, and it was only on microscopic examination, that the lymph corpuscles and other appearances caused by the presence of the fluid parts of the blood, could be made out to exist in it.

Some of the *vomited fluids* contained albumen. In none did I observe any fibrinous coagula, but they evidently contained some of the serum of the blood, mixed, in some instances, with a grass-green colouring matter, most probably some alteration of the ordinary secretions, such as, indeed, we see occasionally ejected during the progress of other diseases.

With regard to *post-mortem* appearances, I regret to say we made but one autopsy, and are not, therefore, in a position to give much information on this point.

The person died in the stage of secondary fever. He had recovered from the collapse, and appeared on the succeeding day almost well, when suppression of urine, with the irritative, continued sort of secondary fever, set in, and terminated in death in a couple of days. We found tufts of congestion here and there in the course of the mucous membrane of the intestines, some having almost the appearance of being ulcerated. The kidneys were slightly congested, but there was nothing further to give any other than negative evidence of the nature of the disease, and but little definite information to form a guide to the most beneficial treatment during the consecutive fever; indeed, the appearances bear out the observations I made to the Society in relating the autopsies of three cholera patients who died during the epidemic of 1848 and 1849—namely, that all the appearances observed in *post-mortem* inspections go to prove the disease to be one which involves all the vital functions of the body, and not a local affection of any particular system or viscus.

The *post-mortem* appearances in the three cases I examined, may perhaps be interesting to the Society at the present time, and were all so much alike, even in their details, that I can with advantage relate them together, without being under the necessity of particularising each one. The first was a strong, muscular young man, 25 years old, of drunken habits, and subject to occasional slight diarrhœa; the other two were children, and sisters, aged 8 and 12. The rigor mortis was extremely firm in each; the soft structures of the bodies were completely shrivelled up, the face more especially; the lips and nails retained the dark venous colour seen before death; the extremities of the fingers and toes were of a pale leaden hue, the skin sticking, as it were, to the bone, and corrugated, as if it had been long immersed in water; the rest of the extremities of a slightly ecchymosed appearance, but not of the same leaden colour. On opening the abdomen, the small intestines were seen in all three cases much congested, of an arterial hue in the two children, but of a darker cast in the adult, especially at the upper part of the small intestine, where it was quite of a venous hue. The intestines contained a large quantity of the rice-water fluid in the lower part of the canal; but in the duodenum the fluid was of a thick and homogeneous gruel-like consistence. The large intestine was quite pale, firmly contracted, and empty. The mucous membrane of the whole of the intestines was of a natural appearance, except in a few parts of the small intestine, where a patch here and there was injected; the mucous membrane generally had the appearance of being washed. The stomach was much congested in the man, but that might have arisen from his drunken habits, for in the children it was of a natural appearance. The livers looked healthy, contained little blood, and had a dry appearance when cut into. The gall-bladders were distended; the ducts would not allow a small probe to be passed through them from the gall-bladder. The pancreas was healthy in each. The bladders were contracted to a small, hard tumour behind the pubis, and contained not a drop of urine, although the kidneys were very healthy.

The lungs were healthy, the lower parts slightly congested. The left, as well as the right, ventricles of the heart were full of dark fluid blood, more like to thin tar than to any other fluid; and, except a small, flabby piece of fibrine in the left ventricle of one of the hearts, the blood was quite fluid and uncoagulated. The roots of the great veins were filled with the same kind of blood.

From the pale, empty, contracted state of the large intestines in each, and the very opposite condition of the small intestines, I should be inclined to think the evacuations are mainly, if not wholly, thrown out by the vessels of the small intestines.

The *post-mortem* appearances, as I have already said, do not seem to cast anything more than a negative kind of light upon the nature of the disease; they enable us to say what it is not, but, being evidently mere secondary phenomena, and not betraying the motor power which throws the system into the violent and deadly commotion, still leave to the microscope, or more probably to some other minute method of investigation, the task of discovering its real nature.

It is most undoubtedly the case, that the nervous sytem, above all others, first betrays the presence of the poisonous infection, and that death itself, more especially in India, often takes place in a few minutes, evidently from the poison acting much in the same manner as prussic acid affects that system. I look upon it, however, that the blood first becomes the receptacle of the poison, and that, through it, not only the nervous system, but probably the whole machinery of the vital operations of the body, are in a greater or less degree deranged, or entirely suspended.

It is evident the poison is most obnoxious to the organic nervous system, or, in other words, to the sympathetic track of nerves and ganglia; for, derangements in the circulation, respiration, nutrition, and other functions, are those which first betray themselves, and cause death, while the voluntary system, including the nervous centres and the associated will and mind of the patient, remain comparatively calm and, in most instances, unaffected.

[To be continued.]

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT
OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE MONTH OF OCTOBER.

In the subjoined report, the following hospitals are included:—University College, King's College, St. George's, St. Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, the Westminster, Charing-cross, St. Mary's, the Metropolitan Free, and the Royal Westminster Ophthalmic.

Lithotomy.—The case left under treatment by our last report has since been discharged well; the boy's urine, however, still contains a small quantity of albumen, and he is subject to œdema of the face. During the month, 6 operations have been performed; of

the subjects of these, 1 has recovered, 4 are progressing favourably, and 1 is dead. In the fatal case, the patient was aged 71, and two large angular stones had been removed. Death took place sixteen days after the operation, and the autopsy discovered inflammation of the cellular tissue of the pelvis, with some peritonitis. In one of the fatal cases mentioned last month, we had been misinformed as to there not having been a *post-mortem* examination. In addition to the previously conjectured disease of the kidneys, extensive phlebitis was discovered, each iliac vein contained pus, and there were purulent deposits in both the lungs and the liver.

Lithotrity—A patient is under care in St. George's Hospital on whom Mr. Cutler has once performed lithotrity. He is aged 68, and was operated on for the same disease ten years ago.

Herniotomy.—We accidentally omitted to state, respecting the five cases reported last month, that the sac had been opened in them all: as far as the operation and the intestinal lesion are concerned, they are all now recovered. This month, 10 operations have been performed. In 7 of these, the sac was *opened*, with the result of 5 recoveries, and 2 deaths. In one of the latter, the patient was a man aged 25; the hernia inguinal and strangulated for sixteen hours before operation. Death from peritonitis occurred on the third day. In the other, the patient was in a very exhausted state at the time of operation; constipation had lasted for a week, and there was stercoraceous vomiting. The symptoms of strangulation were relieved, but death from debility supervened thirty hours afterwards. The autopsy disclosed no evidence of peritonitis, but the mucous membrane of the intestine was red and swollen. Of the 3 cases in which the sac was left *unopened*, one recovered, and two died. One of the cases which terminated fatally was that of a woman, aged 53, in whom a femoral rupture had been strangulated eleven hours. She was of intemperate habits, and in bad health. Death took place on the third day, some indications of delirium tremens having preceded it. Much chronic disease of the abdominal viscera was afterwards discovered, especially of the stomach. The second fatal case was that of an old woman, in whom an irreducible umbilical hernia had been attended with symptoms of strangulation five days before the operation. The stricture was freely divided, and the bowel easily emptied of its contents; but, in consideration of its having long occupied that position, no attempt at reduction was made. The bowels subsequently acted freely; but death took place, seemingly from exhaustion, on the fifth day. The *post-mortem* examination showed no peritonitis; the colon was loaded with fæces, and the intestinal mucous membrane generally congested.

Operation for Artificial Anus.—In a case of complete obstruction of the rectum, from a tumour of the uterus, in the Middlesex Hospital, Mr. Moore performed Amussat's operation of opening the colon in the left loin. Great relief was at first afforded, and for several days the patient appeared to be doing well; she died, however, on the eighth day. The tumour was ascertained to have been of a carcinomatous nature.

Trephining of the Skull.—This operation has been performed in one case. After the death of the patient, a fracture of the base of the skull was discovered, in addition to the superficial injury.

Ligature of Arteries, etc.—In a case of aneurism of the right carotid in an old man, in St. Thomas's Hospital, Mr. Solly placed a ligature on the common carotid, low down. On the fourteenth day, the ligature came away; the patient had had no cerebral symptoms; the tumour was more solid; and the case altogether appeared to be doing very well.(a) In our recent series of aneurism cases, we have already published the details of one in which, in St. Bartholomew's, Mr. Lloyd had tied the femoral artery for popliteal aneurism, and of another in which Mr. Holt, in the Westminster Hospital, had placed a ligature on the brachial, on account of analogous disease. (See *Medical Times and Gazette* for the 5th inst.) Both patients are doing well.

In a case, in St. Thomas's Hospital, of secondary hæmorrhage after amputation of the thigh for compound fracture, Mr. Simon placed a ligature on the femoral. The patient was so exhausted by the profuse bleeding, that transfusion of blood-serum had to be practised. The latter measure apparently produced very good effects; the man lived till the separation of the second ligature, when hæmorrhage again occurred, and, in spite of the employment of the actual cautery, sufficed to terminate life. He was a drayman, and had been very intemperate.

One case of aneurism of the popliteal remains under treatment by compression. It is under the care of Mr. Hilton, in Guy's Hospital. The case mentioned last month, under the care of Mr. Erichsen, in University College Hospital, and that also under the care of Mr. Hewett, in St. George's, have each of them been cured.

Amputations.—Of the twenty-one cases left under care by last month's report, one has died from secondary hæmorrhage, (See above, *Ligature of Arteries;*) the remainder are many of them cured, and the others are, with two exceptions, so nearly well that we need not again refer to them. There were performed, during October, sixteen amputations, out of which four of the patients are dead, two of the others are yet in a doubtful condition, and ten are recovering. Of the fatal cases, one was a secondary amputation of the thigh for compound fracture of the leg, in a stout, middle-aged man. Death from exhaustion resulted on the fourteenth day. In a second, death occurred on the third day after amputation of the leg for senile gangrene of the toes. In a third, amputation of the thigh for disorganised knee-joint was performed, in a very debilitated woman, and the death was preceded by symptoms of incipient pyæmia; but at the autopsy neither phlebitis nor purulent deposits could be discovered. In the fourth, under the care of Mr. Ure, in St. Mary's Hospital, the operation of removal of all the fingers of the right hand, on account of a crush, was delayed a day from the patient's refusal at first to submit to it. Tetanus resulted, and death took place on the eleventh day. Of the cases still in a doubtful condition, both are amputations of the thigh, one primary, the other secondary. In the latter, the patient, an Irishman, obstinately refused at first, although his knee-joint was laid open, to have the leg removed. After a month's delay, during which the joint had become utterly disorganised, and the health of the patient severely reduced, the operation was performed. The case is under the care of Mr. De Morgan, in Middlesex Hospital, and has progressed since the amputation more favourably than could have been expected. Of the nine which are recovering, three are amputations of the thigh, two for diseased knee-joints, and one a third operation, on account of a painful stump, the former ones having been below the knee; one of the leg, for a very large and inveterate ulcer, the persistence of which was seriously undermining the strength of the patient; one at the shoulder-joint, for compound fracture, with much crushing of the arm, under the care of Mr. Solly, in St. Thomas's Hospital. Three of the forearm; one for the effects of phlegmonous erysipelas, one for strumous disease of the carpus, and one primary for compound fracture; one primary amputation of the whole hand, excepting the thumb.

Excision of Bones, Joints, etc.—The cases reported last month continue under care. A partial excision of the elbow-joint has been performed by Mr. Solly, on a young man in St. Thomas's Hospital, who had suffered from scrofulous inflammation of the joint. The case is doing favourably. Resection of the wrist-joint has been twice performed, and both patients are thus far doing well. In the first case, under the care of Mr. Erichsen, in University College Hospital, the heads of the radius and ulna, and the first row of the carpal bones, were removed. In the second, under the care of Mr. Fergusson, in King's College Hospital, the heads of the radius and ulna, and the whole of the carpal bones. Excision of the superior maxilla has been practised twice, and with very favourable issue in each case. In the first, under the care of Mr. Stanley, in St. Bartholomew's Hospital, the whole bone, with the exception of its nasal and orbital processes, was removed on account of a fibroid tumour, which had returned after a former excision. In the second, the disease requiring it was a tumour of suspectedly malignant character within the antrum; the operation was performed by Mr. Hancock, in the Charing-cross Hospital. In the same Hospital, the excision of parts of a diseased metatarsal bone has been successfully performed by Mr. Avery. Five important gouging operations have been done during the last month, in each case in the hope of avoiding the amputation of the affected member. In two of them, on account of extensive carious disorganisation of the head of the tibia, a procedure in each nearly precisely similar has been adopted, and the whole of the softened cancellous bone, to within a very little of the articular cartilage, was freely scooped out. The patients are severally in King's College and Guy's Hospitals, and under the care of Messrs. Fergusson and Hilton. In Mr. Fergusson's case the progress has been hitherto satisfactory, but in the other a sharp synovitis of the knee-joint set in on the seventh day, and has since continued. In three cases, gougings of the os calcis, on account of carious disease, have been performed. In one, which occurred in St. Bartholomew's Hospital, Mr. Stanley was fortunate enough to discover and remove a small fragment of perfectly-detached dead bone, which had been closely encased in the centre of the affected calcaneum, and of the looseness of which no evidence had been afforded by the previous probings. In a fourth case, almost the whole of a much-diseased os calcis was removed by Mr. Holt, in the Westminster Hospital. The case was at first doing very well, but recently gangrene has

(a) This patient has died within the last few days. We shall publish the particulars of the case.

attacked the wound, a disease just at present affecting several of the patients in that hospital.

Trephining Operation for Abscess in Bone.—A case is under the care of Mr. Simon, in St. Thomas's Hospital, in which the patient, a young man, had for many years suffered almost constant and severe pain in the head of the left tibia, attended also with some general enlargement of the bone. The trephine was resorted to. A dense and thick layer of bone having been cut through, some pus welled up, and the instrument and the plug having been removed, about half an ounce of well-formed creamy matter escaped from a circumscribed abscess in the middle of the bone. No necrosis was discovered. Mr. Simon stated, that he could distinctly feel the indurated walls of the cavity in all parts. The operation has been completely successful; the patient has had no more pain, and is now almost well, the cavity having filled with granulations.

Removal of Necrosed Bone.—Of the 18 cases left under care by last report, 10 remain so; the others have been discharged. During the month 14 operations have been performed; 3 of the patients have since sufficiently recovered to return home, and 11 are under treatment. The latter list includes one in which a necrosed portion of the left tuber ischii was removed by Mr. De Morgan, in the Middlesex Hospital; one in which a portion three inches long of the whole thickness of the shaft of the humerus was removed by Mr. Adams, in the London Hospital, and several others in which large portions of the tibia were removed.

Excision of Loose Cartilage from Joint.—A loose cartilage, of about twice the size of a filbert, was removed by direct incision over it, from the knee of a young man, by Mr. Lawrence, in St. Bartholomew's Hospital. The wound united by adhesion, and no bad symptoms followed.

Excision of Malignant Growths.—Of the cases previously reported 5 remain under treatment. Number of operations during the month, 14. Scirrhus of the breast, 6; recovered, 1; under treatment, 5. Medullary tumours in the neck, extending deeply, and adhering to the sheaths of the vessels, etc., 2. In one, the patient has since died, and in the other, although the wound has healed favourably, yet there is a very suspicious mass of induration forming. Epithelial cancer of the penis, 2; recovered, 1; under treatment, 1. Epithelial cancer of the lip, 5; all, excepting one, of which are yet under treatment.

Excision of Non malignant Tumours.—Of the 16 cases left by last report, 8 are convalescent, and 7 remain under treatment. With regard to one of them in which a large fatty tumour had been removed at St. Mary's, we were in error in stating that the patient was still under care, as it had ended fatally. Number of cases, 10; recovered, 4; under treatment, 6. Of these, 3 were sero-cystic tumours in the female breast, in which the whole gland was extirpated. In one of them, under the care of Mr. Fergusson, in King's College Hospital, it was the third operation for the same disease within nine months. One a case of fibrous tumour of the breast, and another of chronic mammary tumour. Two were examples of fatty tumours. Two of large encysted tumours on the scalp, one of which was pendulous, and at least the size of a fist. One case of exostosis from the tibia, a little below the knee-joint. The operation was performed by Mr. Lawrence, in St. Bartholomew's Hospital, and the patient, a young man, recovered well. One case of epulis, and one of a peculiar kind of nasal polypus, in which the disease had returned after several removals, had bled profusely, and attained an enormous size. The patient, in the last case, is under the care of Mr. Cock, in Guy's Hospital. The front half of the tumour has been safely removed by ligature, but a large mass, extending back into the pharynx, still remains. We intend to publish the case at length.

Operations of Urethral Stricture.—The cases reported previously are still under care. In a case in the Middlesex Hospital, Mr. Shaw laid open into the urethra some perineal sinuses. The patient is still under treatment.

Paracentesis Thoracis.—The boy in St. Mary's Hospital, under the care of Dr. Chambers, in whom, with much temporary benefit, the right chest had been punctured on account of pneumothorax, has died since our last report.

In Dr. Bennett's case of empyema, in St. Thomas's Hospital, paracentesis, for the third time, has been performed by Mr. Le Gros Clarke, and the man's condition is much improved.

Paracentesis Abdominis.—For ovarian dropsy three times, after all of which the patients have done well. For ascites eleven times —nine times successfully, and twice followed by death. The case reported last month as in a critical condition has since died. In all the three fatal cases death was due more to the previously-existing disease than to the operation.

Ligature, etc., of Nævus.—In the case in which the perchloride of iron had been injected, the tumour has much diminished in size, and does not appear to be any longer vascular; it is still under observation. Four cases have been operated on during the month, and, with a single exception, are still under treatment.

Tracheotomy.—Neither of the cases previously reported is yet able to breathe continuously without the canula, but they are both of them much improved. The operation has been twice performed during the month, for purposes of artificial respiration in poisoning by chloroform; but, as our Reports have already shown, both patients died. Into the Middlesex Hospital, an infant eighteen months old was admitted, on account of acute laryngitis from a scald of the glottis. The dyspnœa became so urgent, that, eight hours after the accident, Mr. Grant, the house-surgeon, found it necessary to open the trachea. Great relief was afforded, but subsequently inflammation of the trachea and bronchial tubes supervened, and death occurred on the third day.

Fistula in Ano.—The last month's case remains under treatment. Three cases have been operated on during the month, one of which has recovered; the others are progressing favourably.

Puncture of the Bladder.—Death has occurred in the only case left on our report. The operation has not been performed during the past month.

Operation for the Cure of Ununited Fracture.—The case, in which setons had been tried, is still under care; but it seems doubtful whether any success will attend it.

Plastic Operations.—Hare-lip.—One operation for double, and five for single hare-lip, have been performed, all with success. In one case, under the care of Mr. Quain, in University College Hospital, and now cured, the operation had, on a previous occasion, failed to procure union.

Vesico-vaginal Fistula.—The cases previously reported remain under treatment.

Cicatrix after Burn.—One case, previously reported, has been discharged, not much benefited; a second remains under care, and, with three others since performed, is progressing favourably.

Prolapsus of the Rectum.—In a case of troublesome prolapse of the rectum, under the care of Mr. Johnson, in St. George's Hospital, a cure has been effected by snipping away portions of the mucous membrane. Since cicatrisation no prolapse has occurred.

Employment of Cautery, etc.—The cases previously reported are still under treatment, and in one case of vaginal prolapsus in University College Hospital, Mr. Marshall has again made use of the galvanic cautery.

Operations for Cataract.—Extraction.—Two cases have been successfully operated on by Mr. Hancock in the Royal Westminster Ophthalmic Hospital. *Absorption.*—The cases reported last month are doing favourably. One other operation by Mr. Paget in St. Bartholomew's Hospital has been performed.

ST. GEORGE'S HOSPITAL.

CASES OF DEATH FROM DISEASE OF THE STOMACH, INDUCED BY THE ACTION OF CAUSTIC ALKALI AND AMMONIA.

[Reported by Dr. BARCLAY, Medical Registrar to the Hospital.]

Two cases have occurred recently in the practice of this hospital, in which death ensued upon the gradual exhaustion and inanition consequent on an obstructed pylorus, originating undoubtedly, as *post-mortem* inspection clearly proved, in the corrosive action of some irritant poison introduced into the stomach. Although not by any means unique in the annals of forensic medicine, they are yet sufficiently rare to induce me to believe that the details will not be without interest, especially as the opportunity occurs of contrasting the effects of two distinct poisons, each acting in a very similar manner on the economy.

Dr. Christison, in his edition of 1836, states, that there was, at that time, only one recorded instance of poisoning by ammonia, accompanied by a record of *post-mortem* appearances. And if the case now about to be detailed is so far deficient in evidence of ammonia being actually the poison administered, that it could not be received as proof of any unusual or unexpected result, its circumstantial evidence still seems to me sufficiently strong to be received as a corroboration of those conditions which are already proved to be the result of the action of caustic ammonia. "Hartshorn" is a remedy which is popularly known as a most powerful stimulant; and, during a fainting-fit, not only are all the smelling-bottles in the neighbourhood immediately applied to the unfortunate sufferer's nose, but sometimes the "spirit of hartshorn," in water, is given internally, by persons who know but little of its effects, and the risk they are running by forcing it into the stomach. Fortunately, its extreme pungency to nose,

mouth, and fauces, generally serves to prevent its being swallowed; and it was probably only because the syncope was in the present instance more complete, that no resistance to its introduction was offered,—no consciousness shown of its having been swallowed till pain at the epigastrium resulted from its action on the mucous membrane.

No very striking peculiarities presented themselves in the detail of the individual cases calling for especial comment, if we except that of the existence of hæmatemesis in one of them as the immediate consequence of the abrasion or destruction of the mucous membrane. I confess that I was somewhat unwilling to give credence to the statement, and made every inquiry to ascertain whether the hæmorrhage might not have come from some other source, but in vain; the history was distinct and conclusive, that, in the course of the same day, an hour or two after swallowing the ammonia, she had suffered from pain in the stomach, and had vomited blood. I cannot think, that, in the absence of any previous sufferings, and in face of the fact, that from that time her ailments began, that ever since she had been unable to bear the presence of food in her stomach, that vomiting had been constant, and emaciation progressive, we should be justified in assuming even the possibility of previous ulceration; and certainly the *post-mortem* examination sets at rest all doubt as to whether the ulceration which had preceded the cicatrization belonged to the class of spontaneous ulcers of the stomach, for; thick bands of lymph extended in a stellate form, from all sides of the principal cicatrix, indicating a more diffuse and more general destruction and inflammation of the membrane than ever accompanies the spontaneous ulcers.

In the one case, it is certainly remarkable, that, while the whole course of the œsophagus and the two orifices at either end of the stomach presented evidence of previous ulceration, the intermediate mucous membrane lining the viscus was perfectly healthy; while in the other, the absence of disease of the œsophagus may be attributed to the comparatively weaker action of the ammonia, and the circumstance, that vomiting had not occurred for an hour or two after it had been swallowed.

Case 1.—Elizabeth G., aged 44, was admitted into St. George's Hospital, under the care of Dr. Nairne, on May 2, 1853, about six hours and a-half after swallowing a quantity of what is known as "American potash," an impure caustic alkali. She had vomited directly after taking it; the mouth and fauces were much corroded, and on introducing the stomach-pump some shreds of softened mucous membrane were found clinging to the tube when removed. Great pain was complained of in the fauces, along the course of the œsophagus and at the epigastrium. Leeches were applied to the throat and to the epigastrium, and sedatives and saline purgatives administered. It was remarkable that there was no fever or acceleration of pulse during the first few days. It did not appear that any inflammatory re-action had been set up, as there was no tenderness on pressure in the gastric region, although there was, of course, burning and pain along the whole course of the tube, as far as the stomach. Two days after her admission, indeed, there was a little vomiting, but this almost immediately subsided with the repetition of the leeches and a cathartic enema.

The mucous membrane, so far as could be seen, was much abraded, and its tender surface caused some difficulty in swallowing; and now and then she made complaint of feeling pain after food was in her stomach; but it was not till the beginning of June that any symptoms of serious importance were observed, and it was almost hoped that the instantaneous vomiting had saved the stomach from deep and permanent injury. But now she began to suffer from occasional vomiting, which increased in frequency, and was accompanied by pain in the abdomen, tenderness on pressure, constipation of the bowels, a glazed and shining tongue, and a quick and rather weak pulse. She complained that everything she took, whether food or medicine, became too irritating for her stomach, and, after causing her much pain, were in a short time rejected. Blisters were now applied to the epigastrium, and calomel and opium were for some time administered regularly. Gargles and local applications proved of much service in restoring the healthy condition of the mouth and fauces, but no impression was made on the stomach itself. The pain seemed frequently to be very intense, and the vomiting had increased so much, that nothing whatever was retained. Latterly, none but soothing treatment could be employed, and, for a short time before death, life was sustained only by the use of nutritive enemata.

She died of inanition on July 8.

Examination of the Body Thirty-three Hours after Death.—The thoracic viscera were perfectly healthy. The tongue soft; palate and pharynx seemed quite natural; but at the upper part of the œsophagus, opposite the cricoid cartilage, three distinct cicatrised bands were observed, contracting the mucous lining in that situation, apparently the result of previous ulceration. The lower part of the œsophagus was much contracted; its lining membrane was entirely destroyed, and the muscular tunic beneath exposed. The external tunics of the tube were much thickened from effusion of lymph, and the outer wall adhered intimately to all the surrounding structures. The cardiac orifice of the stomach, where the ulceration ceased, was so much contracted as hardly to admit of the passage of a director. At the pyloric end of the stomach, the mucous lining presented a large and dense cicatrix, which involved the chief part of the circumference of the orifice, implicating the valve, and obstructing all communication with the duodenum excepting by a very small orifice, only capable of admitting an ordinary-sized probe. The intervening portion of the stomach was healthy, as was also the continuation of the canal in the small and large intestines. The remaining abdominal and pelvic viscera showed no evidence of disease.

Case 2.—Charlotte R., aged 19, was admitted into St. George's Hospital on the 2nd of September, 1853, under the care of the Assistant-Physician, Dr. Fuller, who was at the time acting for Dr. Bence Jones. She was much emaciated, and complaining of constant vomiting, with a weak and frequent pulse, a sort of hectic flush on her cheeks, and great prostration, so that it was suspected that the sickness would be found due to the irritation of tubercles in the lungs. She alleged that her whole illness was due to fright; and so constantly did she revert to this circumstance, that it was thought needful to ascertain all the particulars. It appeared that, about eight weeks previously, she had been robbed by some vagabonds in the neighbourhood of town, and had fainted and become unconscious through fright; how long she remained in this condition she did not know, but woke up to find herself surrounded by some well-intentioned but over-zealous females, who had given her something to bring her to, which had tasted very strong; she thought it was hartshorn, but could not be sure. Almost immediately afterwards she became conscious of severe pain in the stomach, which, it appeared, neither herself nor her friends had ever thought of attributing to the hartshorn poured down her throat in her state of unconsciousness. In an hour or two after she became sick, and vomited some blood; hæmatemesis, to a greater or less extent, continued for three days, and she was so ill as to be confined to bed for a fortnight. From the first she had taken nothing but fluids, and ever since the presence of food had caused so great irritation in her stomach, that it had generally been, sooner or later, rejected. Gradually the stomach had become less sensitive, and her appetite had improved; but, whenever she attempted to move or exert herself, any food previously swallowed was immediately rejected. At the same time, her bowels were constantly costive, and she was daily emaciating and losing strength. The pulse was feeble and frequent, and the tongue dryish, but not much coated.

The treatment consisted chiefly in the administration of purgatives and effervescing draughts and other means employed to allay irritability; the bowels scarcely ever acting after the purgative without the administration of an enema, when the motions were generally scanty and not at all lumpy.

For some little time, by complete quiet and other means, the sickness became less frequent, and hopes were entertained that no serious lesion of the stomach had existed. For some days, indeed, there was no vomiting, and a ferruginous tonic was prescribed. At this period a considerable fulness, without defined margin, was observed under the left hypochondrium, which afterwards disappeared when the vomiting returned, and was, therefore, probably caused by distension of the stomach, from an accumulation of food not yet rejected by vomiting. Fluids did not give her any pain, but solid food generally did.

Latterly the vomiting became more constant and severe, her pulse was sensibly feebler, and she became more emaciated from day to day; the eyes sunken, the tongue foul; she complained of headache, and was so weak that she was scarcely able to turn in bed. The bowels were obstinately confined throughout. She ultimately died of starvation, on the 30th September.

Examination Thirteen Hours after Death.—The body was pale and emaciated. The lungs were healthy, but adherent by their apices to the costal pleura. The heart small, but healthy. The stomach was greatly distended, and contained a quantity of grumous fluid, its lower border reaching as low as the left iliac region. The œsophagus was healthy, but the cardiac orifice of the stomach slightly contracted. A large and dense cicatrix occupied the inner surface of the posterior wall of the stomach, to the extent of half a crown, and from its margin numerous dense fibrous bands diverged in various directions over the posterior wall, those near the pylorus being larger and more distinct. The pyloric orifice itself was contracted to the size of a crow's quill, and the tissues surrounding it, for at least an inch in extent, were dense and

thickened. The duodenum was healthy. The spleen was very small, but otherwise all the abdominal and pelvic viscera were perfectly healthy.

CHARING-CROSS HOSPITAL.

CASE IN WHICH IT SEEMED PROBABLE THAT SCARLET FEVER HAD BEEN INOCULATED.

[Under the care of Dr. ROWLAND.]

Nov. 1, 1853, Louisa Preston, aged 50, admitted this morning, states, that on the 17th October, when nursing a child suffering from scarlet fever, she was scratched on the hand by the patient; the skin was slightly abraded, and a little blood escaped; the limb subsequently became much swollen, and suppuration ensued. On the 19th she was seized with vomiting and rigors, and, on the afternoon of the following day, sore throat commenced. On the 24th, the legs began to swell, and the anasarca rapidly spread over the thighs and abdomen. The œdema still continues in these parts, and there is also puffiness under the eyelids, with distortion of the features. The urine is scanty, and loaded with albumen. No tube casts can be detected in it.

A powder of rhubarb and soda is ordered, and a saline mixture, with the tartar emetic.

Nov. 5.—Urine increased in quantity; the albumen is diminishing; œdema much less. Continue the medicines.

9th.—The swelling is quite gone; the urine is free from albumen.

The following remarks were made by Dr. Rowland:—

"There can be little hesitation in admitting that the scarlatina in this instance was produced by direct inoculation with the virus. The patient was of an age when the susceptibility to the disease by the ordinary mode of its communication is greatly diminished. The symptoms, too, commenced so immediately after the abrasion of the skin, that they may safely be attributed to that cause. It will be interesting to notice whether any modification in the course of the disease took place under these circumstances.

"Several attempts have been made by different physicians to produce scarlet fever by inoculating, either with blood taken from patients undergoing the disease, or with matter from the miliary vesicles which sometimes form in the midst of the rash. By this means the complaint has sometimes been engendered, although the expectation of a milder form resulting from the experiment, has been invariably disappointed. The present case forms no exception to this rule.

"The initiatory fever, marked by rigors and vomiting, set in about forty-eight hours after the insertion of the poison, being a period of latency unusually small, and the minimum probably of that noticed in the regular disease. The sore throat commenced on the following day. The non-appearance of the rash on the skin is too common a circumstance in this fever to require notice, but as some high authorities have occasionally refused to acknowledge such cases as true examples of the disease, the absence of efflorescence after inoculation in this patient may be worth alluding to. The anasarca appeared as early as the fourth day from the commencement of the fever. The swelling involved a large portion of the surface, and spread with great rapidity.

"There is one other question suggested by the consideration of this case, viz., Is the immunity from scarlet fever in advanced life the consequence of some unknown change in the properties of the blood, rendering it powerless for the active development of the poison? It would rather appear, that in the present instance, at least, the difficulty lay in the virus reaching the circulation, for as soon as this was accomplished a fever of great severity ensued."

THE MEETING OF THE BRITISH ASSOCIATION IN LIVERPOOL.—A numerous and influential meeting of the scientific and literary gentlemen of Liverpool, convened by the Mayor, Mr. Samuel Holmes, was held on Saturday, in the Council-chamber, Liverpool, for the purpose of giving a suitable reception to the British Association, at which resolutions were passed and Committees appointed to carry out the objects of the meeting.

ACONITUM NAPELLUS.—A gentleman having been accidentally poisoned by eating scrapings of the root of this plant in mistake for horseradish, Mr. Herapath, of Bristol, gives the particulars of a trial for murder by administering a solution of this root (a table-spoonful), and says:—"Upon analysing the remainder of the bottle's contents, I found 16-100th parts of a grain of the alkaloid *aconitina* in an ounce of it, and consequently 1-10th part of a grain of the poison must have been in the dose, and, from the half pound of contents of the stomach, I separated 6-100th parts of a grain. This will show the great danger which attends the use of this plant under any circumstances. It is recorded, that the fiftieth part of a grain of the alkaloid will destroy life."

Medical Times & Gazette.

SATURDAY, NOVEMBER 26, 1853.

RECENT IMPROVEMENTS IN MEDICAL EXAMINATIONS.

DURING the last week or two, we have received intelligence of certain improved features in the examination of Medical candidates, which, although not absolutely novel, are of sufficient importance to demand a passing notice at our hands. We refer in particular to the practical examination in medicine conducted by the University of London, and to the preliminary examination in classics and mathematics for junior students at Apothecaries' Hall. The first proposes a very efficient test of the acquaintance, on the part of the student, with practical clinical medicine at the termination of his educational career, and immediately previous to his admission into actual practice; the second aims at obtaining evidence of adequate preliminary and general education before admission into the medical curriculum.

There cannot be any doubt, when we consider the nature of medical examinations as hitherto conducted, that too much trust is placed in books on the part both of the examiners and the examined; and thus it happens, that certain stereotyped views of the nature, theory, and treatment of disease, become current in the schools, are adopted mechanically by the students, and are received as evidence of knowledge by the examiners. Hence clinical medicine is neglected, and the student prefers the acquisition of knowledge by books, which costs but little time, to the laborious study of pathology in the wards of the hospital. The Examiners at the University of London have no doubt been long fully sensible of this glaring defect; for there is no department of human knowledge, in which practice avails so much, and theory so little, as in the science of Medicine. It is true, that the labour and industry of the greatest men in our Profession have been devoted to recording the results of their experience, for the benefit of their brethren and of posterity; and that the perusal of such works, in conjunction with practical experience, contributes most materially to the formation of a sound practitioner; but it has been too much the habit to rely upon the former, and to neglect the latter. The consequence has been, by no means unfrequently, that the candidate has answered most satisfactorily to all the questions proposed to him upon the history of a series of diseases, and yet he may be wholly incompetent to recognise or treat any of those diseases when brought to the bedside of the patient.

We therefore express our gratification at the step in advance which has been lately taken by the University of London, in demanding from the candidates for its diploma, a practical as well as a theoretical acquaintance with the science of medicine. The candidates for the Doctorate, besides passing the written examination as heretofore, are now conducted to the bedside of patients labouring under well-marked diseases, and are there required to describe the physical signs, the diagnosis, and the prognosis, of each case, with its appropriate treatment. Such a course, if carried out from year to year, must give a great impulse to the pursuit of Clinical Medicine, and must eventually elevate most considerably the standard of professional knowledge.

The second improvement to which we have referred, is the establishment of a preliminary examination in classics

and mathematics, for junior students, at Apothecaries' Hall, to which several hundred candidates have already presented themselves and have received certificates of competency. It is quite true, that a test of a similar, or rather of a higher character, had already been proposed in the Matriculation Examination at the University of London; but it is well known that the candidates for this test are drawn from the whole mass of students in Arts from all the schools and colleges in Great Britain, and that the proportion of medical students is very small.

In the examination at the Hall, on the contrary, all the candidates are necessarily medical, for they must produce their indentures of apprenticeship before they are admitted to the ordeal; and we may also mention, as a compliment to a large and important section of the Medical body, that all the candidates, or nearly all, are the sons or pupils of General Practitioners, and are themselves intended for that department of our common Profession.

We conceive, that no sane person will dispute the necessity of placing the members of our Profession on a level, so far as regards general attainments, with the allied pursuits of Law and Divinity, and of requiring from all candidates for Medical licences at least some evidence of having received a liberal education. We do not by any means insist, that every Medical student should be profoundly acquainted with the niceties of Greek versification, or be skilled in the higher branches of astronomy, but we consider that a moderate knowledge of the classics and mathematics, at least, is indispensable before a Medical career can be advantageously pursued. We hope also soon to see that a knowledge of one or two of the modern languages is considered necessary in the scholastic routine.

The great error committed by most of the Medical examining bodies in relation to general education has been, that they either require no test of preliminary knowledge at all, or that they require it at the *termination* instead of at the *commencement* of the state of pupilage. Hence, when the student should be diligently pursuing the study of disease at the bed-side, he is compelled to cram the inflexions of nouns and verbs in the Latin grammar, or, perchance, to labour at the translation of Celsus and Gregory.

We know that there are some persons who think, if they do not assert, that if a Medical student has arrived at the end of his hospital attendance without possessing any classical knowledge, no test of that kind should be imposed upon him; but, without arguing the question, we may state at once, that we do not agree in any such opinion. The Medical Practitioner ought to have the education of a gentleman. He associates with the learned and the intelligent, and his general attainments ought not to be below those of his associates.

But, as we have just urged, we do not approve the system of mingling the study of Latin, or Greek, or any other branch of general knowledge, however useful or ennobling, with the practical pursuits of Medical and Surgical science. At the latter period of the student's career, he must study anatomy in the dissecting-room, chemistry in the laboratory, pathology in the dead-house, diagnosis and treatment in the wards of the hospital; and the beauties of Greek and Latin poetry, or the records of ancient history, must linger in his memory only as the reminiscences of the past, or must be the solace of his leisure hours.

We think, therefore, that the Examiners at Apothecaries' Hall have acted wisely in demanding evidence of some general preliminary knowledge *before* the student commences his medical lectures and hospital practice. There are numbers of good schools throughout this country where the elements of knowledge may be readily acquired; and those who are too idle or too ignorant to pass through a Grammar-school with moderate ability, are certainly unfit for the pursuit of Medicine.

BLACK-BALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

In a late notice of the election of new Fellows at the first meeting of the session, we stated that one gentleman had not been elected; it was supposed because he did not belong to the College of Physicians. We hoped that means might have been found to remedy the error without the necessity of further publicity; but the matter has caused so much excitement, and such loud complaints from members of the University of London, that we cannot longer pass it over unnoticed.

It appears, that last spring a physician who, although young, has already taken a very high position as a scientific Practitioner, and has contributed to our columns some communications which prove him to be a minute and accurate observer, fully acquainted with the most recent advances of microscopical anatomy and pathological chemistry, was proposed by Professor Quain and several other gentlemen, as a fit and proper person to become a Fellow of the Royal Medical and Chirurgical Society. A few days after the nomination, one of the Secretaries wrote to the candidate to inquire what title he had to practise as a Physician, or what claim to become a Fellow of the Society. The reply was, that he rested solely upon the degree he had obtained as Doctor of Medicine in the University of London. He wrote at the same time to his proposer, stating, that he would withdraw his name, if the laws of the Society did not admit Physicians who were not members of the College of Physicians. It was ascertained that no such law was in existence, and that there were many Fellows of the Society who were practising in the Provinces without the licence of the College of Physicians. Professor Quain brought the matter before the Council, and the Secretary was informed by the Council that the candidate was eligible for election. Yet, after this decision, we are assured that two members of the College of Physicians canvassed in the room against him, and succeeded in obtaining sufficient black balls to exclude him, thus negativing the decision of the Council; for it cannot be asserted, for one moment, that any other reason than his position with regard to the College of Physicians could be given for the exclusion of a gentleman of such high general and professional character.

We cannot enter here into the question of vote by ballot, further than to say, that in this instance it has been most grossly abused. With members on the Council, who, like Dr. Sharpey, have no connexion with the College of Physicians; with distinguished Fellows like Sir Robert Carswell, who are in the same position; and with no law of the Society bearing upon the question, it does appear most unjustifiable to require this qualification from a Graduate of the University of London, and to make it appear that the Royal Medical and Chirurgical Society consider, that all those Physicians who practise in England without the licence of the College practise illegally. If the Charter of the College were reformed, and power were granted to prohibit all unlicensed Physicians from practising, the case would be altered; but, until some such law come into effect, we must protest against any such unfair proceeding as that of admitting some Physicians who are not members of the College, and excluding others solely on that ground who

stand in the same position. It must prove discreditable to the small party of Fellows who were instrumental in the transaction, and injurious to the Society itself.

THE ATTACK ON MR. CHURCHILL BY THE *ASSOCIATION MEDICAL JOURNAL.*

A good story is told of one of our greatest lawyers. When a young barrister, a brief was handed to him in court with a fee, but, on opening the brief, he found it was a sheet of blank paper. A little careful examination, however, led to the detection of the following sentence, scribbled in pencil: "We have no case. Please to abuse plaintiff's attorney." Something similar appears to have taken place lately between the Council of the Provincial Medical and Surgical Association, or the Journal Committee, or some one who is responsible to the Association for the conduct of the Journal and its Editor, who must have received instructions something to the following effect: "The assertion is quite true that the support of the Journal absorbs our whole receipts. It is quite true that the Council are obliged to discontinue the publication of the Transactions. It is quite true that we are obliged to apply for subscriptions to carry on the battle of Medical Reform. You cannot answer this. You have no case. Please to abuse Mr. Churchill."

In the last Number of the *Association Journal*, we accordingly find an article which has called forth the following letter from Mr. Churchill:—

"TO THE EDITOR OF THE ASSOCIATION MEDICAL JOURNAL.

"SIR,—I think you must agree with me, that the manner in which you introduced my name into a leading article in the last number of the *Association Journal* demands some notice from me.

"The character of a publisher is public property, and it is right that his 'doings,' if wrong, should be subject to censure. On the same principle, his name and reputation must not be allowed to be unjustly trifled with.

"I regret, Sir, that in reply to observations the Editor of the *Medical Times and Gazette* made in his editorial character, you have introduced my name, and in a manner which leads to the formation of a very low estimate of the dignity of an editor's position; for that gentleman, you imply, would allow me to write or dictate a leading article, simply because I am publisher of the Journal.

"My character is not of yesterday. For more than twenty years I have been before the Profession as a medical publisher; and I hope I may be permitted honestly to add, that by my enterprise I have contributed to the advancement and improvement of its literature.

"I have, as publisher of several periodicals, been happily and most agreeably associated with many gentlemen occupying influential positions in their Profession, and I appeal to them thus publicly, if I ever in any one instance attempted to interfere with, or influence, their opinion; and I may take this opportunity of adding, that I have never asked for a favourable or biassed review of any book I have published: and I appeal to you, Sir, as your publisher while Editor of the Monthly Journal, to confirm the truth of this statement.

"The fact is, I know as little of what each current number of the *Medical Times and Gazette* will contain as you, Sir; and I can affirm that the article in question was not mentioned to me, nor did I know of its purport until after the number was published.

"I have the honour to be, Sir, yours,

"JOHN CHURCHILL."

We have but little to add to this. We cannot refrain, however, from expressing our astonishment at the low opinion the Editor of the *Association Journal* appears to have of the editorial position. We do not hesitate to say that no high-minded, independent man would ever suspect another of degrading himself to be the organ of any publisher, and that any one who would accuse a brother Editor of allowing a proprietor to act in the manner imputed to Mr. Churchill, must have very different ideas of the duties of the editorial office from those entertained by us. Had any such imputation been insinuated in other publications, we should have passed it over without notice or contradiction; but it is gravely published by one who affixes his name to a Journal that is regarded as the organ of an Association which was powerful and respected. Now that it has sunk to the position of a Society for the production of a weekly Journal, which it is only enabled to support by soliciting for advertisements from Mr. Churchill and other medical publishers; from the proprietors of the Iodine Spa, Stringfellow's battery, the resilient bodice; for M. Bourjeaurd's Cautions against his shameless imitators; for notices of the cantharadine tissue, patent trusses, elastic stockings, old port, pale sherry, malt-whiskey, pale ale, and various other matters which lead to the entry "Bad debts" in the Annual Financial Statement of the Council, it is not for us to say how much of its power and respectability have been lost: but as it still numbers among its members men of the highest character and noble reputation, many of the oldest and most influential of whom are active in their exertions to restore the body to its former high position, we say to them, that the imputation cast upon us in their Journal is absolutely without foundation.

Before concluding, we must say that a Journal cannot be considered as passing from its legitimate province when it comments on the proceedings or position of a public association. We find that last year 200*l.* was voted from the funds of the Association to the Reform Committee, but that this year the Committee is "to be thrown upon the private generosity of the Profession;" that the publication of a weekly Journal has increased the expenditure of the Society until it is "greater than at any former period," and cannot be borne unless the income be steadily increased; that the Council are obliged to express regret in announcing, that the "Transactions," which have always been a striking feature in the proceedings, in all probability will not be continued, because the expenditure on the Journal is so large "as to leave little room to hope that a surplus will be left for the publication of 'Transactions;'" that the Society had to pay 876*l.* from its funds for the support of the Journal for six momths; that it cannot support its own Journal without the assistance of advertisements; that many influential members of the Association are very unwilling to give up the publication of the 'Transactions,' and do not think that a "weekly Journal, or a Journal at all, is necessary for the prosperity of the Association;" that the largest Association of our Profession has departed from its original objects, and has become a sort of club, for the publication of a Journal, to which the accession of new members is attributed, and which absorbs nearly all its revenue; that this diversion of funds from their legitimate object has led to divisions in the body, and openly expressed wishes from members that their money was otherwise expended, and that those gentlemen who wished to have a Journal should pay an additional subscription for it; and, lastly, that the Editor of their own Journal has acknowledged that the Association has become "IN OUR CHARACTER OF PUBLISHERS, A TRADING FIRM CARRYING ON AN ACCIDENTAL COMMERCIAL ENTERPRISE"!! When all this is forced upon our attention, it is impossible to pass it over without comment, and we claim the right of making our comments freely, without incurring the charge of doing so from interested motives. There might at first sight appear to be some plausibility in a charge of rivalry; but a little consideration will show, that a Journal which publishes none of the lectures or hospital reports, which are the chief features of the *Medical Times and Gazette*; which is seldom used by men of great eminence as a medium for the publi-

cation of original communications; which publishes reports of Societies and other Medical intelligence long after they have appeared in our columns; and which only circulates among members of the Association, cannot be considered as a rival of ours. We have never regarded it in that light; and we repeat that we have a right to criticise the conduct of the Provincial Medical and Surgical Association; that we do so upon purely public grounds, and with no interested motive whatever; that neither Mr. Churchill nor the other proprietors interfere, directly or indirectly, either with the Editor or with any of the gentlemen who assist him in the Editorial department; and that, if any of our remarks should call for a reply, that reply should relate to the facts we adduce, and the arguments we found on them, and should not consist of unfounded charges against either Mr. Churchill or the Editor of this Journal.

We sincerely trust that this will be the last time we shall have to write on such a subject, as it is our earnest desire not to enter into disputes with other Journals, but to pursue, steadily and uninterruptedly, our attempts to lay before our readers rather what is important to them than interesting to ourselves, and to make this Journal the repertory of the advancing medical knowledge of the age.

THE CHOLERA.

METROPOLIS.

CHOLERA AND THE LONDON WATER SUPPLY.

The Registrar General, in a Supplement to his Weekly Return of Mortality, says, as the result of investigation in 1849, "The mortality from Cholera was lowest in districts which have their water chiefly from the Thames, so high as Hammersmith and Kew. The mortality was greatest in districts which derive their water from the Thames so low as Battersea and Hungerford-bridge. The districts of the New River occupy an intermediate station. In 6 districts supplied from Kew and Hammersmith 15 in 10,000 inhabitants died, and the mortality ranged from 8 to 33. In 20 districts supplied from the Amwell, the Lee, the Ravensbourne, 48 in 10,000 inhabitants died of cholera, and the mortality ranged from 19 to 96. In the 12 districts supplied from the most impure part of the river between Battersea and Waterloo Bridge 123 in 10,000 died, and the mortality ranged from 28 to 205. Elevation or depression of site co-operated with the quality of water to produce these relative results; the mortality of the third group of districts was three times as great as in the second, though the density of population in the third (73 persons to an acre) was little more than half of what it was in the second."

In consideration of the importance of the subject, the Registrar-General in October, this year, addressed the following letter to the several Water Companies supplying the Metropolis, to ascertain how far, in respect of water, the position of the Metropolis has been improved since 1849:—

"General Register Office, 13th October, 1853.

"Sir,—The Registrar-General will feel obliged if you will answer the accompanying inquiries for the public information.

"I have the honour to be, Sir, your obedient Servant,
(Signed) "T. Mann.

"To the Secretary of ———— Water Company.

"1. What is the source from which the Water Company obtains the water for the supply of the London districts? If wholly or partly from a river or running stream, state at what point the supply is taken.

"2. Is it the same as it was in 1849?

"3. Are the methods of filtration and purification the same as those in use in 1849?

"4. Is the area of supply the same?

"5. If any changes have been made in either of the above particulars, what are the date and nature of those changes?

"6. If any change is contemplated in the existing arrangements, what is its nature, and when is it likely to come into operation?"

The Directors of eight of the Companies promptly replied to these interrogatories, and, from these replies, it appears, that cholera finds London, as regards water, in the situation in which it left it. This holds with reference to all except the Lambeth Waterworks Company, who changed their source of supply nearly two years ago, from Lambeth to Thames Ditton; and, from the table subjoined, it will be seen, that the results of the present epidemic in the districts supplied by that Company, as compared with others, are rather more satisfactory than they were in 1849:—

Water Companies.	Sources of Supply.	Aggregate of Districts supplied chiefly by the respective Water Companies: Elevation in feet above Trinity High water Mark.	Population.	Deaths from Cholera in 12 Weeks, ending Nov. 12.	Deaths to 100,000 Inhabitants.
London	... ...	...	2362236	326	27
Hampstead and New River.	Springs at Hampstead and Kenwood, two artesian wells, and New River.	80	166,956	6	4
New River.....	At Chadwell Springs in Hertfordshire, from river Lea and four wells in Middlesex and Herts.	76	634,468	50	8
Grand Junction	The Thames, 360 yards above Kew Bridge.	38	109,6[illegible]6	14	13
Chelsea	The Thames, at Battersea ...	7	122,147	22	18
Kent	The Ravensbourne in Kent..	18	134,200	27	20
West Middlesex	The Thames, at Barnes	72	277,700	72	26
East London .	The river Lee, at Lee-bridge..	26	154,691	124	80
Lambeth and Southwark ...	The Thames, at Thames Ditton and at Battersea.	1	346,365	193	56
Southwark ...	The Thames, at Battersea	8	118,267	100	85
Southwark and Kent.	The Thames, at Battersea, the Ravensbourne in Kent, and ditches and wells.	...	17,865	18	101

The Registrar-General observes:—"It is believed that, through nearly the whole of this Table the impurity of the waters with which the inhabitants of the several districts are supplied is in nearly a direct proportion to the mortality from cholera."

The water at St. Thomas's Hospital is thus described by the Professor of Chemistry:—

"The water, as delivered at the pipe in the Laboratory of St. Thomas's Hospital, on the 11th November, was quite turbid, as it usually is, and contained diffused through it 1·16 grains of vegetable matter, dried at a steam heat, consisting principally of silica, the chief constituent of the shields of the lower class of plants. But, as in its moist state, it contained at least two-thirds of its weight of water, we cannot estimate the filth in the water which could be removed by filtration at less than 3½ grains per gallon."

It is satisfactory to perceive that the mortality from cholera was not so great as in the four previous weeks, the number of deaths having fallen to 72, while that from diarrhœa was only 36. In the three weeks of November cholera carried off 102, 98, and 72 persons. The mean weekly temperature, which rose so high as 55·5° in the last week of October, declined in the two subsequent weeks to 48·9° and 45·7°, and last week fell so low as 38·5°. Of last week's deaths from cholera, 5 occurred in the West Districts, 11 in the North, 3 in the Central, 20 in the East, and 33 in the districts on the South side of the River.

Deaths from Scarlatina, Typhus, Diarrhœa, Cholera, and all Causes, Registered in London in the last Thirteen Weeks, with the Mean Temperature for the same periods.

	Aug. 27.	Sept. 3.	Sept. 10.	Sept. 17.	Sept. 24.	Oct. 1.	Oct. 8.	Oct. 15.	Oct. 22.	Oct. 29.	Nov. 5.	Nov. 12.	Nov. 19.
Deaths.....	1021	1029	1015	949	969	1212	1001	1039	1054	1144	1112	1192	1162
Scarlatina.	18	32	43	34	48	47	58	54	46	44	52	56	50
Typhus	37	48	37	39	49	57	49	52	47	50	49	43	51
Diarrhœa and Dysentery..	144	157	137	80	94	71	72	55	48	43	42	50	36
Cholera	18	16	7	16	29	47	66	45	83	99	102	98	72
Mean Temperature	° 58·6	° 55·7	° 56·1	° 57·6	° 51·6	° 52·4	° 48·6	° 52 0	° 48 6	° 55·5	° 48·9	° 45 7	° 38·5

DISTRICTS.—The following are the Deaths from Cholera in Districts, with the Population, as compared with that of the same period of 1849.

DISTRICTS.	Population.	Area in Square Miles.	Total Deaths from Cholera in 1848-9.	Weeks Ending Sept. 2, 1848.	Sept. 3, 1853.	Sept. 9, 1848.	Sept. 10, 1853.	Sept. 16, 1848.	Sept. 17, 1853.	Sept. 23, 1848.	Sept. 24, 1853.	Sept. 30, 1848.	Oct. 1, 1853.	Oct. 7, 1848.	Oct. 8, 1853.	Oct. 14, 1848.	Oct. 15, 1853.	Oct. 21, 1848.	Oct. 22, 1853.	Oct. 28, 1848.	Oct. 29, 1853.	Nov. 4, 1848.	Nov. 5, 1853.	Nov. 11, 1848.	Nov. 12, 1853.	Nov. 18, 1848.	Nov. 19, 1853.
West.....	376,427	17·2	1258	2	3	1	...	1	3	1	2	1	3	1	9	5	6	4	2	4	16	2	11	2	16	1	5
North ..	490,396	20·5	965	3	6	...	...	2	3	1	1	...	6	...	5	...	3	4	5	1	3	1	9	3	15	2	11
Central..	393,256	2·8	1739	...	...	1	...	2	3	2	2	2	2	3	2	1	2	4	3	...	1	...	2	2	0	...	3
East.....	485,522	8·8	3218	1	2	2	3	...	3	2	3	1	4	5	8	7	6	5	24	5	24	3	21	4	22	12	20
South....	616,655	66·2	7048	1	2	3	4	1	5	1	18	...	32	5	42	21	28	28	49	24	52	59	59	51	45	39	33
			Totals...	7	16	7	7	6	16	7	29	4	47	14	66	34	45	45	83	34	96	65	102	62	98	54	72

PROVINCIAL.

RETURNS FROM THE 21ST TO THE 23RD OF NOVEMBER.

Names of Places.	Date.	Cases. Diarrhœa.	Cases. App. Cholera.	Cases. Cholera.	Deaths. Diarrhœa.	Deaths. Cholera.
Dundee	Nov. 17	157	9	11	—	7
,,	,, 18	120	4	9	—	6
,,	,, 19	128	6	4	—	7
,,	,, 20	94	8	4	—	3
Workington } Cockermouth }	,, 19	—	—	1	—	1
Isleham	,, 17	—	—	2	—	2
Leith	13 to 15	—	2	1	—	1
Aughter-house	Up to 17	—	—	2	—	—
Durham	Nov. 19	—	—	—	—	1
Arbroath	,, 18	—	—	1	—	—
,,	,, 21	—	—	1	—	1
Dalmeny	,, 19	—	—	1	—	1
Bridport	,, 19	—	—	—	—	1
South Shields	,, 6	—	—	—	—	3
Cupar Fife	,, 20	—	—	1	—	—
Tunbridge	,, 21	—	—	1	—	2
Liverpool	11 to 22	—	—	10	—	13
Liff and Benvie	,, 21	—	—	2	—	2
Glasgow	,, 20	—	—	1	—	1

TOTAL SINCE FIRST OUTBREAK.

Names of Places.	Date.	Cases. Diarrhœa.	Cases. App. Cholera.	Cases. Cholera.	Deaths. Diarrhœa.	Deaths. Cholera.
Dundee	Nov. 17					
,,	,, 18	2885	141	276	—	142
,,	,, 19					
,,	,, 20					
Workington } Cockermouth }	,, 19	—	—	—	—	9
Isleham	,, 17	—	—	—	—	—
Leith	13 to 15	—	—	—	—	2
Aughter-house	Up to 17	—	—	—	—	—
Durham	Nov. 19	—	—	—	—	3
Arbroath	,, 18	—	—	—	—	14
,,	,, 21	—	—	—	—	
Dalmeny	,, 19	—	—	3	—	3
Bridport	,, 19	—	—	—	—	1
South Shields	,, 6	—	—	—	—	77
Cupar Fife	,, 20	—	—	1	—	—
Tunbridge	,, 21	—	—	3	—	2
Liverpool	11 to 22	—	—	—	—	—
Liff and Benvie	,, 21	—	—	3	—	3
Glasgow	,, 20	—	—	2	—	2

CHOLERA ON SHIP-BOARD.—The *Cork Examiner* of Nov. 18, contains the following:—"We have just been informed of the arrival of another emigrant ship in Queenstown, which has been visited, to a dreadful extent, with the scourge of cholera. Through the agency of Mr. Meldahl, the German interpreter of the port, it was ascertained that the ship was a Prussian vessel belonging to Rostock, called the Prevalar, and that she left Hamburg on the 26th of October, with 159 German emigrants for New York. On the 28th of October, after being two days at sea, one of the passengers died of cholera, and, since that date, the deaths have averaged about one each day. In a few days after, the captain was attacked with the same disease, and died on the 7th of this month. The sailmaker of the ship was attacked, and died; and those are the only deaths that have occurred among the crew. The disease on board this ship is said to be of a very mild type, those attacked generally living six or eight, and, in some instances, ten days."

CHOLERA ABROAD.

By accounts from Berlin to the 17th October, we learn, that since the commencement of the epidemic there have been 1285 cases of cholera in that city, of which 832 died, 322 recovered, and 131 remained under treatment.

At Stettin, to the 14th October, the number of cases has been 1009, and of deaths 232.

At Gottenburg the cases were 956; deaths, 533.

At Christiana the deaths had amounted to 1600.

At Königsberg the attacks were 213; deaths, 111.

At Stockholm, to the 30th September, the attacks had amounted to 4143; the deaths to 2477.

At Christiana, to the 30th September, the attacks had been 2318, the deaths 1506.

At Helsingfors, in Russia, the attacks had been 1328, the deaths 1607.

At Norköping, to the 24th September, there were 2118 attacks, 675 deaths.

At Copenhagen the attacks have been 7515; the deaths, 4074; and it is stated that these numbers are considerably under the truth.

At St. Petersburg the attacks have amounted to 13,121; the deaths to 5351.

REVIEWS.

On the Remote Cause of Epidemic Diseases. By JOHN PARKIN. Pp. 198. London. 1841.

The Remote Cause of Epidemic Diseases; or, the Influence of Volcanic Action in the Production of General Pestilences. By JOHN PARKIN, M.D. Part II. Pp. 16. London. 1853.

The Cause of Blight and Pestilence in the Vegetable Creation: with Suggestions for the Development of Other Supplies of Food during the present Crisis. By JOHN PARKIN, M.D. Pp. 15. London. 1846.

The Prevention and Treatment of Disease in the Potato and Other Crops. By JOHN PARKIN, M.D. Pp. 84. London. 1847.

THE first of these works was published in 1841, some years after the first invasion of cholera in this country. The author then examined the alleged causes of epidemic diseases, and found that they were all unsatisfactory. He was induced altogether to disbelieve the assertion that they were propagated by contagion, and brought forward all the usual arguments by which that view is controverted. He observed that epidemics broke out at particular times, had a limited duration, and passed across the earth in the direction of particular lines. He next proceeded to show that volcanic action is felt or witnessed along certain lines of the earth's surface, that its occurrence is paroxysmal and of limited duration, and that

it is accompanied by various atmospheric phenomena, such as rain, wind, hail, and hurricanes. He then attempted to connect the outbreaks of epidemic diseases with the existence of volcanic movements and earthquakes, both in point of time and of locality, and came to the conclusion, that the subterranean commotions, the atmospheric variations, and the visitations of disease upon man, animals, and plants, were to be considered not merely as accidental coincidences, but as events mutually and necessarily connected together. Proceeding a step further, he propounded the theory, that epidemic diseases were actually *caused* by the exhalations from the bowels of the earth during periods of volcanic activity; and he adduced many ingenious, though not quite convincing arguments, in support of this view.

In the present year, the author publishes a short pamphlet as the second part of his previous work; and from the results of more mature experience and reflection, he is induced to maintain the correctness of his original theory, notwithstanding the fact, that it has made little way in the public mind, and has been stoutly opposed in some quarters, especially by Mr. Farr, the very able author of the Medical Statistical Reports emanating from the office of the Registrar-General, whose objections are summed up by Dr. Parkin as follow:—

"1st. The successive outbreaks of cholera in the districts of England have not, in 1832 or 1849, been preceded, accompanied, or followed, by any earthquake, or visible volcanic phenomena; 2ndly, Cholera is, apparently, not more fatal in the immediate neighbourhood of volcanoes than it is elsewhere; and, 3rdly, the gases which escape from volcanoes have been analysed; but the poisonous element has not been identified or detected in places suffering from cholera."

It would be unjust to Dr. Parkin not to admit, that these objections are explained away with considerable force, but our space does not allow us to enter into the arguments, which are necessarily of a somewhat recondite character.

In the third and fourth works of Dr. Parkin, he extends his views of the volcanic origin of human epidemics to the periodic diseases which affect the vegetable kingdom, and more particularly refers to the well-known potato blight which so lately visited the world, and produced such lamentable results to the human race. Apart from his theoretical views, which are open to well-grounded objections, the author offers some useful hints to the agriculturist and the politician upon the cure and prevention of vegetable diseases, and upon the means of alleviating the distressing effects which such calamities must inflict upon the population.

Medical Reform; being the Sketch of a Plan for a National Institute of Medicine. By Azygos. Pp. 78. London: 1853.

This is an able pamphlet upon a subject on which many persons have written, and on which, perhaps, no two writers have agreed. The anonymous author proposes a comprehensive scheme for the fusion of all the medical examining and licensing bodies into one great Institute, and for the classification of all present and future Practitioners into Physicians, Licentiates, and Apothecaries: the latter being restricted to the preparation and sale of medicines, and the two former being allowed to charge only for their attendance. A high tone of feeling pervades this little work, and, although we are not at all sanguine that such a plan as that which it developes can ever be realised, we nevertheless think that many of the suggestions it contains might be made available in any well-considered measure of Medical reform which may hereafter be proposed.

An Introductory Lecture delivered in the Grant Medical College at Bombay, at the opening of the Session 1853-54. By C. Morehead, M.D., Principal and Professor of Medicine. Pp. 45. Bombay: 1853.

This lecture gives, upon the whole, a satisfactory account of the success of the efforts made in Bombay to found a native school of medicine; but Dr. Morehead complains, that the students do not sufficiently appreciate the great advantages which are offered to them by the Government. Dr. Morehead's observations are very judicious, and well calculated, by their plainness and perspicuity, to reach the minds of the Hindoo aspirants to medical honours.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON PARTIAL ANEURISM OF THE HEART.

By FORGET.

The author affirms, that the seat of partial aneurism of the heart is almost exclusively the left ventricle, and most commonly at the apex; rarely at the basis; most rarely in the wall between apex and basis. He believes, with Rokitansky, that there is an acute and a chronic form, of which the latter is the more common. The cause is acute or chronic endocarditis and pericarditis, producing softening of the muscular tissue. There are no pathognomonic signs during life, nor can anything be said respecting treatment. He relates the particulars of the case of a man, aged 81, in whom this morbid change was found.—*Gaz. de Paris*, 1853.

THE MICROSCOPICAL DILATATION OF THE BLOOD-VESSELS IN INFLAMMATIONS OF THE BRAIN AND DISEASES OF THE MIND.

By E. H. ECKER, of Utrecht.

The marbled colour of the cerebral substance ensues when the minute vessels, which usually are empty, become distended with blood. In the medullary substance there are vessels so small, that they seem scarcely capable of admitting blood-discs; but they are so numerous, that the white colour of the brain would disappear were they filled with blood. In the state of inflammatory congestion they become filled with a multitude of blood-corpuscles, and hence ensues the "rosy colour." This engorgement spreads to the greater vessels, so that everywhere there is seen a closely woven vascular net-work over all parts of the cerebral substance. Should the congestive stage pass into that of inflammation, the vessels become unequally enlarged in different parts. The dilatation may attain six times the normal diameter of the vessels, which are sometimes locally enlarged, so as to present aneurismal pouches. By this enlargement of the blood-vessels, the nerve fibres may be as completely compressed as if blood were effused. From investigations carried on in three cases, it appeared that the first patient died from pressure on the brain, caused by the dilated capillaries and their larger vascular trunks, and not from apoplexy and effusion of blood. The second patient suffered from severer symptoms; the congestion was of longer duration, and the blood effusions in the corpus striatum and in the cerebellum immediately around the dilated vessels were the causes of death. In the third case, death ensued rapidly from a sharp apoplectic stroke. The effusions of blood in the cerebellum were much more numerous than in the preceding, and the bloodvessels of the cerebellum were greatly dilated.

The author gives, in a table, the results of his micrometric measurements. The vessels were more dilated in the cerebellum than in the cortical substance of the cerebrum. The largest, however, were found in the corpus striatum, where they were also very numerous. By distension of these tubes, the structure of the brain becomes injured and compressed. From their great number, the general effect must be considerable.

Schröder van der Kolk, in order to determine microscopically the diameter of the cerebral vessels, cut thin slices of the brain, before the blood had had time to escape, about one mmtre. thick, and then spreading it upon glass, allowed it to dry. He next reduced its thickness to ½ mmtre, so as to render it transparent, and put it up in Canada balsam. From similar observations, the author proceeded to deduce his present conclusions.—*Deutsche Klinik*, 1853.

GANGRENE OF THE BRAIN AFTER DECUBITAL MORTIFICATION.

By Dr. GUNSBURG.

The author relates the following case in refutation of Henle, who doubts the propagation of pus, cancer-juice, etc., by the lymphatic vessels:—R., a criminal lunatic, became the subject of decubital mortification, which produced necrosis of a large portion of the external surface of the os sacrum; the patient died, labouring under symptoms of chronic hydrocephalus. The body was much emaciated; cranial bones thickened; the diploe had become obliterated; dura mater of pearly-white colour; pia mater thickened. The base of cerebrum, namely, the middle lobe, the crus cerebri, and the optic thalamus, was of greenish-grey, or

black colour, and completely softened. In the lateral ventricle, there were about three ounces of clear fluid. Both lungs were loosely adherent: there was a reddish serum in the bronchial tubes. Spleen somewhat enlarged. The splenic, the left hypogastric, the left external iliac, and both vertebral arteries, contained masses of elementary granules, resembling pigment cells, and spindle-shaped corpuscles, which constituted little grumous masses, identical with those at the base of the brain. These masses are regarded by the author as taken up from the slough over the sacrum, or from some other diseased part, and as being conveyed to other organs by the arteries.—*Deutsche Klinik*, 1853.

UPON THE SEAT AND USUAL CAUSES OF DISEASE OF THE HEART.

By Professor GRAUX.

It is a matter of common experience, that diseases of the heart are found especially to affect the left side. The cause of this is the direct relation of these cavities to the respiratory apparatus, through the medium of which noxious matters are conveyed from without into the arterial blood, and thus cause a variety of morbid changes either in the circulating fluid itself, or in the walls of the vessels which contain it. As an example he brings forward the inhalation of chloroform, watery vapour, the miasmata of hospitals, or carbonic acid. The transition of fluid or gaseous matters from the ramifications of the bronchi into the left cavities of the heart is favoured by the close contact of the small pulmonary veins with the bronchial tubes, and the extreme delicacy of their walls.

The author does not overlook the influence which may be exerted upon the left cavities of the heart by substances taken into the circulation from the intestines or from the systemic venous capillaries; but he regards it as inferior to that caused by matter introduced with atmospheric air through the medium of the lungs. To illustrate his views, he commences with an account of the anatomical relations between the pulmonary arteries and veins, and the connexion of the latter with the left auricle. This contains nothing new. He affirms, however, that Bichat is in error in the assertion, that the pulmonary artery belongs to the venous system, and the pulmonary veins to the arterial.

That changes of colour, or thickness in the walls of the pulmonary veins, so often found upon examination, are not the consequence of age, or of the passage of arterial blood through them, is proved by—1. Many observations upon old persons whose veins were normal when the lungs were healthy; 2. By examinations of the bodies of children who have died from disease of the lungs. In them changes of structure were observed in the pulmonary veins.

The proof, how lesion of the left side of the heart occurs through the medium of the pulmonary veins transmitting blood morbidly changed, or conveying noxious matters imbibed from without, fails in this work completely. Perhaps it will give the reader a just idea of the value of the author's views on pathology, when we assert, that he recognises an inflammation of the blood.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, Nov. 17, 1853.

The session of the Medico-Chirurgical Society commenced last night, and the first meeting was numerously attended.

Mr. Syme read an exceedingly interesting and practical paper on "Pedunculated Exostosis of Bone." He objected to the nomenclature of Sir Astley Cooper and to the operation of Liston, who, not distinguishing between the several varieties of exostosis, performed amputation in all cases. Mr. Syme pointed out the frequent occurrence of a variety of this tumour in the superior maxillary bone, and reflected somewhat severely on the writers of books on surgery for "students," for not giving him the credit for being the first to perform the operation of removal of the superior maxillary bone in Europe. Mr. Syme proposed to divide the various tumours arising from bone into three classes:—1st. Solid bony tumours. 2ndly. Hollow tumours. 3rdly. Spiculated or laminated tumours. He particularly drew attention to one form where the tumour is attached by a neck (pedunculated exostosis); and narrated two interesting cases where sudden swelling and effusion around these tumours occurred, which he was at a loss to account for; until cutting down upon it, in one case, he discovered that the tumour was invested with a synovial membrane, presenting appearances and undergoing diseases similar to that which exists in joints. Mr. Syme concluded his paper with the account of a case where he had removed an exostosis of this kind from the upper part of the thigh of a young lady from Lancashire.

At the request of Mr. Syme, Mr. Lister then read a minute account of the general appearance and microscopic character of the tumour in this last case, illustrated by drawings.

Professor Miller followed: He began by defending the nomenclature of Sir A. Cooper, which, he thought, had scarcely been fairly represented by Mr. Syme; and, while condemning Mr. Liston's practice of indiscriminate amputation of the distal phalanx of the toes, on account of the exostoses which are apt to grow at the side or extremity of the nail, he stated as his belief, that before his death, this great surgeon had seen reason to alter his practice in these cases, and that but for his earlier opinion, the museum of the University would have lost a series of most excellent preparations of these diseases. Professor Miller further objected to Mr. Syme's proposed threefold division, on the ground that it classed together tumours requiring very opposite treatment, and stated that although Mr. Syme might have been the first actually to remove the superior maxillary bone, the operation was certainly suggested, and its practicability shown, by Mr. Lizars.

Mr. Syme replied at some length, and narrated a case of tumour in the nasal bones, projecting both externally and internally, which Mr. Miller had treated by twisting out the internal tumour, which speedily grew again, closing the nostril, of which he (Mr. Syme) thought it necessary to remove the whole bone with the tumour.

Mr. Miller explained, in reference to this case, that he had in the first place removed a polypus from the nose, of a suspicious character, and that, some months afterwards, a malignant tumour had appeared on the bone, with which he did not think it advisable to interfere; that he still retained his first opinion, while he hoped Professor Syme would not have reason to regret interfering with a malignant growth.

The discussion threatening at this stage to become a little personal, though still quite good-humoured on both sides, the President (Dr. Simpson) called on some other surgeon to express his views, when Professor Bennet rose, and was proceeding to adjudicate between the Professor of Systematic and the Professor of Clinical Surgery; but his interpretation of their statements being repudiated by both these gentlemen, he sat down, protesting against the doctrine, that the return of this or any other tumour, after operation, was to be held as proof of its malignant character.

Mr. Lister then rose, and gave a luminous exposition of the pathological characters of this tumour, taken from the nose; and, after a few more desultory remarks, the meeting broke up.

The points on which Mr. Syme peculiarly dwelt in his paper were—1st. The propriety of removing the pedunculated tumour; and 2nd. The explanation of the swelling and fluctuation sometimes observed in these tumours, and which was apt to create the suspicion of the existence of malignant disease of the bone. These, the real points of the paper, were scarcely noticed; and these I consider an important addition to our knowledge of these growths. Had the paper been free from sundry caustic remarks, it would have been considerably improved.

GENERAL CORRESPONDENCE.

CHLOROFORM AT ST. BARTHOLOMEW'S HOSPITAL.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your last Number, you appealed to me for an answer to the question, "Is the opinion a correct one, that the kind of inhaler used at St. Bartholomew's Hospital affords no means of either knowing or regulating, even approximately, the proportion of vapour in the air which the patient inhales?"

I am anxious to meet this appeal, not only from personal considerations, but on account of the extended influence which the example of a large public institution must have on the Profession. If the plan which has hitherto been pursued at St. Bartholomew's be a bad one, let it be at once discontinued; and let those who have followed it make open confession of their error, and be the foremost to disabuse the Profession of their confidence in a practice which is not only unscientific but dangerous.

Whether or not this is in reality the case, I will endeavour to give your readers the means of determining; and, in order to do

this, I shall first briefly describe the form of the inhaler which has hitherto been used at St. Bartholomew's, and to which reference is made. I will then subjoin a few remarks, partly in answer to your question, and also having reference to an element of danger incidental to the most careful administration of chloroform, which, in my opinion, has not been sufficiently appreciated.

The inhaler consists of a mouth-piece (probably well known to your readers) of a conical form, and fitting closely at its base round the nose and mouth. At the truncated apex of this cone there is a cylinder of an inch and a-half diameter and seven-sixteenths of an inch in depth, containing a piece of sponge nicely cut and adjusted to fit into this chamber, which encloses it between two pieces of gauze wire. The chloroform is poured on the sponge; and all the air which is admitted to the lungs when the instrument is closely applied to the face passes through the sponge, charging itself with the vapour of chloroform in its transit. I say this is the case when the inhaler is closely applied; but it is frequently or even generally found, that, at the commencement of inhalation, it is most convenient to allow some air to pass between the margin of the inhaler and the face, so that the air which passes through the sponge is diluted to a variable extent.

Between the cylinder containing the sponge and that part of the instrument which is fitted to the nose, there is a valve opening outwards for the passage of the expired air, which also passes in part through the sponge, thereby wasting the chloroform to a certain extent.

It appears to me, that in such an instrument, the amount of chloroform which will be conveyed to the lungs will depend, *cæteris paribus*, on two points, viz., the depth of the cylinder of sponge and its closeness, through which the air is inspired. To illustrate this, the sponge may be considered as a series of layers of gauze, each of which is moistened with a certain amount of chloroform.

By removing successively one of these layers, that is, by diminishing the depth of the cylinder of sponge, you diminish *pro tanto* the surface from which the air has to charge itself; and it appears to me that it would not be more difficult to ascertain by measurement what per centage of the vapour of chloroform would be taken up by air which has passed through a sponge of a certain depth or thickness, than it would be to determine it in other cases in which it has been alleged to have been done.

There can, I think, be no doubt, if I were to illustrate this view by extreme cases, that, if the depth of the cylinder of sponge were increased to any great extent, that air would be carried to the lungs, if, indeed, their irritability allowed it, perfectly saturated with the choloroform; and that, on the other hand, if the cylinder of sponge was so reduced in thickness as to represent only a single layer of thin gauze, the anæsthetic effects of the chloroform would never be produced.

Any one in whose hands a fatal result has ensued, has indeed received a severe lesson; but how much more has he whose anxieties are multiplied tenfold by the importance of his public position! As a private individual, his responsibility is great enough; but we cannot limit it to this, for he must accept that of those who are the followers of his practice, and he incurs morally the penalty of their malapraxis who plead as their justification the example which he has set them.

As it is the fate of the writer to stand in this position, he will not assume the responsibility of upholding or sanctioning the use of an instrument whose safety is called in question; but he believes that he has shown that there is an intelligible principle in its construction, and one which might form the basis of a convenient and scientific apparatus,—that, in fact, it does afford, as much as any apparatus affords, "the means of ascertaining, at least approximately, the proportion of vapour in the air which the patient inhales;" and that, although it does not provide, when closely applied to the face, for any regulation of the quantity of the chloroform in the inspired air, yet the means of effecting this is left to the discretion of the operator in the manner alluded to above at the commencement of operations, just as in any other apparatus, a valve for tempering the inspired current is at the operator's discretion either opened or allowed to remain closed.

I hope, Sir, that neither you nor your readers will imagine that my intention is to defend, and by defending to recommend, an instrument of questionable value. My object has only been to give an answer to a definite question, and to show how much is provided by the apparatus in question, and how much is left to the discretion of the operator.

I am of opinion, that we have not yet succeeded in obtaining an instrument which is entirely free from objections; it is impossible that we shall get one which will absolve the operator from the most careful watching of the physiological effects of the anæsthetic; so that, in every case, the watchfulness of the attendant must supplement the deficiency or imperfections of his apparatus. It is not enough to say, "We have tested our instrument, and we find that air which has been passed through it at the ordinary rate of an inspiration will absorb so much per cent. of the vapour of chloroform." We can place no practical reliance on the average rate of an inspiration, for the exertion of a little struggling will increase many fold the frequency of the inspirations; so that, in a given time, the quantity of chloroform which may be taken into the system will be increased, though not exactly,(a) yet almost in a proportionate degree with the frequency of the respirations.

But, while we would not depreciate the value of the most carefully constructed instruments, but rather most anxiously avail ourselves of every means which might tend to insure safety, it appears to me that, after all, we must be chiefly guided by the physiological effects. Few have had the advantage of greater experience than ourselves. Is that experience to be deemed of no account? I cannot think so; and my conviction is, after the most careful consideration, that the death of ——— Smith was not in any way due to the method in which the chloroform was administered, but rather to a circumstance incidental to its administration, and to which I shall presently refer. Are we to suppose that that method, which has been successful—I speak without exaggeration—in hundreds of cases, is fraught with danger, of which, in not one of these cases, has it given the slightest intimation? Surely it would be irrational to accept such a conclusion.

But the melancholy fact is before us, and we must explain it as we can; and this brings me to the consideration of that element or circumstance of danger to which I have just referred, and at which I hinted in the earlier part of my communication.

This element of danger is to be found in the violent struggling of the patient,—a danger which is not obviated by the most careful and scientific administration of chloroform, where its influence is not fully appreciated and understood. It is this struggling which proves the source of that fatal and sudden exhaustion from which the chloroform, not otherwise in excess or faultily administered, renders recovery impossible. With how many analogous phenomena does not physiology support this opinion? The beneficial effects of chloroform and other anæsthetics are due to a temporary poisoning of the blood in a manner which is in analogy with the poisoning of the blood in drunkenness or in the extreme case of delirium tremens. Let us suppose the drunkard to be the subject of a violent or prolonged epileptic convulsion, would not the incidence of intoxication be accepted as the explanation of death in such a case ensuing from a cause, which, though not exempt from danger, is not usually fatal? Is it an uncommon event for the subject of delirium tremens to fall back lifeless after some sudden or violent effort?

But additional reasons and much fuller proof must be afforded of the accuracy of this opinion. I propose, therefore, to revert to this subject on a future occasion.

I am, &c. P. Black, M.D.

St. Bartholomew's Hospital, Nov. 16, 1853.

CASE OF CHOLERA WITHOUT PREMONITORY DIARRHŒA.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the letter addressed to the Registrar-General by Dr. Macloughlin, published in your last Number, I observe the following remarks:—"As yet no case of cholera has been discovered which had not had a premonitory diarrhœa for some hours, for some days, or for some weeks, previous to an attack of spasms, etc.,—not even excepting the cases reported in your weekly return as cases of cholera without any premonitory symptoms. All these cases have been inquired into, and all have been ascertained to have had either a diarrhœa for some hours or for some days previous to the attack of spasms, etc." It does not often fall to one's lot to be so positive a witness in this matter as in the following case:—Mrs. H., aged 40, a fine, hale, strong, sober, good-natured woman, tendered her services to nurse a patient of mine in labour with her first child. The confinement was most tedious, and was terminated (after nature had given up the effort) by instrumental aid, at least fifty hours from the earliest pains. During all this time Mrs. H. was most attentive, watchful, and kind towards the patient, even neglecting to get her own meals with any regularity, and not taking any sleep or rest. Within half an hour from my leaving the house, the husband of my patient came to me in great alarm, stating the nurse was seized with the cholera. In a few minutes I returned with him, and found the nurse (Mrs. H.) in the most deplorable condition,—almost pulseless, voiceless, and

(a) It is supposed that air which passes rapidly through will absorb less chloroform.

quite cold, after a sudden attack of pain, sickness, and purging, with cramps, etc., which still continued in all their terrible severity, in spite of all efforts, until she was released by death, some seven hours after this sudden attack. Here is a case in which I am very sure there was not a premonitory symptom. Several others also it fell to my lot to witness here in the visitation of 1849, in which I could not get any history of premonitory symptoms from the sufferer, (who, indeed, does not easily or readily answer,) or those who had been about him; yet, in every case, was to be gained a history which declared the sufferer to have been in a state of physical prostration and exhaustion, or below par, when attacked.

I am, &c. J. W. Turner, Surgeon, etc.

31, Lower Phillimore-place, Kensington.

THE ADVENT OF CHOLERA IN ARBROATH.

[To the Editor of the Medical Times and Gazette.]

Sir,—While on a rambling holiday in the North, visiting my native town, Arbroath, cholera made its appearance for the first time during this epidemic; and, having no fixed notions of the great question as to contagion or non-contagion, I give you a little narrative of the advent of cholera in Arbroath, which made a due impression upon my mind; and you are at liberty either to insert it in your valuable Journal, or your valueless waste-paper basket.

The first case was that of a married woman, who had been in attendance on her daughter, who was carried off by cholera in Dundee, a distance of seventeen miles from Arbroath. She bundled the dead woman's clothes up, and carried them with her to her own dwelling in Arbroath, where she was engaged during the whole of the first night in washing them, in order that the neighbours might not witness so imprudent an act. Before night she was a corpse. Her husband, who arrived in the morning from Dundee, quickly followed; and another daughter so speedily, that the two latter were borne to the grave at the same time. This daughter had not left Arbroath.

A young man, a generous volunteer in rendering the unfortunate family assistance, was attacked, but recovered,—(a change of treatment was adopted in this case, the air of the sick apartment being charged with sulphurous vapour.) Finally, a promising medical student, of 19 years of age, who had also been in zealous attendance upon the family, was quickly seized, and quickly perished,—all these cases occurring in regular and rapid succession. These are the substantial facts that I can vouch for. I should have preferred giving you the details in a more finished state, but was disappointed from a lazy friend not complying with my request. Several cases have occurred since, and it would be curious to learn how far they had started off from a common centre. Locality here had certainly nothing to do with it. It was a clear case of conveyance from one place to another.

I am, &c. Jas. Davidson, M.D., Surgeon, R.N.

Addison-road, Kensington, Nov. 21, 1853.

STRANGE QUESTIONING FOR THE DIPLOMA OF THE ROYAL COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is currently reported, that more than one candidate for the diploma of the Royal College of Surgeons of England has been lately asked by a learned Examiner, celebrated for total unfitness for his office, "Upon what principle do you apply a ligature to a wounded artery?"

Perhaps one of your numerous correspondents may, by a bare possibility, hit upon the answer. I have not the remotest idea what is meant; especially as to the reply, "To arrest hæmorrhage," there came an angry rejoinder, "You had better take care what you are about, Sir." Some very many years ago, I was examined, and was asked by an elderly gentleman, of most respectable reputation, "If a man fell from an attic window upon the area-palings, and one of the railings ran into his chest, what should I expect?" Sir, I should expect the man would hurt himself; he would have his ribs fractured, his chest opened, his lung wounded; I should expect that he would die, that the by-standers would be alarmed, that women would shriek, and that the police would carry the unfortunate man off on a stretcher.

Does not this style of silly questioning show the want of a very different system of examination? I am, &c.

Scrutator.

University of Glasgow.—The Earl of Eglington has been re-appointed Lord Rector, after a sharp contest with Mr. Alfred Tennison, the Poet Laureate.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, November 15, 1853.

Dr. Babington, the President, in the Chair.

Mr. Robinson exhibited a preparation of

ANEURISM OF THE ABDOMINAL AORTA.

The patient had suffered from diseased aortic valves and from hæmaturia; there had been œdema of the legs, which was relieved by puncture. He was cupped in the loins, and three or four days after coagula of blood came away from the bladder, and from this time there was no return of hæmaturia. He died rather suddenly. On a *post-mortem* examination, an aneurism of the abdominal aorta was found extending from the superior mesenteric artery to the bifurcation of the iliacs. The back of the aneurism was formed by the vertebral column. The vertebræ were somewhat scabrous, but the intervertebral cartilages were not affected. There was a free communication between the aorta and the ascending vena cava. The disease of the aortic valves was sufficient to account for death. The most important question in the case was, whether there had been an intermingling of venous and arterial blood, or whether one current had balanced the other. There had been symptoms of imperfect arterialization of the blood. The case was a rare one, there being only two similar ones on record.

Dr. Brinton thought that, considering merely the dynamical laws of the circulation, the transfer of blood would be more likely to be from the artery to the vein, than from the vein to the artery, from the greater strength of the current in the artery, and that consequently so much arterial blood had been lost to the circulation.

Mr. Brooks observed, that the aperture appeared to be out of the way of the force of the current; the coats of the cava were not thickened, nor its calibre increased; and, consequently, there could not have been much flow of blood into it from the aorta.

Mr. Robinson also laid before the Society an example of

PERFORATING ULCER OF THE ILEUM.

The patient, during his recovery from an attack of intermittent fever, with hæmorrhage from the bowels, contrary to the advice of his medical attendant, partook of a very hearty meal of unsuitable food; soon after, he was seized with symptoms of perforation of the bowel, and, after much suffering, died. On examination, the greater omentum, and two folds of the ileum, were found adherent to the symphisis pubis and to the fundus of the bladder. The sigmoid flexure of the colon and the rectum were thickened, but not absolutely in an inflamed state. In the ileum was found a patch, not absolutely perforated, but so much softened as to give way on the least pressure; and this he thought, from various cases, to be the usual state of things, the parts being kept together by the adhesions of the surrounding tissues, and the perforation being an artificial appearance, from the necessary violence of an examination.

Dr. Snow mentioned several cases where fæces were found in the cavity of the peritoneum, having escaped through a perforation of the bowel.

Dr. Sankey thought that there was usually some escape though but small in quantity, the perforation being bound down, by the peritoneal adhesions.

Dr. Ogle exhibited a case of

CONGENITAL MALFORMATION OF THE HEART.

The pulmonary valves were diseased, and the right ventricle hypertrophied, in order to overcome the obstruction. There was a communication between the ventricles. The aortic valves also were diseased. The patient was a girl who had come under his care with hysterical symptoms, and who afterwards became delirious and died. There was no cyanosis.

Dr. Peacock thought the absence of cyanosis an interesting feature in the case, but that the hypertrophy of the right ventricle would explain it.

Mr. Hutchinson exhibited

THE MALFORMED HEART OF A CYANOTIC GIRL, AGED ELEVEN.

The bulk of the organ consisted of a much enlarged left ventricle; both auricles were, however, perfect in size and form, and there was in the upper part of the front wall of the left ventricle a small chamber, evidently the undeveloped analogue of the right. This latter cavity was further divided into two by a muscular septum of some thickness, situated eight lines beneath the attachment of the

pulmonary semilunars, and separating the infundibular portion from the sinus of the ventricle. The infundibular part was extremely small. In the centre of this abnormal septum was a minute opening, only admitting of the passage of a small probe, through which the entire pulmonary current of blood must have passed. The pulmonary artery and the aorta were of natural size; the ductus arteriosus closed; the septum of the auricles perfect, that of the ventricles almost wholly deficient. Although not structurally an example of a single or reptile's heart, yet practically it had been so, with the additional inconvenience of an extreme impediment to the passage of blood into the pulmonary artery. From the deficiency of the ventricular septum, both auricles had communicated with the left ventricle, and by the latter the pulmonary as well as the systemic circulation had been carried on. During life, the child had been an example of very severe blue disease, stunted in her growth, never able to take exercise, or to maintain her temperature without the aid of artificial warmth. Mr. Hutchinson stated, that he was indebted to the kindness of his friend Mr. Keyworth, of York, for an opportunity of exhibiting the specimen.

Dr. Peacock remarked on the points of analogy and difference between this case and that brought forward by Dr. Sieveking at the last meeting of the Society; and observed, that all these cases seem to show that obstruction to the circulation during fœtal life is the cause of all these malformations.

Mr. Simmonds showed a specimen of

STRONGYLI IN THE ARTERY OF AN ASS.

These parasites were very common among some of the lower animals, more particularly in asses. These animals were seldom found free from them. They were most frequently found in the mesenteric arteries; but were, of course, sometimes, though not so frequently as might be expected, carried to other parts of the arterial system. The animals do not die of it. The artery shown was full of them.

Dr. Snow thought that their presence in the mesenteric arteries might throw some light on their origin, the ova, probably, having been introduced with the food.

Mr. Simmonds said, that they were found at the origin of the artery, and not at its distribution on the intestine, as should be the case on this supposition.

Dr. Handfield Jones presented several drawings illustrative of

THE STATE OF THE LIVER IN JAUNDICE;

and read the history of the cases from which they had been taken. The conclusions he arrived at from the cases were—

1. That interference with the out-flow of bile into the intestine causes dilatation, chiefly of the gall-bladder and larger ducts, and not at all of the smallest.

2. That this arrest of the bile-flow tends to produce local or general jaundice of the liver itself, but does not do so necessarily, at least not for some time.

3. That local jaundice of the liver in spots, and general jaundice, as in acute yellow atrophy affecting the whole organ, may be produced without any such obstruction.

4. That any considerable accumulation of yellow pigment in the hepatic cells may be chiefly, if not entirely, dependent on vascular congestion long protracted, the exuding hæmatine undergoing changes in the liver similar to those seen when it exudes in other parts.

5. That from the comparatively small number of the coloured spots, and their often wide separation in cases of local hepatic jaundice, there seems reason to conclude, that derangement of the action of the ultimate ducts is materially concerned in their production. If this were not so, the spots ought to occur at every point where a duct terminates, as the backward pressure must tell on all alike.

Mr. H. Thompson exhibited a preparation of

HYPERTROPHY OF THE BLADDER, WITH DILATED URETERS AND DISEASED KIDNEYS.

The patient had had a stricture of the urethra for eight or ten years, but did not apply for medical aid until within the last fortnight, when there was every symptom of extravasation of urine; free incisions were made, and pus, and afterwards urine, came away, and for some days there was a flow of urine both from the opening made and from the natural passages; that from the natural passages increasing during the last few days of life, as if the ulceration was destroying the stricture. Throughout the case the introduction of a cathether was found impossible. Latterly there had been no signs of extravasation. Diarrhœa came on, and the man sank under it. There were no symptoms of poisoning by absorption of urea. At no time did puncture of the bladder appear advisable, on account of the gangrenous state of the parts. On examination, the bladder was found much hypertrophied, the ureters dilated to the size of the small intestines, and the kidneys much diseased and enlarged, the pelvis of left kidney measuring seven inches across.

Mr. Park brought forward an example of

MALIGNANT DISEASE OF THE OVARY.

The tumour was found filling the brim of the pelvis, and burst in removing, allowing the escape of a pint and a-half of purulent fluid. The right internal iliac artery and vein were obliterated by the pressure of the tumour, and the right ureter and kidney were distended and full of urine. The rectum was much congested, accounting for the great pain which had been experienced in the act of defæcation.

Dr. Bristowe exhibited a preparation showing

GREAT ELONGATION OF THE CERVIX UTERI,

which had, during life, much the appearance of a tumour from the mucous membrane of the vagina. There was also ovarian dropsy, and the great elongation of the cervix uteri appeared to have been caused by the body of the uterus having been prevented from descending by its ligaments, etc., and by the diseased and enlarged ovary.

Dr. Bristowe also showed a case of

DISEASED KIDNEY.

The secreting tissue was obliterated, and a number of cysts were to be found in its stead, filled with a soft, putty-like matter, which was not unlike tubercle, but which Dr. Bristowe believed to be the effect of suppurative inflammation. The ureter was small, and almost impervious.

Mr. Wm. Adams exhibited an example of

ULCERATION OF THE INTERVERTEBRAL CARTILAGES OF THE LUMBAR VERTEBRÆ,

following a blow on the back, in a sailor, aged 43. There were also traces of old and recent tubercular disease. Mr. Adams considered that two distinct diseases of the vertebral column were often confounded, and that the disease affecting the cancellous tissue of the vertebræ is necrosis rather than caries, and that, when the intervertebral substance is attacked, it is truly an articular disease.

MEDICAL SOCIETY OF LONDON.

November 19, 1853.

Forbes Winslow, M.D., D.C.L., President, in the Chair.

Dr. Crisp brought before the notice of the Society the following case of

ARREST OF DEVELOPMENT IN THE FŒTUS,

supposed to have been produced by a mental impression upon the mother. Mrs. A. brought her infant, aged 11 months, to the Metropolitan Dispensary on Tuesday last, November 15. On investigating the child's symptoms, the mother stated, that "the infant had only one leg." On examination, Dr. Crisp found the right leg nearly absent, there being only about an inch below the knee-joint, and to this was attached a small, round, integumentary appendage. The mother says, "her first child, now nine years of age, has a very large, long head, she, at the commencement of her pregnancy, having been frightened by a horse. During the early months of her last pregnancy, she saw a crowd of persons in the street, and, believing herself not to be in the family-way, she pushed through the crowd, and was horrified at the sight of a sailor without a leg or legs." Her impression was, when she found that she was with child, that the fœtus would be deformed, but never anticipated that it would be born with one leg. Dr. Crisp remarked, that he had always been a disbeliever in the effect of mental impressions of the mother upon the embryo, as no nervous communication existed between the uterus and the placenta; but the instance in question somewhat startled him; and, although the occurrence of this deformity might have been merely a coincidence, he thought the case was worthy of record, as it was only by the accumulation of such examples that the question could be ultimately settled.

Mr. Hunt related the particulars of a similar case in which the development of the arm had been arrested by the funis tied in knots around it. This mother had also been impressed on seeing a man with an amputated arm, but had not mentioned any fear as to her child until after its birth.

The President had no doubt of the fact, that the mother's mental impressions do influence the fœtus, and reminded the Society that

Sir E. Home had affirmed, in a paper inserted in the "Philosophical Transactions," that there is a nervous connexion between mother and child. In periods of public agitation, monstrosities are more frequent, and idiocy was known to have been very prevalent in children born during the periods of the French and American revolutions. He then reminded the fellows, that twenty years ago, Dr. Addison had presented to the notice of the Society the skin of the face of a child marked with half-diamonds, which was said to have been produced from the mother having witnessed the performance of a clown. The preparation is still in Guy's Hospital.

Dr. Chowne, in reference to the case just mentioned by the President, state, that he had very carefully examined this preparation, and, although it was marked in a wonderful manner, he had come to the conclusion, that it was not so marked as the result of mental impression. Moreover, in the Charing-cross Hospital is a piece of skin exactly like that referred to, also taken from an infant, and presumed to have resulted from the mother having been frightened by walking on cracking ice.

RESECTION OF THE KNEE-JOINT IN JERSEY.

Mr. Henry Smith introduced to the Society Mr. Jones, of Jersey, who had performed this operation six times. All had been successful except one, which had died from epidemic dysentery. Mr. Jones had brought over two successful cases for the purpose of ascertaining from two or three leading surgeons if the operation ought still to be performed. One patient, 20 years of age, had the bones excised, and the patella removed twelve months ago, and is now able to walk steadily with a stiff knee without limping; to walk six or seven miles at one time, and to mount ladders in carrying on the business of a painter. The disease was strumous. The other is 13 years of age, and had the same operation performed six months ago, except that the patella was not removed. His limb is stiff, and he has now dislocation of the opposite hip-joint, but yet is able to move about with the aid of sticks.

The President congratulated Mr. Jones, and tendered to him the thanks of the Society.

Mr. B. W. Richardson read a paper on

THE FIBRINOUS CONSTITUENT OF THE BLOOD IN RELATION TO DISEASE.

He restated the leading points of his previous communications on this subject,—viz., 1st. That, under certain conditions of the system, fibrin may separate from the other blood constituents, form into cylinders and masses in the circulating machinery, and thus cause general or local death. 2ndly. That these fibrinous deposits form under some general conditions of the system,—from actual increase of fibrin, the result of super-oxidation of the blood and increased animal combustion, from relative increase of fibrin, and from mere languid motion of the blood itself. 3rdly. That the process called inflammation is a general systemic derangement, a super-oxygenation and combustion of the body; that the excess of fibrin in inflammation is a necessary consequence of this increased action; that the formation of fibrinous deposits is secondary to the increase of fibrin; and that in most cases of simple acute inflammation, which terminate at an early stage by what is called "the sinking state," the mere formation of a fibrinous deposit in the heart, is the chief, and, as a general rule, the only cause of the sinking symptoms. The author then described briefly the kinds of cases in which concretions are met with. He detailed several cases from his own practice, in which the sinking symptoms were obviously connected with fibrinous deposits in the right auricle. If ever, in the course of an acute inflammatory attack, a patient suddenly becomes pale and restless, with intermitting pulse, cold skin, and tumultuous heart, the inference might be drawn with almost absolute certainty, that a concretion was forming on the right side of the heart, and most probably in the auricle. In other cases, the symptoms were less well-marked, the local inflammatory manifestation having been located in some organ, the functions of which were not absolutely necessary to life, as the spleen; or the concretion having formed in such a manner as to obstruct the circulation of the blood only in a small degree. Some instances of this kind were related. In one, the concretion which had formed in the auricle was small, and œdema of the whole body followed from the obstruction produced, as from valvular disease. In another case, which had been recently inspected, there had been signs of concretion in the right auricle, and general congestion of the abdominal organs and suppressed urine, but no œdema. In this case, the concretion was placed *in auricula*, and did not immediately obstruct the circulation, as could be seen by looking at the specimen of the heart which was here presented before the Society, but it filled up sufficient of the cavity to cause its over-distension, and so induced slow death. In a third case, the spleen was the organ in which the local inflammatory mischief had occurred, and the splenic disease had never been diagnosed. The patient sank rapidly, with signs of congestion of the lungs and exhaustion—syncopal asphyxia. The concretion had formed in the pulmonary artery. At this point, the author took occasion to explain his views as to the way in which fibrinous concretions are formed. When they occur in the auricles, and are attached to the auricular wall, they are formed by the blood washing over the part,—are churned out of the blood; but when they occur in the large vessels running from the heart, they are always cylinders, and not mere clots. They are first laid down upon the inner surface of the tube; but as they soon become in this way an obstruction to the blood, they are dislodged from their attachment, they contract upon the current of blood that was passing through them, and now become plugs or cords, and the blood endeavours to rush past them,—that is, between them and the surface of the vessel. Hence, in these cases, the concretion is often found surrounded by a layer of clotted blood, and always containing in its centre a vein of clotted blood. Dr. E. Smith had recorded lately an excellent illustration of this kind. In cases of bronchitis, the fibrinous deposition in the heart is sometimes arrested by a free secretion on the bronchial surface. By this, the atmosphere is cut off in a great degree from the blood, oxidation is checked, and the fibrinous deposition is rendered abortive. After some remarks on the formation of concretions when inflammation is not present, and on deposits in the arteries at a distance from the heart, and on the unfavourable prognosis in cases in which concretion in the heart is known to be present, the author referred to the important subject of "treatment." The great endeavour of the practitioner ought, of course, to be to check the formation of concretion. He defended bloodletting, mercury, and salines in acute inflammation. In cases, however, where concretion had formed, all thought of depression must be at an end, and be superseded by careful and continued stimulation. It would, perhaps, never be possible to dissolve concretions situated in the heart. In conclusion, the author said, that if the diagnostic signs of concretion which he had described were correct, they would, at least, teach negative practice, inasmuch as the practitioner who might recognise certain effects as resulting from concretion, would know how to meet them. He would not treat restlessness with opium, purging with astringents, or congestion of the lungs and convulsions with bloodletting. Above all, he would not perform the operation of tracheotomy in croup, in cases where death was taking place from syncope, the result of concretion in the heart, and not from asphyxia, the result of obstruction in the windpipe.

The cause of the fibrinous concretions was the chief point of discussion.

Dr. Camps considered that the excess of fibrin met with in phthisis is rather due to the inflammatory complications of that disease, and that in pregnancy it is not absolute, but relative to the diminished quantity of red corpuscles.

Mr. Lee believed, that fibrinous concretions are frequently owing to the introduction of morbid products into the blood, and instanced a case in which, with abscess in the thigh, the profunda vein became plugged, while the femoral vein remained pervious. In the instances of diseased spleen and of abscess in the pericardium referred to by Mr. Richardson, the like result had doubtless followed. He had also attended a gentleman labouring under paroxysms of intense dyspnœa, without any evidence of inflammation or fever, in whom he diagnosed a portion of lung, into which air was not admitted, in consequence of a plug, which had been formed in the pulmonary vessels. A generous and not a heroic plan of treatment had succeeded. From such cases, and from the lividity of skin which is manifested in cases of fibrinous deposits, he inferred that the blood was sub-oxygenated rather than super-oxygenated.

Dr. Crisp had observed, that the fibrin coated the clot, or was attached to the side of the heart in many cases, and, therefore, that it was rather a dying or *post-mortem* occurrence. He did not deem the means of diagnosis to be sufficient, but thought that fibrinous concretions might have been the cause of death in some of those cases in which no adequate cause had been discovered. He had recently found a plug in the aorta of a person aged ninety years, who had been long dying from old age, and had no doubt of its having been due to the retarded circulation.

Dr. Routh combated at some length the author's theory, that fibrinous concretions are due to the state of super-oxygenation of the blood. He showed that the blood is usually alkaline, and that, as the solution of the fibrin is due to the alkalinity, the deposition of that substance would result from the contrary state. Dr. Williams's experiments had shown that the blood is acid in low forms of inflammation and in puerperal

fever, and that in their treatment, as in that of scurvy, alkalies are the best remedies. In such forms of disease there is also an excess of fibrin, but it is not due to super-oxygenation; and, on the contrary, in purpura there is a diminution of fibrin, and yet there is a great tendency to fibrinous deposits. He thought it probable, that the excess of fibrin was frequently due to the conversion of albumen into that substance, since Bouchut had noticed such excess to occur after injections of albumen into the circulation. He remarked that after death the blood coagulates more perfectly in winter than in summer, and advised that any examinations to determine the question, whether the concretions were living or *post-mortem* occurrences, should be made almost immediately after death.

Dr. Snow referred to the administration of chloroform as a remedy for super-oxygenation of the blood, and believed that it would be useful in active inflammations and in acute rheumatism. He would not use it where the deposition of fibrin was a reparative effort of nature, nor in low states of the system; but where it was proper to use it, he was of opinion that it must be continued for some days. He had not recommended it in such cases, since he believed that opium and other narcotics are equally efficacious, and act simply by lessening the activity of the oxygenating process of the blood.

Mr. Richardson replied, that he did not see any general principle in the theory, that the introduction of morbid matters into the blood may induce fibrinous concretions, and that lividity of the surface does not precede the formation of the clot, but accompanies the congestion which follows. He was of opinion, that fibrin is not dissolved, but simply held in solution, and, therefore, that the alkalinity of the blood is immaterial to that end. He had never stated that these deposits are always owing to the state of super-oxygenation of the blood, but that it is so in rheumatism and acute disease. The temperature of the season can have but little influence upon a living patient, since means are always taken to keep him in or near to an equal temperature. Fibrin abounds more in summer, and in persons residing within the tropics. He would restrict the use of chloroform to acute diseases, but was of opinion that it is a very proper remedy, if the dose at first be small, and subsequently increased.

MEDICO-CHIRURGICAL SOCIETY OF QUEEN'S COLLEGE, BIRMINGHAM.

November 1, 1853.

Pye H. Chavasse, Esq., Vice-President, in the Chair.

Dr. Fife read a Paper on

CHOLERA.

After considering the causes and nature of the disease, he entered on the treatment, and stated, that where premonitory diarrhœa exists, he does not at once stop it, but, by means of an alterative, with a small quantity of opium, restrains its violence. He believed it to be very important to maintain the action of the liver, which he had effected by a combination of mercury with chalk, ipecacuanha, and opium. Where the diarrhœa has already assumed the choleraic character, he gives calomel and opium. He strongly reprobated the abuse of alcoholic stimulants, and said, that if stimulants were used, they should be of the most diffusible kind. In reference to bloodletting, against the use of which there is so general a prejudice in this country, the author observed that he had only employed it in the worst cases, and so great was its utility, that he had not lost one patient where he had succeeded in obtaining blood. At the same time, he believed that the use of the lancet required great caution. Of saline injections and emetics he had no experience to offer to the Society, but thought that, from the known power of the latter in equalising the circulation, they might be often of great service.

Mr. Clayton related the case of a gentleman, aged 67, who applied to him on the 28th of July last, with the following symptoms:—For the fortnight or three weeks previously, he had been suffering from loss of appetite, languor, great distention of the stomach, from flatus after meals, and pain between the scapulæ. He also experienced more difficulty than formerly in walking up hill; while his rest had been much disturbed by attacks of dyspnœa, rendering it necessary for him to assume the upright position. Occasionally he felt a sense of oppression or constriction about the præcordia. Physical examination did not reveal anything abnormal in the chest, with the exception of feebleness of the heart's impulse. The treatment was chiefly directed to the relief of the dyspepsia. On the 31st, after eating a hearty dinner, he was attacked with vomiting, and passed a restless night, suffering from severe cardiac anguish, accompanied with a sense of impending dissolution. On the next day, contrary to the instructions of the narrator, he took active exercise in the course of business for several hours. About ten minutes after he had taken his seat in an omnibus, on his return home, his head was observed by a fellow-passenger to drop on his shoulder; on being raised, he was found to be dead. On the inspection of the body, it was observed to be much loaded with fat; the lungs were healthy, the heart soft and flabby, its muscular structure pale, and very friable, but not more than ordinarily loaded with adipose tissue. The ventricles were filled with blood. There was a small amount of ossific matter in the semilunar valves of the aorta, which was slightly dilated, and atheromatous to a marked degree. The orifices of the coronary arteries were fully patulous, but there was a large amount of ossific deposit through the whole of their course, and in some places they were entirely obliterated. After mentioning two or three other cases of death from angina pectoris, in which there was more or less disease of or about the coronary arteries, Mr. Clayton insisted that generally such paroxysms are dependent upon defective nutrition of the heart, either from disease of those vessels, of the valves, or of the aorta itself in their neighbourhood, whereby the course of the blood became obstructed. In some cases, the same result was brought about by impaired nervous energy. The author believed that aggravated dyspepsia is frequently the excitant of the paroxysm, from its debilitating effects upon the nervous system, and still more from its producing distension of the stomach, and thus mechanically interfering with the functions of the heart.

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

November 18, 1853.

Dr. Barclay, Vice-President, in the Chair.

Mr. Dickinson communicated a

CASE OF POISONING BY SULPHURIC ACID.

The patient recovered. The most remarkable feature of the case was the absence of any corrosion of the soft parts, a condition alluded to by Dr. Taylor, who narrates two or three instances of the same kind. In this case the mouth was probably shielded by the epithelium, which is always loose and abundant in the morning. It is also remarkable, that salivation, a common symptom, was absent in this case. That the stomach had sustained injury was certain, and as vomiting generally occurred some hours after the food had been swallowed, the lesion was probably seated at the pyloric extremity. The long continuance of constipation, and the sudden recovery of the patient upon its removal, were worthy of notice. Dr. Barclay then related two cases of poisoning, one by caustic potash, and the other probably by caustic ammonia, in both of which ulceration resulted. Cicatrisation, however, occurred, and caused such constriction as to prevent the passage of food, in the one case at the cardiac, and in the other, at the pyloric orifice, as was proved after death.

Mr. Ellis then read a paper

ON THE GALVANIC CAUTERY IN THE TREATMENT OF UTERINE DISEASE.

He remarked, that the actual cautery had seldom been applied to the uterus *in situ* until M. Jobert had recommended it in chronic disease of that organ. He alluded to the researches of Mr. Marshall, and his investigations on "electric heat in surgery." This gentleman only used a heated wire, which necessarily acted upon a small surface, and was consequently inefficient. The experiments of the author soon led him to adopt a better method, by which he was enabled to concentrate the heat evolved over a considerable surface,—an important element in cauterization by electric heat. The instrument he employed was as follows:—A good-sized silver catheter, straightened out, and the end cut off, formed the body of the instrument. It was then slit open at the upper end, and broached so as to form a socket for the porcelain cauteriser, and also to allow the internal wires to pass out. Within the catheter are placed the two conducting wires, insulated at one extremity, being connected with the wires of the battery, and at the other with a piece of platinum wire, which is coiled around the porcelain cauteriser. The battery employed is Grove's of four or five cells, and two such are required to heat the porcelain to whiteness, which degree of heat is essential. From this simple contrivance the instrument

derives its principal value, the heat being thus both intense and permanent. When ready it is entirely under the control of the surgeon; a matter of vast importance in its application. The patient to be operated upon should be in the usual obstetric position, and the battery and wires concealed from her, so that she should not have any idea of the nature of the remedy. A good light and a speculum are essential, and the speculum best adapted is the common circular glass one, or one composed of glass coated with gum-elastic. Neither the two-bladed metallic nor the conical glass answers; the former, because the heat radiated from the metal would be concentrated upon those portions of the vagina which bulge between the blades; and the latter, because it is liable to be easily expelled by the vagina. A full view of the os and cervix uteri having been obtained, the os should be cleansed with a piece of wool or cotton; and when the cautery has become intensely heated, it should be steadily introduced and quenched in the diseased tissue, the duration of the application, and the depth of its introduction depending upon the effect required. The eschars thus produced are marked by a whitish yellow border, and the cervix often contracts visibly under the application of the cautery. The author insisted upon the necessity of heating the porcelain to whiteness, otherwise slight hæmorrhage may occur from the instrument dragging off a portion of mucous membrane, which invariably adheres to it under other circumstances. The surgeon should also remember, that the degree of eschar is entirely under his control. He then stated, that the cases in which it was chiefly applicable, were those of induration of the cervix, and ulceration of the os uteri, of prolapsus uteri, and of prolapsus of the anterior wall of the vagina.

After some discussion the Society adjourned, the Chairman announcing, that on Friday, December 2, Dr. Baines would read a communication upon "Scrofulous Inflammation of the Eye."

UNIVERSITY OF LONDON.

M.B. SECOND EXAMINATION.—1853.

FIRST DIVISION.

Briggs, Henry	University College.
Clarke, Erlin	King's College.
De Castro, James Cato	University College.
Ekin, James	,, ,,
Evans, Evan	,, ,,
Gould, John Henry	,, ,,
Masfen, William Edward	King's College.
Roberts, William	University College.
Walker, John West	St. Bartholomew's Hospital.
Washbourn, Thomas Buchanan	Guy's Hospital.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 18th inst.:—

Birch, John, Manchester.
Bromley, Frederick, Bath.
Cockell, Frederick Edgar, Queen's-road, Dalston.
George, Edward, Calcutta.
Harmer, Robert, Wells, Norfolk.
King, John Bishop, Brighton.
Leach, Walter, Martock, Somersetshire.
Long, Edward, Berkeley, Gloucestershire.
Minnie, John, Plymouth.
Snoad, Edward Hemings, Ashford, Kent.
White, Charles John, Storey's-gate, Westminster.

At the same meeting of the Court, Mr. William Patrick passed his examination for Naval Surgeon. This gentleman's diploma, from the Royal College of Surgeons of Edinburgh, is dated December, 1846.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, Nov. 17, 1853:—

Baines, John, Exeter.
Buckoll, Edward Charles, Nottingham.
Hay, Henry Hodgson Ogle, Sunderland.
Makin, William Henry, Lancaster.
Rendle, Edmund Marshman Russel, Plymouth.
Salter, Arthur, Exeter.
Woodman, William Robert, Exeter.

Lincoln Dispensary.—A ball took place on the 3rd inst. in aid of this charity, when the receipts amounted to 98*l.* 16s.

APPOINTMENTS.

Medical.—Bristol Dispensary.—Mr. Crosby Leonard has been unanimously elected Honorary Surgeon Accoucheur to this Institution, to fill the vacancy occasioned by the death of Mr. W. James.

James Copland, Esq., M.D., F.R.S., No. 5, Old Burlington-street, and Edward Smith, Esq., M.D., LL.B., 16, Norfolk-terrace, Westbourne-grove, have been appointed Medical Referees of the London Mercantile and Industrial Assurance Company.

Naval.—Surgeons: James Laird (1852), to the Medea paddle-wheel steamsloop at Portsmouth, vice Harvey; Charles W. White (1841), to the St. Jean d'Acre, 101, screw steamship, at Portsmouth; William Macleod, M.D. (1853), to the Buzzard paddlewheel steam sloop, on the West Indies station. Assistant-Surgeons: John C. Messer, M.D., (1852), from the Arrogant, 47, screw steam frigate, to the Saracen surveying vessel, at Devonport, for service in the Chinese seas; Charles H. Chambers (1851), to the Arrogant, vice Messer. William H. Sloggett (1842), serving as additional Assistant-Surgeon to the St. George, 120, Guardship of Ordinary at Devonport, and James J. Martin (1842), first Assistant-Surgeon of the Agamemnon, 91, screw steamship, to be Surgeons.

Army.—Hospital Staff: Peter Divorty, M.B., to be Assistant-Surgeon to the Forces, vice M'Wharrie, promoted.

DEATHS.

Frith.—Nov. 22, at his residence, Counter-hill-villa, Lewisham-road, Richard Frith, M.D., late of the Bombay Medical Establishment, in the 54th year of his age.

Singleton.—Nov. 12, at Hill-top-house, Leicestershire, Joseph William Singleton, Esq., Surgeon, deeply lamented.

Apothecaries' Company.—John Parratt, Esq., Master, N. B. Ward, R. C. Griffith, Esq., Wardens of the Apothecaries' Company, accompanied by R. B. Upton, Esq., clerk, had a conference with the General Board of Health, November 16, at their office, Whitehall.

The Queen of Portugal died, on the 15th, in childbirth.

Medical Benevolent College.—On Sunday last, the claims of this national Institution were very ably advocated by the Rev. W. Harrison, M.A., who preached a most eloquent and impressive sermon to a crowded congregation, among whom we noticed Her Royal Highness the Duchess of Cambridge and the Princess Mary. The powerful appeal of the reverend gentleman was liberally responded to. We have pleasure in stating, that other clergymen have kindly promised to preach in aid of the funds of this much needed Institution. Agreeably with the laws of the College, Mr. Harrison and Mr. Hamilton, in whose church the sermon was preached, will be constituted Honorary Life Governors.

Nottingham General Hospital.—The Eighteenth Anniversary of the Nottingham General Hospital was held on the 3rd inst. The Right Hon. E. Strutt, M.P., presided. There were also present Earl Manvers, the Earl of Scarborough, Viscount Newark, etc. In the course of the meeting, Mr. Felkin alluded to the fearful increase of accidents attendant upon the enlargement of the town, no less than 1000 of such cases having been treated at the hospital in the last six months.

Albert-park, Finsbury.—A Deputation from the Committee for promoting Albert-park, had an interview with the Chancellor of the Exchequer, November 16, at his official residence in Downing-street. The Deputation consisted of Lord Robert Grosvenor, M.P., Mr. William Tyler (Chairman), and other gentlemen connected with the movement. The requisite legal notices for securing the object have been given, and there seems to be a fair prospect of its attainment.

The Royal Society.—The first meeting of the session for 1853-4 was held yesterday week; Dr. Wallich, Vice-President, in the chair. A paper was read "On the Nerves which supply the Muscular Structure of the Heart," by Dr. Robert Lee, F.R.S. A series of dissections, made by the author, of the heart of the racehorse, in which both the muscular and nervous structures are largely developed, demonstrate that from the outer surface to the lining membrane the walls are universally pervaded with nerves, on which ganglia are formed. From these dissections it is seen that the ganglionic nerves ramify on the surface of the heart; those which have been hitherto delineated in the works of anatomists are few in number, compared with those which are distributed throughout the muscular structure of the organ, many of which are wholly independent of the blood-vessels. This anatomical demonstration of the ganglia and nerves of the muscular structure of the heart is stated by the author to completely subvert the opinion still entertained by some physiologists, that the sensitive and contractile powers of the heart are independent of nervous influence. It further indicates the real source of the action of the heart as an entire organ from the commencement to the termination of life, how the circulation of blood is carried on when the fœtus has neither brain nor spinal cord, and how the detached parts of the heart continue to contract for a time in some animals after its total

separation from the body. Dr. Lee states that his dissections are open to the examination of any gentleman who may be interested in the anatomy and physiology of the heart.

Irish.—The Dublin depot for receiving the night-soil, filth of the streets, etc., of the north side of the city, is in the centre of the following public establishments:—"Grangegorman Prison, District Lunatic Asylum, Royal Barracks, La Touche's Orphan House, Hardwicke Fever Hospital, North Dublin Union, Convent of Sisters of Charity, with about 100 inmates; Richmond Surgical Hospital, Richmond Chronic Hospital, and Smithfield Prison; and the water for supplying these houses is from the most impure source, taken from the canal, where all kinds of filth is thrown—in fact, the filth has frequently to be removed to allow water to pass into the city.

Pleuro-Pneumonia is proving very fatal to cattle in Lincolnshire.

More Quackery.—Mr. Pearce, the Registrar of the sub-district of St. John, Westminster, writes as follows to the Registrar-General:—"The causes of death are not specified in three of the eighteen entries, in consequence of the parties having been attended by a person without qualification, who resides in Grey Coat-place, Rochester-row. He has been a night porter at Westminster Hospital, and is an army pensioner. He styles himself a medical reformer, a physician of nature, a surgeon, etc., with numerous other titles, by which he dupes the poorer classes of my district, who call his house 'John Bull's Cabin.' Suspicious cases have occasionally been referred to the Coroner, who *has not considered inquests necessary*. My weekly reports of the causes of death have been often incomplete from this circumstance."

Cases of Poisoning by Lobelia.—The first case is that of George Burt, aged 27, an ostler, who resided at 13, Dunk-street, Whitechapel. On the 31st of last month he was taken unwell, and he sent for a Coffinite agent, named John Stephens, who carries on the business of a greengrocer in Ratcliffe Highway. This man administered an emetic of lobelia seeds, and in the course of a few hours the patient became so much worse, that the friends thought it advisable to send for Mr. Champneys, the parish surgeon. On his arrival he found the man in *articulo mortis*, and before he left the bed side the patient was dead. An inquest was held on the body; and on making a *post-mortem* examination, the vessels of the stomach were found to be highly injected, the mucous coat was of a scarlet colour, and the organ contained about a table-spoonful of brown liquid, in which Dr. Letheby recognised the seeds of lobelia. At the inquest Dr. Letheby informed the jury, that he had already had to give evidence in two cases of poisoning by lobelia that had occurred from the indiscreet practice of the same man (Stephens), in one of which the jury had returned a verdict of manslaughter, upon which he had been tried at the Old Bailey. He also stated, that thirteen cases of poisoning by lobelia had occurred in the course of the last three or four years, and that in six of them the Coroner's jury had brought in a verdict of manslaughter. Mr. Baker, the coroner, thought that it was so difficult to procure a conviction in a Criminal Court, that, instead of sending this case for trial, it would be better to place the facts before the Secretary of State for the Home Department, and before the Board of Health. The second case occurred in the same week. It was that of a child, named Robert Smith Massinger, aged 3 years, whose parents resided in the neighbourhood of the London Hospital. The child had been ailing for some time, and had suffered from paralysis of the lower extremities. The parents of it were advised to put it under the care of a woman, named Mary Anne Mansfield, the wife of a baker, who resided in Charlotte-street, Whitechapel, and who practised Coffinism. The woman took the child to her own house, and in a week she returned its dead body to the parents. They were not satisfied with the treatment, and demanded an inquest. Dr. Godfrey, of Mount-place, examined the body, and by the Coroner's directions he brought the stomach and intestines to Dr. Letheby for analysis. He found the stomach highly inflamed, as is usual in these cases, and obtained from its contents fifteen grains of the seeds of lobelia. Dr. Letheby's evidence was to the effect, that death had in all probability resulted from the administration of lobelia; but the Coroner, having regard to the previous condition of the child, and the fact that it would be impossible to obtain a verdict of guilty if the jury were to pronounce it a case of manslaughter, advised that they should return it as a case of death from natural causes, accelerated by improper treatment. This was accompanied by a censure.

"Cheap" Surgeon-Dentists.—At the Lincoln County Court, an action was tried,—Rumble *v.* Metcalf. The action was for 4*l.* 1s. 3d.; 3*l.* 15s. of which was for a set of five artificial teeth: 6s. 5d. was paid into Court. The plaintiff is a druggist, and the defendant a cook. It appeared that the defendant was recommended to the plaintiff as a "cheap surgeon-dentist," and that, after a consultation or two, five teeth were ordered. Mr. Rumble took a mould of the lady's mouth, and the false teeth were furnished, but did not, upon the first trial, suit either Mr. Rumble or the lady, and certain alterations were made. Eventually they were completed to the satisfaction of the plaintiff, who, according to the defendant's statement, pronounced them "beautiful;" and, though the gold upon which they were placed was oppressive to the gum, said they would become easy in a few days. Mr. Rumble said he had served four years under an eminent surgeon [not named] in London, and had paid much attention to dentistry. Mr. Taylor, who was with Mr. Sales, taught him the art of modelling the mouth; one of the most eminent dentists of the Metropolis, [not named,] *who could furnish teeth for anything, from an elephant down to a mouse*, supplied him with teeth; and the mode of fitting he learned from Mr. Thomas, *gunsmith*, but he had not had assistance from the foundry-men of Clayton, Shuttleworth, and Co. Mr. Jefferies, jeweller, was his mechanical operator. It appeared that the defendant returned the set of teeth, and refused to pay for them, though the plaintiff and his witnesses insisted that they fitted well. For the defence, it was insisted that the object of Mr. Rumble in coming to the Court was transparent enough; he wished to advertise that he was a skilful and cheap dentist; but the set of teeth supplied were *no teeth* at all, as the defendant was not able, while wearing them, to close her mouth; she could not masticate with them, could not talk, and *her upper lip was forced and held up*. The defendant and other witnesses having proved the case as stated for the defence, the verdict went for the defendant.

Cholera Simulated in Sheep.—The sheep in the neighbourhood of Cheveley have been attacked by a disease resembling cholera, and a great number have died.—*Cambridge Chronicle.*

Insolvency as affecting Medical Diplomas.—In a case which came before the Court of Queen's Bench upon demurrer, the question raised was, whether a surgeon who had become insolvent was bound to deliver up his diploma to his assignees. The Court held that "the plaintiff's diploma did not pass to the assignees. The document was necessary to prove the person's identity and his title to practise. When he began life again, it would be necessary for him personally to have his diploma, in order to show that he was what he pretended to be."

Mortality Notabilia.—The mortality for last week shows but a small reduction on the previous return, which was rather high. In the week that ended on Saturday, the number of deaths registered in London was 1162. In the ten corresponding weeks of the years 1843 52 the average number was 1023, which, if raised in proportion to increase of population, becomes 1125. Therefore the actual mortality somewhat exceeded the estimated amount.

Births.—Last week the births of 814 boys and 747 girls, in all 1561 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1356.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·723 in. The mean temperature was 38·5°, which is 4·3° below the average of the same week in 38 years. The mean daily temperature was below the average on every day of the week, and this depression extended to 8·5° and 6·8° on Thursday and Friday. The dew-point temperature was 36 2°. The wind calm and variable. Horizontal movement of the air, 280 miles. Rain, 0·13 in. Electricity positive and tension strong throughout the week.

DEATHS *in the Metropolis for the week ending Saturday, November* 19, 1853.

Causes of Death.	Nov. 19. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	609	339	214	1162	10232
Specified Causes	606	335	213	1154	10187
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	231	65	25	321	2352
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	9	24	19	52	470
3. Tubercular Diseases	64	111	9	184	1633
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	70	19	37	126	1154
5. Diseases of the Heart and Blood-vessels	2	24	18	44	387
6. Diseases of the Lungs and of the other Organs of Respiration ...	129	24	27	180	2026
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	29	23	11	63	573
8. Diseases of the Kidneys, etc. ...	1	8	4	13	101
9. Childbirth, Diseases of the Uterus	1	10	1	12	106
10. Rheumatism Diseases of the Bones, Joints, etc.	1	7	3	11	86
11. Diseases of the Skin, Cellular Tissue, etc.	...	...	2	2	14
12. Malformations	3	...	...	3	37
13. Premature Birth and Debility ...	30	...	...	30	217
14. Atrophy	24	1	7	32	189
15. Age	...	...	42	42	505
16. Sudden	...	...	1	1	74
17. Violence, Privation, Cold, and Intemperance	12	19	7	38	263
Causes not Specified	3	4	1	8	45

ORIGINAL LECTURES.

CROONIAN LECTURES, 1853,

DELIVERED AT

The Royal College of Physicians.

By THOMAS MAYO, M.D., F.R.S.

ON

MEDICAL TESTIMONY AND EVIDENCE IN CASES OF LUNACY.

Lecture I.

Legal Division of the Subject of Diseased Mind.—Lunacy, the Generic Term; Insanity, Idiocy, Unsoundness, being species, varied by the Act of 1853.—Insanity Considered in its Relation to Delirium; this having Two Forms, viz., Incoherency or Inconsecutiveness, and Delusion.—Two Forms of Delusion, viz., Objective and Notional.—Cases Illustrative of the Application of these Forms of Delirium as Tests of Insanity.—Delirium Tremens Legally Considered.—Doctrine and Practice of the Law in Reference to Lucid Intervals.—Dr. Rae's Remarks on this Subject Considered.

I have formerly endeavoured to investigate the general subject of medical proof. In my present Lectures, I propose to offer some remarks on the noblest of its departments, the pathology of mind; and on that in its noblest phase, where it is brought into contact with great judicial questions. The circumstances of the time recommend the subject for consideration; for it is certain, that, while, on the one hand, the Medical Profession holds in its hands the learning and the experience of this subject, on the other the members of it often find themselves in a very unenviable position while informing Courts of Justice by their evidence. I believe, indeed, that I shall obtain the assent of experienced Practitioners, when I affirm, that, in a large number of instances, it is difficult to certify that a patient requires coercion or surveillance, without incurring the risk, that he may be returned into the hands of his family, before the conditions of his recovery are completed, under a different opinion entertained by the officers whose duty it is, and who conscientiously perform that duty, to visit the receptacles of such patients.

Before I enter upon the topics from which, and the means by which, we are enabled to prove or to disprove an abnormal state of mind, (I use this term as involving no hypothesis,) it appears expedient carefully to weigh the terms—drawn, indeed, from our own vocabulary, but prescribed by the Legislature—expressing the abnormal states of mind for which the Medical Practitioner is empowered to place a given person under surveillance or coercion; the more so, as these abnormal states must be the same in kind as he may have at another time to prove or to disprove as a witness, either in a civil or criminal point of view.

It has been most frequent, in this kind of inquiry, to lay down the doctrine of the subject, and to confirm it by decisions arrived at on certain facts. The practical nature of my purpose leads me to start rather from the latter point; to adopt the decisions of the Courts and the Legislature, whether conveyed as dicta, or embodied in positive rules; and to explain the rule by, or bring it in contact with, the doctrines prevalent on the subject among adepts or experienced persons.

The individual, in whose case the law sanctioned restraint or confinement under a medical certificate, (previously to certain changes in terms, to which I will presently advert,) must be a "lunatic, or an insane person, or an idiot, or a person of unsound mind." And here let me premise, that the force which I must attach to these terms is conjectural, grounded on the supposition that they cannot be considered synonymous, and, consequently, must be the heads of a division, whether vague or complete, to which I assume the meaning which I assign to each term bears as near an approximation as can be made at present. The first of these expressions, then, I must presume to be generic, and to contain as species the other heads of the enumeration, though I admit that this interpretation seems to demand a different structure of the sentence. The selection of lunatic as a generic term is evident; for whether the patient be an insane person, *i.e.*, one whose intellect is perverted, or an idiot, *i.e.*, one whose intellect is abolished, or an unsound person, whom I shall presently describe, the writ has run *de lunatico inquirendo*, and the Commissioners who watch over his proper management are Commissioners in Lunacy. But, conceding this generic force to the term lunacy, and that the other terms indicate its species, I am entitled to suppose that insanity is as much intended to form a distinct species from unsoundness, as it unequivocally does from idiocy. This distinction is, I may add, recommended by the subject matter, which is constantly claiming it, or some equivalent distinction, as a means of judicial diagnosis in certain cases of incompetency, of which neither insanity, nor any synonyme of insanity, can be affirmed. Such was the bearing of a case which last year attracted painful attention,—the case of Mrs. Cummins. A host of witnesses were adduced to disprove the imputation of insanity; a host of witnesses stepped forward to prove that she was incompetent to manage her person and property. The first set of witnesses seemed to think that the case turned upon their evidence; the second set were justified, conformably with the distinction which affirms that a person may be unsound in mind without being insane, in demurring to this conclusion. The attention of the jury was called by the learned Commissioner to the law laid down by Lord Eldon, conformable, I may observe, with a distinction of this kind, and the plea of mental disease was accepted, in spite of the disproof of that particular form of it which is termed insanity. Now, as Mrs. Cummins certainly was not idiotic, this form must have been, or ought to be, according to the terms of the certificate, unsoundness. I shall have to consider this case more at length, when I shall have arrived at the subject of unsoundness, as one of the heads of my division. The case itself certainly involves grounds for a more than merely verbal distinction. At present I will venture to assume that insanity is predicated, or predicable, of certain states of perversion of mind in which delirium is present; that unsoundness is the expression by which certain other forms of perversion or of weakness may be distinguished, in which there is incapacity to manage person or property, in the absence of any distinct evidence of delirium, while, again, the term idiocy cannot be applied to them, which are, in short, exceptional cases to the two great heads of mental disease,—insanity and idiocy. I feel that I shall not enlighten my hearers by offering any definition of idiocy. I shall, in another lecture, describe it in reference to the points in which medical witnesses have to consider it.

Whatever may be thought of the meaning which I have suggested for the above distinctions, it is necessary to include them here, as contained in all "medical certificates" up to the 26th of August, 1853, and thus as having operated on a large proportion of cases of abnormal mind at present under surveillance or restraint. Nor is it difficult to trace, in the nomenclature of the Act then passed, an intention to maintain similar distinctions. In the recent form of medical certificate, there is apparently no generic term expressive of abnormal mind in all its relations, but it is at once supposed that A. B., the subject of the certificate, is a lunatic or idiot, or person of unsound mind. I shall here, then, presume the word "lunatic" to be used as equivalent to "insane" in the former Act, and "idiot" and "unsound" to mean precisely what I have supposed them to mean under that former Act. The mode in which the principles and science of mental pathology have to be applied to judicial distinctions is indeed somewhat remarkable. It has pleased the Legislature to associate certain judicial powers with certain medical designations in a certain not very exact sense, so that they bind or loose those of whom we predicate them, or to whom we refer them in civil matters; or, again, are accepted on the same authority in courts of justice as expressing an exculpatory or mitigatory plea in criminal matters. Meanwhile, the question is reserved to themselves by the Court, whether we, as medical officers or witnesses, adhere to that sense of the above terms, in which we have been understood by the law to use them, or with which recorded decisions of courts of

justice, assisted by our evidence, has stamped them. Thus, when the medical witness indulges in peculiar and fanciful views, as when in the course of his evidence he expresses an opinion, that not only the person in question, but all mankind, are more or less mad, he is evidently giving a non-judicial force to the term, which is intended to specify a class, and his evidence must go for nothing.

There is another view of the position of the medical witness in relation to courts of justice, which deserves more attention than it always receives. He is summoned in such courts in order to enable the judge and jury to arrive at certain practical conclusions, by virtue of his applying certain terms to which, as we have observed, a given meaning has been annexed, or negativing their application to the person under trial or examination, according as the matter be civil or criminal. But, in the latter case, he must remember, that he is not deciding upon the penal consequences contingent on the opinion thus given, for although certain consequences of this kind may follow in the course of law if his assignment of opinion be accepted by the court, it is wisely considered, that a simple fact, and not its consequences, is the question proposed to him, since it will be presumed, that if the latter consideration be also entertained by him, it will be liable to bias his evidence on the fact which is his legitimate topic. In this way, I understand the suggestion occasionally made by the court to the medical witness not to encroach upon his functions and those of the jury. It is obviously in criminal cases that the bias thus occasioned is most to be dreaded. Thus, the definition of insanity becomes very expansive, when its expansion may become protective to a criminal with whom we happen to sympathise. And if we permit ourselves to entertain the judicial question, Is A a responsible agent? instead of confining ourselves to the medical question, Is A insane? we are liable to find ourselves enlarging our description of the disease in favour of some one who possesses equally, as we think, with the insane that element of character and external circumstances on which alone we argue that their impunity is or ought to be based. Thus, an elaborate argument may easily be constructed, proving that the offspring of the prostitute and the thief, devoted to infamy by the one, and educated to crime by the other, is equally deficient in freedom of will with the homicidal monomaniac; and when the medical witness, having permitted himself to stray into this question, has achieved this conclusion, he will easily discover eccentricity enough—for brutal vice is an eccentric state—to enable him to adopt for his client the term "morally insane." I shall presently have more to say on the subject of this term.

In respect to the error against which I have just addressed a caution, and generally in respect to our functions as medical witnesses in cases of mental disease, we have to bear in mind one heavy impediment, which the world opposes to our efficiency, and which we must ourselves obviate as well as we can. It is a part of the enlightened policy of the present age to throw widely open the subject of mental disease, and to give publicity to its details for the benefit and protection of the patient as well as of society; and the Legislature expects a sufficient acquaintance with this subject in all the medical faculty to enable all its members to fill up the certificate which attests the presence of such disease. Meanwhile, the public here interposes a more selfish policy to the prevention of our obtaining that amount of knowledge which may fit us for this arduous duty, by making the acquisition of such knowledge a source of danger. He who is known to have given much attention to this branch of pathology, is liable to be excluded, on that account, from practice in every other, as if all diseases were not in some sense conterminous. The consideration is a grave one, and can be antagonised only by increasing liberality in the opinions of the public, and by a high sense of duty in the Profession, instructing us, as we cannot waive the performance of the duty, when called upon to certify or negative the presence of such disease, to fit ourselves for this function by practice as well as by study.

Insanity or lunacy, idiocy, and unsoundness, are, then, the judicial terms for abnormal states of mind, which, in their purely medical relation, admit of cross divisions, and fall under other other heads. But these being the expressions contained in the formula, by which the existence of abnormal states of mind is certified, I now proceed to inquire into the sense in which we may apply these terms so as to facilitate the decisions, and to comply with the intentions of courts of justice, thereby also avoiding an evil, which often besets us in such places, that of mutual misunderstanding between the two professions.

INSANITY.

"All states of mind," says Mr. Stuart Mill "are caused either by states of body, or by other states of mind." Both these causes have to be considered by us, when it is a question of medical treatment in cases of mental disease. But when we are called upon not to propound, the treatment of such cases, but merely to certify their reality, the physical phenomena on which they may depend are not fairly within the cognizance of the audience addressed, and our reasoning, as drawn from this quarter, will have little, or uncertain effect. Now, in looking for a term which may contain the essential mental elements of insanity, and, therefore, confer a criterion of its presence, I adopt delirium, as used by M. Pinel and Dr. Cullen. I do not affirm that all delirium is insane; there is a delirium in fever and in phrenitis, and again in simple irritation, which have specific differences, whereby we can distinguish them from that of insanity, though I do not think it advisable that this question should be entered into in a court of justice or in filling up a certificate. Estimating delirium thus, I propose to give some account of it, such as it is, when it justifies our giving that title of insanity to certain phenomena which would otherwise be called oddity or eccentricity, or perverted and inordinate tendency, or orgasm.

In the whole of this discussion it must be borne in mind, that a great unanimity may exist among experienced observers as to the presence of certain mental states, characterised by certain generally accepted names, which states, at the same time, it would be very difficult to describe in any form of words, insomuch that the undefined name, in the use of which experienced men are agreed respecting these states, will convey to all a more clear and distinct impression than any attempt at definition or even description. There is no term which lays claim to this admission more than delirium; and it may seem stsange, that with the consciousness of this fact, I should venture to explain that term, instead of leaving it to the conceptions of my hearers. In doing this, I shall at all events endeavour to confine my hypothesis within the circle of commonly received opinion. Delirium is generally contemplated as involving two conditions in this sense, that one of them must be present in every delirious person, both being generally present. The first of these conditions is a negative one. It is the absence of that control over the rise and succession of thoughts which exist in the sane mind, and co-existent with this, a state of ill-associated and incoherent thought. It must be admitted, that in the sane state we cannot peremptorily command a thought to spring up in the mind, for this would imply that it has sprung up already; but we can, as Stewart observes, by an operation of the will, give such a direction to the associating process as may secure the presence of the class of thoughts which we wish to have before us. Not only is this control over the rise and production of thought absent under the circumstances supposed, but also the power of the will over the succession of thoughts is impeded. In other words, the associating process acts independently of the will. To estimate this we must estimate the state which precedes actual delirium in persons in whom insanity is making gradual advances, when they have as yet only obtained the epithet eccentric. At this period, when the power of the will is still possessed, an attentive observer may perceive, and the unhappy patient sometimes feels, how heavily it is taxed and overweighted in its exertions to maintain a normal series of ideas. The principle on which that perturbation depends, which ends in the withdrawal of this influence of the will, is unknown to us. What approximation to such knowledge may ultimately be made through careful observation is uncertain. It may be helped by listening to the soliloquies of the insane; it may also result from attention being given to the (overheard) conversations and intercourse of the insane with each other. They seem to go along with and understand their own class wonderfully well. Once, indeed, when I was inspecting the Asylum of Mr. Newington, at Ticehurst, it occurred to me to obtain a clue to the abnormal associations of a gentleman there confined, by consulting another gentleman confined in the same house, as to his present state. The lunatic thus consulted by me, averred the fact, and enabled me to ascertain it, that his chum still laboured under morbid delusions, which was a question of great difficulty both to me and the visiting magistrates. With man in his normal state, the

insane have little, or at least diminished sympathy, in the true sense of the term, *i. e.*, they do not place themselves in the position of the sane, or estimate the fitness of ideas in any reference to the extent to which such persons can go along with them in those ideas. Still they are sometimes able to recognise the fact, that, as concerns the rest of mankind, they are contemplated, and must consent to be treated, as a class apart. This idea was oddly developed by an incurable chronic patient at the above Asylum, who one day, on my visit of inspection, furtively slipped into my hands a paper, in which he had with no slight ingenuity described what he considered the state of the Asylum ; the case being stated by him, ingeniously though incoherently, as if Mr. Newington and his family, attendants, etc., were really the unsound and incompetent inmates, and the lunatics confined were certain distressed ladies and gentlemen who had fallen into their hands, and were called insane.

It has often appeared to me that the incapacity for silence observable in those insane persons who are not melancholic, throws some light on the phenomena of their deportment. Let any one who wishes to estimate this incapacity in its relation to the incoherency and inconsecutiveness of insane delirium, watch the succession of ideas in his own mind, and then fancy himself compelled to give utterance to every one of them as it comes uppermost. He would find his resemblance to a man under the delirium of insanity greater perhaps than he would wish to think it. I apply this remark to insane delirium, and in doing so I endeavoured to draw some line between it and the inconsecutiveness of fever and simple inflammation of the brain and its membranes, to which he will find no such affinity in his normal state. The entire diagnosis between these forms of delirium, I do not pretend to lay down. Here the physical symptoms of the case must come into consideration, and be taken on the authority of the medical witness, whether as giving evidence or as signing a certificate.

In the above remarks I have endeavoured to portray that element of the delirious state which expresses itself by incoherency and inconsecutiveness. Of its relation to unsoundness, as distinguished from insanity, I shall have to speak in another part. In respect to idiocy, I may here observe, that the incoherency of that state is distinguished from the same property in the insane in various ways. The ideas of the idiot are few in number, besides being unconnected. Short sentences, or portions of sentences, are endlessly repeated by him. Under this mode of delirium, in insanity, an intelligent looker-on might observe, or conceive, that if some controlling power could be applied or restored, the patient might judge normally, while, in the corresponding state in idiocy, no such hope is suggested; the machine is spoiled, as well as the manager deposed. The inability to compare his ideas, imputed to the insane by Dr. Conolly, is mainly the result of this simple abstraction of power, of which the unhappy sufferer himself is sometimes observed to show a wavering and partial consciousness. United with the incoherent state, which I am describing, there will assuredly be motiveless and inconsequential conduct, and this, in many taciturn, reserved, and abstracted persons, not only is coincident with it, but also suggests the first suspicions of its existence.

The second phase of delirium consists in the presence of certain delusions, or false perceptions, of which there are two principal forms.

1. The delusion may simulate a perception of the special senses; it may, in this case, suggest, as absolutely and undoubtedly real, persons, forms, and sounds, which have no objective existence, and obtain implicit credit with the percipient, whether sight or hearing is appealed to in evidence of the hallucination, as this is often called. These I shall call objective delusions.

2. The delusion, or false perception, may have no direct reference to objects of sense, but may apparently turn on perceptions of the understanding alone, thus embracing a large and, I regret to say, indefinite category, which contains preposterous notions respecting power, station, conduct, moral motives, future prospects, etc. Thus the patient is in idea an Emperor, or perhaps a divinity; and, even while he is submitting to the rules and establishments of an asylum, he believes himself possessed of unbounded wealth and power; others, meanwhile, he thinks, are conspiring against him, and threatening his life. For the class of false perceptions here referred to I am compelled to appropriate a term which may designate their intellectual character, and will call them notional. They bear the same relation to the understanding which the delusions first described by me bear to the special senses; and it is to be observed, that, in many of these cases, the delusion shall appear to engage the special senses when careful scrutiny will detect the fact, that the patient sees or hears truthfully, but puts a false construction upon what he sees and hears. Thus, in Mr. Percival's singular monograph of his own case, the imaginary personages are justly appreciated, in form and appearance, as servants of the asylum; that is to say, the divine or preternatural beings whom he esteems them to be in reality, have, in his opinion, assumed such forms. Now, out of these notional delusions, some declare their own abnormal character as immediately and plainly as delusions of the special senses or objective delusions, and the medical witness finds no difficulty in attributing them to delirium; but there are also some notional delusions eminently calculated to put his sagacity to the test as not being separated by any well-marked line from other delusions or mistakes of which it would be impossible to predicate insane delirium, or insanity, or lunacy, according to the practical intentions to which these terms are subservient. Thus the fixed convictions of the unhappy artist, Dadd, that his father was his bitter enemy, which terminated in parricide, was previously separable by no definite line from the large category of unreasonable hatreds, the growths which fungate in depraved minds,—I say by no definite line, for I conceive that there had been a strange oversight here in respect to certain indefinite suspicious symptoms, which might have forewarned his unfortunate father. But compare this case with Mr. Haslam's account of another lunatic, Matthews, and the singular creations to which his distempered fancy gave birth, and which he saw, on the retina of his mind, constantly employed in the tasks which his fancy had assigned them. The line which separates these imaginings from all but the imaginings of the insane is sharp and clear. Yet it may be truly affirmed that Dadd was not less delirious in his own sanguinary delusion than Matthews, but the former case did not similarly unfold itself.

I have thus, under the heads—first, of inconsecutive and incoherent thought; secondly, of certain delusions, endeavoured to trace the form and outward symptoms by which insanity is recognised in kind, though with infinite varieties of the degree in which each element is developed. But what is the pathology, and what has taken place, when this fearful change is worked? I have little to say in answer to this question. If analogies can throw light upon it, they must, perhaps, be sought for in the history of dreaming and intoxication. It has been said of dreaming, that it is constituted by a suspension of the will, and by the resulting confusion, through which conceptions of the imagination are mistaken for perceptions of the senses. Certainly, if one could give permanency to a state of simple intoxication by alcohol, and add to it these latter attributes, a state would result not very distinguishable from insanity. So much for the obscure light of analogy. In respect to the actual changes which may be worked in the human being under insanity, it must be remembered by those who engage in this arduous inquiry, that they must be contemplated as concerning our immaterial phase of being in a light much more exclusive of that afforded by physiological consideration than we are accustomed to assume. That there should be a disease of the mind in the abstract, that such disease should work changes in us, viewed in this light, analogous to the physical changes of our bodily organs, is neither unnatural nor inconceivable. A parasitical growth —if, for want of a proper term, I may borrow this epithet from physical speculation—may take place under such disease, itself possessing vital functions and energies, but having no other relation to matter than the obvious one on which the tenure of our present life is based, namely, that we have an immaterial and a material being indissolubly bound together for the duration of that life, while, for anything we know, the immaterial element may be just as subject to its proper affections as the material one is. The above remarks may, at least, have a wholesome tendency to keep before us in our speculations the immense fund of mental disease that may exist inappreciable through any knowledge that we at present possess of phenomena so little capable of being made the subject of experiment, or even observation, as those which I am supposing.

[To be continued.]

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. XI.

EXTRACTS FROM A REPORT ON EPIDEMIC CHOLERA IN NEWCASTLE, JAMAICA.

By J. D. M'ILLREE, Esq.
Surgeon 16th Regiment.

Epidemic cholera had appeared in Cuba and at the Havannah many months previous to its advent in Jamaica, and had been attended throughout a lengthened period with destructive consequences to the inhabitants of that island, without serving as a warning to the people of Jamaica.

Cholera, reported by Dr. Watson, of the Royal Navy, to be of the malignant kind, first appeared at Port Royal on the 7th October last, on which day a woman died of the disease in a few hours' illness; and out of seventeen cases which occurred during the following few days, fifteen proved fatal in from five to twenty hours. The epidemic after this increased fearfully, and eventually destroyed one-fourth of the inhabitants of that town, and also an immense proportion of the navy and military on that station, but without numbering among its victims any of the commissioned officers belonging to either service, and among those were nine medical officers, who had been in constant attendance on cholera patients.

A Medical Board, composed of Kingston practitioners, investigated, at this period, into the probable and supposed causes of the appearance of the disease in the island, and their opinion was, that the cases at Port Royal had not in any way been connected with importation, but originated in causes purely local and atmospheric.

On the 9th of the month, two days after the first case at Port Royal, a black man, of the name of Phipps, died of cholera in Kingston. He had, it is stated, gone down to Port Royal that morning, but it is certain that he returned from that place a few hours previous to his being seized with cholera, which terminated in death very quickly; and from this period cases of the epidemic daily appeared in Kingston, and gradually increased until from 200 to 280 souls perished every twenty-four hours, out of a population of about 40,000.

It is positively asserted by some, contrary to the opinion of the Medical Board, that cholera was imported to Port Royal by one of the crew of the Bermuda, a vessel of war, and that the woman who died at Port Royal, on the 7th of the month, had washed the clothes of a man who had died of cholera at Chagres. It is at least quite certain, that not only the Bermuda had arrived from Chagres, and was lying at Port Royal at this period, but that two American steamers had also arrived from the same port, where cholera was at the time, and between which place and Panama, where the disease was very fatal, there was a constant communication.

Daily tidings reached us at Newcastle of the malignant form the epidemic was assuming in Kingston and other districts, and, wishing to make use of every practicable precaution for the safety of the troops, I addressed the following letter to Dr. Maclean, as visiters from the lowlands occasionally came up to Newcastle for change about this time:—

"Newcastle, October 18, 1850.

"Sir,—May I request you will be pleased to inform me whether you consider it necessary, as a precautionary measure, to use means for preventing visiters from Port Royal and Kingston, where cholera has appeared, from coming to Newcastle at this particular period?

"I am induced to ask the question, as I am unwilling to recommend that such a step should be taken until satisfied of the necessity of doing so, and which my imperfect knowledge of the extent and nature of the disease as it exists at the above places will not justify me in deciding on, and I therefore beg leave to submit the matter for your consideration. "I have the honour to be, &c.

"(Signed) J. D. M'Illree, Surgeon, 97th Regt.

"The Deputy Inspector-General, &c., Kingston."

I received the following reply, dated October 19, 1850:—

"Sir,—I have to acknowledge the receipt of your letter of yesterday, and, in reply, to state, that I am of opinion it is advisable, as a precautionary measure, to use means for preventing visiters from Port Royal, or Kingston, or any other infected locality, going to Newcastle at this particular period. Much, however, under existing circumstances, will depend on the means of perfect segregation which the station of Newcastle affords in modifying such restrictions.

"It is desirable, on the arrival of any detachment, even from a healthy station, to keep them separate from the rest of the troops until all chances of cholera appearing among them shall have passed; but, as our present very limited knowledge of the laws under which the disease attacks, I think eight or nine days a sufficient term of segregation.

"I have the honour to be, &c.

"(Signed) C. Maclean, Deputy Inspector-General.

"Surgeon M'Illree, 97th Regiment, Newcastle."

The quarantine system must always be distasteful, particularly among persons who are ignorant of its nature, or have no confidence in its efficacy, and, therefore, difficult to establish satisfactorily, unless authorised by the highest authority; but I am bound to say, that, during the working of the system at Newcastle, though not unopposed at all times, I have been able to secure all the advantages derivable from its operation, though all the officers, from the commanding officer downwards, with two or three exceptions, from time to time, have suffered from the privations necessary for its due performance; and the application of this system to such men as it affected has been universal and complete during the whole period we have been threatened with an invasion of the prevailing epidemic; and I have no doubt in my own mind of its utility on the occasion under consideration, or could there have been a locality more favourably placed for trying its power, or observing its effects, than Newcastle.

On the morning of the 30th of October, I received the usual report from the sergeant in charge of the party at the "Gardens," in which he stated that a fatal case of cholera had taken place there the day previous to the date of his report. The "Gardens" are about five miles from Newcastle, and nine from Kingston, by the road, and this village is at the termination of the carriage-road from Kingston, and about 2800 feet lower than the highest building at Newcastle. It is in the direct thoroughfare from the lowlands, and here the epidemic had at length arrived, having caused terrible mortality along the road all the way from Kingston, and destroyed eventually a very large proportion of the natives of this little village where the detachment of the 97th Regiment was stationed.

On finding that a case of the epidemic had proved fatal at the "Gardens," I recommended that the detachment stationed there, or that portion of it which might not absolutely be required for duty, be removed to Newcastle as soon as possible, as I had little doubt but that the disease would spread.

The commanding officer, on my recommendation, ordered the immediate removal of the party from the "Gardens" to Newcastle; and they consequently marched up, and were placed in quarantine; but the Major-general commanding, on being aware of the circumstance, did not approve of the return of the detachment to head-quarters, and desired that it should immediately be replaced, which order was of course complied with.

The epidemic increased daily in and about the "Gardens;" and, on the 9th of the month (November), the non-commissioned officer in charge of the party which had been replaced was suddenly attacked with cholera, on hearing of which I at once wrote, and again recommended the removal of the detachment from the "Gardens" to Newcastle.

The party was finally and permanently withdrawn in a couple of days after, with the exception of a sergeant, and one man left in charge.

The epidemic, in its destructive march, did not pause at the "Gardens" more than to receive a fresh impetus. The malignancy of the disease was never more remarkable than among the people of this place and neighbourhood, and, in a very short time, it appeared within a mile and a-half of Newcastle, and also in the mountain districts around.

We were beginning to consider ourselves safe, when a man (Private W.) was admitted, at one o'clock in the morning, in a state of collapse, and died in about twelve hours afterwards.

This was a most startling circumstance, and I had the

most serious apprehensions that our time had come at last, and that W.'s case was but the signal for a general outbreak of the epidemic among the troops, and we looked for fresh cases hourly and daily, until our fears gradually declined up to the 17th of December, when a second case occurred, which, on investigating into its probable cause, we found, like the first, to be attributable to importation, as both the men attacked had absented themselves at places infected, contrary to existing orders. The third and last case which, happily, we have to record, appeared in a corporal of the Regiment, who had only returned [a couple of hours from the low lands, where he had been on duty all during the epidemic, and was admitted from the quarantine house. The two last cases recovered, having come under observation immediately; the first man died in consequence of being ill for several hours previous to admission.

The protective measures employed for the safety of the troops in this cantonment have been already mentioned, but it will be requisite to state what means were employed when the awful agent of death had actually appeared among us. The man attacked with cholera was placed in a ward at the leeward side of the hospital, and all communication between this and the other wards was at once cut off, and instead of employing men "first for duty," to be relieved daily, I proposed to select volunteers for this service, who would be kept segregated from all the troops until a sufficient period would elapse to render their return to barracks safe. Eight men volunteered, who were permitted, while engaged on this duty, to smoke in hospital when they pleased, besides having a liberal allowance of spirits and tobacco given them daily; and under those circumstances they did not at all appear to consider themselves disagreeably employed, as they were granted every indulgence in other respects consistent with their own safety and that of others.

A man who has been some hours in contact with a cholera patient, should not be allowed to leave the sick bed of a man afflicted with a pestilential disease, and go at once among his comrades, as must be the case when men selected "by turns" are employed. A volunteer is of far more service to a patient than a pressed man, and the former is much less liable to become infected, and, when segregated for a sufficient period from all others, he cannot communicate disease.

Under every circumstance, I think that we may fairly attribute our happy isolation from the invasion and ravages of the late epidemic to the preventive measures employed. In the first place, the cutting off of all communication with the cantonment and those places infected, to the daily observation of the men, and the removal of all local or predisposing causes which could possibly engender or operate in the production of disease from epidemic tendency or influence, and to the means used against the spread of the disease when the first case did appear among the troops. It will be remembered those cases were imported, and could not be attributed to any local cause.

I have no doubt in my own mind, that the late visitation of cholera in this island assumed, and was in a great degree propagated by contagion, though there are many instances where the epidemic spread without any apparent influence in this way. The number of instances which could be adduced for and against either opinion are too numerous to permit of a decided belief in one or the other. I may mention two which came under my own observation.

1st. From a neighbouring estate (Chester Vale) a woman went down to Kingston, where cholera was raging, and returned home within twenty-four hours. She was seized with cholera soon afterwards, and died rapidly; her husband, who remained at home, and must have been infected by his wife, (as the estate was perfectly healthy previously,) died of cholera in ten hours after his wife; and in a short time there occurred eighteen cases on this estate, and ten deaths.

2nd. Twenty-one individuals, including two medical officers, attended night and day on three cases of malignant cholera at Newcastle, Jamaica, some months past, and, without experiencing any inconvenience whatever from the exposure.

With such contradictory evidence as this, and other instances of a like description, which the history of cholera in Jamaica could furnish, it is not surprising that the opinion of medical men here should differ so much on the contagious nature of the disease.

AN ACCOUNT OF THE RUPTURE TRUSS WITH SCREW ADJUSTMENTS.

By NEIL ARNOTT, M.D., F.R.S.

[To the Editor of the Medical Times and Gazette.]

Sir,—The subjoined explanation of the principle and mode of application of a truss, which I have found effectual in cases in which the ordinary trusses had failed, was, at my request, kindly communicated to me by the inventor, Dr. Arnott, for the purpose of my lectures. As I am authorised to make any use of this communication that may be likely to prove advantageous to others, I request your aid in making it known to surgeons.

The truss has been satisfactorily made by Spratt, in Brook-street, Hanover-square; but it may be made by all truss-makers, for Dr. Arnott has declined to derive all pecuniary advantage from its construction,—as he has always done, indeed, with regard to the various other applications of the laws of physics in contrivances of admirable utility which his fertile inventive genius has furnished to the Profession and the public.

I am, &c. R. Quain.

Cavendish-square, November 23.

Until about a century ago, the chief remedy or means of security for ruptured persons was a pad placed over the weak part and bound on with straps; but so insufficient did this means prove, that most of the persons afflicted had to withdraw from the active duties of life,—they could not safely lift weights, nor run, nor ride; they could not serve in the army or navy. It was a great boon when the proposal was made to connect with the hernial pad a steel spring, which should keep the pad pressing with a known degree of force against the weak part. In most cases of hernia now, some form of steel truss is employed.

But there are attendant evils which lessen the advantages of the simple spring-truss as at present in use. The fact of its pressure being continued without interruption, and therefore when not wanted, as well as when it is, may produce the following effects:—

1. In cases of large rupture, requiring, of course, strong support, there often arise pain, inflammation, and even ulceration of the skin, rendering insupportable the use of springs of sufficient strength.

2. There occur in every case some absorption and stretching of the flesh pressed upon, and some impediment to the free entrance of the nourishing blood; all these being causes of increasing weakness as life advances.

3. The pressure on the spermatic cord interferes with the circulation in its vessels, as proved by the occurrence of varicose veins, orchitis, and impaired function of the gland.

Many of the forms of the spring-truss, that they may be accurately fitted to particular cases, require in the maker skill and dexterity which are not everywhere found; hence much disappointment and expense to patients, and need for more trusses than one.

It appears, therefore, that, if it were possible to give to the spring-truss the three following additional qualities, it would still more completely answer its purposes:—1st. That, after being applied with moderate pressure on its seat, it could be rendered so stiff or resisting that no force outwards of the hernia might overcome it. 2ndly. That this stiffness or rigidity should equally prevent the useless and hurtful pressure inwards of the pad when the person were at rest and the muscles relaxed; and 3rdly. That the construction of the truss were such that any ordinary-sized truss might be fitted accurately to any ordinary-sized person. Now, these additional qualities do belong to the truss with screw adjustments about to be described. The general appearance of this truss is the same as of the two-padded truss in common use. It is represented in the adjoining sketches, *Fig.* 1 showing it apart or by itself, *Fig.* 2 showing it applied to a hernia of the right groin. In both figures the same letters mark the same parts of the truss.

Fig. 1.

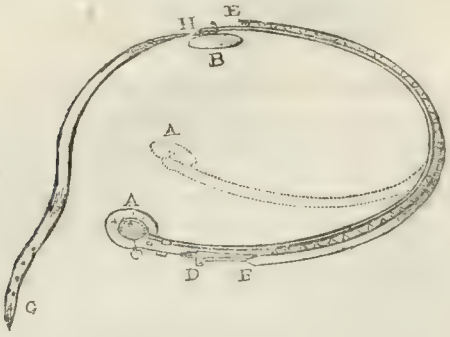
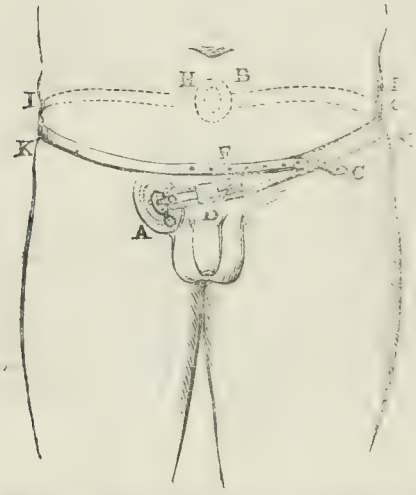


Fig. 2.



A is the front pad which acts in the groin. The dotted lines in Fig. 1 show the form of the truss when not expanded by the screw.

B marks the back pad, which rests in the middle of the lower part of the back, on the bone of the pelvis called the os sacrum. In Fig. 2, the dotted lines indicate the position of the part of the truss behind the person.

C is the hoop portion, or bow, which carries and connects the pads. It embraces rather more than half the body, resting, not on the ruptured, but on the sound side, in a depression between the prominence above of the haunch bone distinctly to be felt at I, and the prominence below of the thigh bone near the hip-joint at K. Its long arm slants downwards, quite across the front of the body, to the pad A placed on the hernial opening.

H G is the strap, slightly elastic, which steadies the truss in its place, by passing from the nail of the back pad to a button or buckle at F, near the front pad. It occupies, on one side of the body, a position corresponding to that of the truss-bow on the other.

A main difference between this truss and the common truss is in the construction of the bow. In the common truss, the bow is a spring of a single plate, or of two plates always co-operating; the second plate, called a rider, being simply laid along the back of the principal within the same leathern sheath. In the new truss, the bow has always two springs, but connected in a very peculiar way, so that they necessarily act together whenever the push of the hernia has to be resisted, and they are opposing or acting against each other at all other times, to prevent useless and hurtful pressure on the flesh. This paradoxical result is obtained by the arrangement now to be described. The outer spring of the new truss lies along the principal, as the rider of the common truss does, only not loosely like that, but with one end firmly riveted to the principal spring near the back pad at E, while the other end near the front pad at D, changing the flat form to that of a round wire cut as a screw, passes through a staple projecting from the principal spring at D, to receive there a screw-nut fitted to it. This nut, when turned, draws the round end of the outer spring through the staple, and thereby opens or expands the whole bow to any desired degree. To render the opening action more energetic, the springs are not placed in complete contact, but held a little apart by a waving wire laid between them. The bow thus opened out to fit exactly the size and shape of the person, almost without pressing on it, becomes, at the same time, so strongly rigid or stiff, that no pressure of a hernia can overcome it. The remark may be made here, that, as the bones of the pelvis are joined together immovably, a rigid truss, once well fitted to the pelvis, can need little future adjustment. The front pad of such a truss may be compared to a rock placed at a door to prevent opening, but which does not press against the door unless the door be pressed against it.

There are two other useful qualities belonging to this truss which do not belong to others:—

1. It retains the advantages of the ball-and-socket joint for the front pad, while it avoids a great evil connected with it. The jointed pad applies itself exactly to the form of any surface on which it has to rest, and this was deemed a great merit of the truss in which it was first used. Surgeons now know, however, that the joint, at the same time, facilitates much the escape of the hernia,—for the ball becomes as a fulcrum, on which the hernia, working with the pad as a lever, can overcome the resistance of the spring, and free itself. The force in a hernia required to lift the edge of a jointed pad is often less than half of what would be needed to lift the edge of a pad immovably fixed to the bow. Many of the failures of the common double-padded trusses spring from this defect. In the screw-truss, after the jointed pad is once perfectly adjusted, a small ring-screw on its back completely clamps or fixes the joint.

2. In the screw-truss, by having the button or buckle for the strap moveable to different distances from the front pad, there is the power of causing the pad to rest higher or lower in the groin, and so of using the same truss for femoral and for inguinal hernia, and for either side of the person.

Directions for the management of the screw-truss.

1. The measurement to be sent to the maker has to be taken by a tape passed round the body in the depression already referred to between the letters I I and K K in Fig. 2,—that is to say, about an inch below the lateral prominences of the haunch bones. A medium measure there is 35 inches. In connexion with each pad of the truss, there are, near the extremities of the bow, three holes, allowing the effective length of the bow to be altered in many ways.

2. Before putting the truss on, it must be opened out or expanded by the main screw at D, so as nearly to fit the diameter of the body. It would strain the parts too much to open the bow by the action of the screw alone, therefore the ends must be held asunder while the screw is turning. This is conveniently done by placing the back pad under the edge of a table, or other fixed object, and then lifting the front pad upwards by the left hand, while the other hand turns the screw. When so held open, the back spring is slackened, and the screw is turned by the slightest force.

3. The truss thus expanded is to be drawn on to the body from the sound side, or that on which the rupture is not, until the back pad reach the middle of the back, and the front pad has crossed over the centre of the body to its place in the weak groin.

4. The front pad is to be placed over the site of the rupture as shown in Fig. 2, with its length obliquely upwards and outwards, that being the direction of the passage in the flesh along which the hernia has to descend, and with the lower end of the pad resting near the upper and outer corner of the central bone of the pelvis, called the os pubis. Of the exact position which best restrains the hernia, the patient himself will soon be able to judge. If, on making the effort to cough, he finds that the intestine does not descend, he may conclude that the position of the pad is good, and the restraining action sufficient. He should then tighten or clamp the ring screw which fixes the pad.

5. The final adjustment with the main screw at D, is to determine the amount of restraining pressure. The bow has to remain expanded so as to leave just the degree of pressure which will hold the truss, steadied also by the strap, in its place, and which can be easily borne. By turning the screw nut with the key provided in the direction of an entering cork-screw, the bow is opened further, and the pressure is lessened. By turning it in the contrary direction, the contrary effects follow. Even half a turn of the screw makes a great difference. However small the motion of the main screw to be made at any time, the back spring should always be rendered slack during the change, as already explained.

6. The truss-strap is to be made moderately tight, as it

thus steadies the truss in in its place without needing much help from the pressure or binding of the truss itself. There is this further reason for using a proper strap, that the direction of the pressure from pad to pad in the trusses used without straps is not that most favourable for restraining the hernia, while the pressure made partly by the truss-spring, and partly by the strap, is in the best direction.

7. After this truss has been used for some time, it will be worn more pleasantly over the inner shirt of cotton or flannel than under it.

8. The hernia should never be allowed to remain down, for, by then acting powerfully as a wedge, it quickly widens the hernial opening.

9. It is rarely necessary to wear a truss in bed, but it may be expedient occasionally to put the truss on and take it off while in the lying posture.

When hernia exists on both sides, a double truss is wanted. This can be made with the same qualities as the single truss, only having shorter bows, which do not cross in front, but pass from the groins to the large pad behind by the shortest ways.

Caution.—When the screw-truss is wound up, or expanded by the screw, the springs are on the strain, and an attempt then made to force the pads towards each other, might break a spring. This attempt can never be made but from thoughtlessness, as no purpose can ever be served by it; but there is no risk, when the truss is wound up, in expanding the bow to put it on the person.

REPORT OF THE CASES OF CHOLERA AND CHOLERAIC DIARRHŒA,

TREATED AT THE NEWCASTLE-UPON-TYNE INFIRMARY DURING THE PRESENT EPIDEMIC,

WITH OBSERVATIONS THEREON,

BY CHARLES JOHN GIBB,

House Surgeon, Lecturer on Anatomy and Physiology in the College of Medicine in connexion with the University of Durham, etc.

(As read before a Meeting of the Newcastle and Gateshead Pathological Society, held Nov. 11, 1853; T. M. Greenhow, Esq., President, in the Chair.)

(Concluded from page 551.)

With regard to the nature of the disease, I think it cannot reasonably be doubted that it is a specific one, and that all experience and reasoning upon analogous disorders, most decidedly proves it to arise from the presence of a peculiar poison in the atmosphere. Also, that this poison, be it a ferment or a malarious emanation, is generated in certain localities, under favourable circumstances, and issuing thence, can be wafted to the most distant parts. That it selects its resting places in accordance with fixed laws, and that its devastations are doubtless regulated by the almost numberless and varying influences which each town or district presents to it, and the condition in which it finds its inhabitants. It is urged, that science cannot detect the specific poison which is supposed to infect the atmosphere, and, therefore, has no right to pronounce its existence therein with any degree of confidence. The same argument is, however, equally applicable to epidemic fevers, and other diseases universally allowed to arise from specific poisons in the air, and which, like the cholera, spread to surrounding districts favourable to their reception and development. This argument is, therefore, entitled to little respect, since it is equally true, that no one can separate and demonstrate the existence of the specific poisons of epidemic fevers in the same simple and indubitable manner as the experiments of the chemist prove the existence and nature of oxygen or hydrogen gases, although we do not on that account doubt their presence in the atmosphere. Although, then, we are unable to separate, bottle up, so to speak, and demonstrate the peculiar and specific poison of cholera, which, infecting the atmosphere, enters into the human body, and, under predisposing influences, produces the epidemic or malignant form of cholera, it nevertheless may have, and in my opinion has an existence, and, granting this, who can doubt that our beneficent Creator has allotted to it immutable laws, and that, by well directed and persevering efforts, we shall ultimately arrive at a satisfactory knowledge of them.

Whether the disease is infectious only, or contagious only, or is both contagious and infectious, I am not in a position to assert from the experience I have had of the disease. That the disease is infectious I think can scarcely be doubted, and certain facts which came under my notice during the slight outbreak of the disease in 1848 and 1849, certainly led me to think that some of the cases I then saw might have arisen through the medium of contagion. The very meaning of contagion, is, however, so variously understood, and the subject so extensive, that I will not pretend to draw positive inferences from the data I possess. Perhaps, however, I may be excused stating, that in setting apart special wards for the cholera cases in the Infirmary, in order to guard against the possibility of its spreading by contagion, I was mainly induced to do so from reasoning upon certain undeniable facts. I assumed, in the first place, there is, during the prevalence of cholera, a specific poison floating in the atmosphere, analogous in some respects to a ferment, whose virulence can evidently be rapidly increased by importation into localities favourable to its development. That this poison is absorbed into the body, and, probably, like the small-pox virus, reproduces itself, and becomes concentrated within the system, until the poisonous influence preponderating, the preservative efforts of life excite those violent fluxes which to some extent rid the system of its presence, or, failing that, destroys life, in some instances with a virulence and rapidity almost equal to that of prussic acid. Now, if these assumptions be true, as I think you will agree with me they are, I cannot understand how any one can deny, that the breath and fluids of a cholera patient may not be charged with the cholera poison, and will not, therefore, infect the atmosphere around, and thus spread the disease to those in attendance. That the disease is one of the least contagious of epidemic diseases I think no one can deny, but, as I have already said, I cannot see why a patient charged with the choleraic poison may not infect surrounding persons, when it is acknowledged that the poison is without doubt carried about by the atmosphere, setting aside other media, and the persons in attendance absorb that atmosphere into their bodies.

I have said the choleraic infection may kill in the same manner as prussic acid or any other similar poison, and that this is said to happen frequently in India, where persons suddenly feel faint, fall down, and, in the course of a few minutes, die. I observed the same to occur, although in a very different degree, in two cases during the present epidemic. The first one happened in a house near to the infirmary. The man was a stout, beer-drinking smith, who was attacked suddenly early in the morning with a sinking and faintness, took to his bed, and, with scarcely any vomiting or purging, died, bloated, hot, sweating, and apoplectic-like, in the course of ten hours after the setting in of the attack. I think if I had bled him, and exhibited emetics, he might have possibly rallied, for the powers of life were evidently palsied, and he expired without his system making any effort to expel the deadly poison from out of the congested viscera. The second case happened in the infirmary. The patient was an old man, brought in a few days previously, suffering from the effects of an accident. He had a fluid motion early in the morning to no great extent, and immediately fell into a state of prostration and partial collapse, in which condition he died pulseless, in the short space of three and a-half hours after the first motion. He was not dried up and shrivelled like most of those cases, where copious evacuations had occurred, for he lost, indeed, but little of the serum of his blood. I might enumerate two or three other cases of a similar character occurring in old people, where death supervened very rapidly, and where the poisonous influence of the disease was very marked, but scarcely attended with any flux or excretion of the fluids of the body. I began to regard this towards the end of the epidemic as a valuable landmark in the treatment of the disease during the stage of collapse, and accordingly exhibited mustard emetics, and I think with benefit, where the attack was severe, and there was not already copious vomiting or purging, but a deadly and lethargic collapse. It is curious that the contrary treatment would appear to be the best in the simple rice-water purging. No one would, I am sure, like to follow Dr. Stephens in his system of encouraging the flux, in this milder form of choleraic infection, by half an ounce of salts. There can be no doubt, that in the infirmary cases, the solid opium in large doses, combined with a small quantity of calomel, was the only medicine which appeared to check the severe cases of diarrhœa, and

completely to remove the disease. Its effects in two-grain doses every hour, in the persistent rice-water cases—and in a few cases, even at shorter intervals—were most marked, after all other things had failed. The same remedies, in smaller doses, with compound cretâ mixture, and ammonia, generally sufficed for the slight cases; and it is most satisfactory to have to report, that, with but a very few exceptions, the cases of rice-water purging were cured without passing into the stage of collapse. In the fatal cases of cholera observed within the infirmary, the premonitory diarrhœa was of only a few hours' duration, and from the beginning might have been termed fatal attacks. It is almost unnecessary for me to say, that, with most of the Profession, I believe the diarrhœa is as distinctive a mark of choleraic infection as the collapse itself; indeed, I doubt not that many of the nervous and apparently hypochondriacal affections, which were experienced more or less by so many persons during the epidemic, also arose, in a great many instances, from the imbibition of the malarious poison.

From what I have observed, I should be induced to recommend the exhibition of small doses of mercury frequently, during both the diarrhœa and advanced cholera. It is one of those powerful depurators whose influence is most beneficial in perhaps destroying, or at least excreting from the body, noxious poisons, as well as natural or depraved secretions; and I think it has been observed, that patients under its influence rarely die of consecutive fever. When it is only given in the cold stage, I cannot think it can be of any use until the supervention of the re-action, when large doses lying in the intestinal cavities might prove most destructive to convalescence, if absorbed to any great extent.

We used chloroform during the stage of collapse in all the cases, and with apparent advantage. I was favourably disposed towards it, from my experience of it in the epidemic of 1848-49. It acts seemingly as a powerful stimulant, and appears also to allay undue irritation. I must, however, confess, that I believe I have seen it, when exhibited in long-continued and large doses, produce additional irritation of the stomach, with hiccough, and great distress, as if it burnt, so to speak, the surface of that viscus; for we must ever remember, it is not miscible with water, and must therefore exist in the stomach uncombined, and, as it were, undiluted. I found, if the chloroform was exhibited in the form of a mixture, it fell to the bottom of the bottle, in consequence of not dissolving in the other fluids, and the patient was liable to receive none of it with some doses, and to be almost suffocated by the quantity contained in others. I therefore generally carried it in a phial, dissolved in spirits of camphor and ammonia, the proportion being about one of chloroform to three of each of the other constituents. A teaspoonful of this, poured into a tablespoonful of water, or weak brandy-and-water, at the bedside, and at once placed in the mouth of the patient, is, I think, the best method of exhibiting it. Creosote, combined with the chloroform, appeared to be a valuable adjunct in allaying undue vomiting. I thought the warm bath acted most beneficially in the first cases which occurred in the hospital; but the fatigue of going to it, being sustained in, and removed from it, counterbalances, in my opinion, the advantages; indeed, I regret to say, I believe the fatal termination of one case was somewhat accelerated by it. A portable steam-bath, for the purpose of applying heat to the patient under the bed-clothes, is, I believe, a most useful apparatus in the treatment of the cold stage of cholera.

I found the brandy blister, used in the manner recommended by Mr. Greenhow, of excellent service in rousing for a time the patient out of the deadly collapse.

We thought the exhibition of large doses of opium during the collapse would be of little or no use, and that, as it might probably exert a deleterious influence in the consecutive fever, we refrained altogether from administering it, except in cases where there was great irritation of the stomach, and restlessness, and even then in small doses in the form of tincture, and in combination with the chloroform and other remedies. I very much doubt the utility of giving large quantities of brandy during the cold stage. I have reason to think it aggravates the succeeding symptoms when administered so liberally, and that its powers of rallying the patient are very problematical. I would allow cold water to be given *ad libitum;* and a small quantity of brandy added to it might possibly be of service. The evanescent and rapid stimulation produced by the chloroform, camphor, and ammonia, is, I think, to be preferred.

Seeing that so much of the serum of the blood is lost during the progress of the disease, I managed, through the kindness of a friend, to have a horse bled, and thus procured a quantity of serum, for the purpose of injecting it, along with some common salt and chlorate of potass, into the veins. This was towards the end of the epidemic; but, as I could not prevail upon any patients to allow me to try its effects upon them, I have only to say I was inclined to use it, more especially at that stage where the collapse terminates in consecutive fever, from the belief that much of the irregular nervous excitement, fever, and succeeding local inflammations, arise in great measure from the almost complete loss of the nutritive part of the blood. More patients, I believe, die of the disease during the consecutive fever than during the stage of collapse; and, on that account, we ought to direct our attention specially to its treatment. We see strong and healthy men, who have lost large quantities of blood through accidents, sometimes die of a low form of fever, against which, in spite of local congestions, nothing but beef-tea and similar nourishment, with the moderate use of stimulants, holds out any prospect of recovery; and, on this account, I confess I am not inclined to coincide with those gentlemen who would apply leeches freely to the head or other parts, and practise the routine treatment of ordinary fever in the consecutive fever of cholera. The choleraic infection may, no doubt, produce many of the peculiar and dangerous symptoms of the fever. I think, however, the loss of the serum of the blood, and the consequent nervous excitement and re-action, ought also to be taken into consideration; for, I believe the latter to be the healthy efforts of nature to restore the lost equilibrium between the nervous, vascular, and other systems, and cannot, therefore, be subdued by the still further abstraction of the vital fluid, but requires, on the contrary, a corresponding amount of suitable nutriment to be administered for its removal.

In conclusion, I may, perhaps, be allowed to observe, that in this disease, where our remedial measures are so unsuccessful in the advanced stage, we are too apt to slacken in our efforts to solve the doubts and difficulties which meet us at the threshold of the inquiry. It is on this account we too often at once profess an almost total ignorance of the cause, nature, and treatment of the complaint, and, when the sickening sight of its ravages has faded from our memory, again sink into that apathetic condition which encourages above all other things the present almost total neglect of the study of preventive medicine.

It may be, and indeed it is too probable, that, even if we arrive at a perfect knowledge of the nature and proper treatment of this most frightful plague, we shall in many instances find the curative efforts of our art of no avail in checking its fatal and fearfully rapid progress; but even the certain knowledge of this melancholy fact should not arrest our efforts to unravel the intricate coils of the disease. No one can at present question the assertion, that the preventive treatment of this as well as of many other epidemics, plagues, and fevers, is still in its infancy, and that innumerable cases present themselves in which it is evident the strife between the inherent strength of the patient and the poisonous influence of the disease is a doubtful one. It is in such cases that our beneficent art might step in, and, by proper curative measures, save many a valuable life from the fell hand of the poison.

In our search after the most effectual means of preventing and treating cholera, we ought ever to preserve in remembrance the wondrous—nay, specific—powers of quinine in the prevention as well as the cure of ague; and, as Asiatic cholera must, in my opinion, be ultimately classed as an epidemic form of malignant fever, we must live in hope of discovering its antidote; for, our all-wise Creator has sent forth few evils against which he has not at the same time provided a remedy. Under the influence of such views it is that I have ventured to detail to you our experience of the epidemic cholera in this hospital, more, perhaps, with the object of opening out the subject for the purpose of discussion than that there was anything very new or peculiar for me to relate. I look upon it, however, as almost equally useful to be enabled by correct observation to confirm what has been well nigh already established as a fact, as to add another observation to those already fully made out. In this light I am sure no one can be accused of wasting the time of the Society, when he gives to it his faithful testimony regarding his experience of the disease.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

REPORT OF CASES OF EPIDEMIC CHOLERA FOR THE LAST FIVE WEEKS.

Our readers will have noticed that we have omitted the Cholera Report for the hospitals in our last five numbers. The cases have not been numerous, and we shall now briefly pass them in review.

University College Hospital.—One case occurred in the first week of November. The patient, a middle-aged man, was admitted in the stage of collapse, under the care of Dr. Parkes. The sulphuric-acid treatment, and the application of artificial heat, were tried, but without any good effect. About an hour before death, saline injection into the vein was practised, but it did not produce any effort at rallying.

King's College Hospital.—The case in which we mentioned that Dr. Todd had pursued the emetic plan of treatment (common salt) recovered; and in a second case, under the same remedy, a like favourable result ensued. The latter, however, was not a severe one.

St. George's Hospital.—No cases.

St. Batholomew's Hospital.—No cases have been admitted since our last report. Mr. Wood informs us that diarrhœa is now quite infrequent, but that some severe examples of it still occur occasionally.

Guy's Hospital.—Edward Dean, a middle aged labourer, was admitted, under the care of Dr. Hughes, on October 25th, and died, in the stage of consecutive fever, on the 31st. Charles Eagar, aged 21, a railway-porter, was admitted in extreme collapse, on November 10th, and died on the following day. James Downing, aged 31, was admitted November 14th, and suffered a severe and well characterised attack, but recovered. John Edward Davey, aged 18, was admitted, for acute rheumatism, into Stephen-ward, on October 21st. He subsequently had pericarditis, for which he was placed under the full influence of mercury, and while so, on November 2nd, was attacked by cholera. He was removed to Petersham Ward; and, after having been for more than a week in a very critical state, is now recovering. No cholera patients had been admitted into the ward in which this case began. Dr. Hughes's plan of treatment has been addressed to the symptoms present, consisting in the moderate use of astringents, opiates, and stimulants, conjoined with the sedulous application of artificial warmth.

St. Thomas's Hospital.—Thomas Steward, a labourer, aged 40, was admitted in the collapsed stage, under Dr. Barker's care, on November 16th. He died comatose in the consecutive fever, on the 26th. A *post-mortem* examination was made by Dr. Bristowe, who informs us, that the blood in the right chambers of the heart was partially coagulated. In the intestines, the solitary glands, as also Peyer's patches, were enlarged.

The Middlesex Hospital.—Mr. Sibley, the Medical Registrar, has favoured us with the particulars of three cases which have occurred in this hospital, all under the care of Dr. Hawkins. They were all subjected to the saline treatment, chlorate of potash and table salt; and in none was any form of opium used. *Case* 1st, a girl, aged 7, admitted Nov. 8, in a collapsed state, having had a slight diarrhœa for fourteen hours, but only for half an hour any alarming symptoms. She died without rallying, about 13 hours afterwards. *Case* 2nd, a boy, aged 4, admitted Nov. 9, at 9 p.m., quite pulseless, but having been perfectly well until two hours previously. He died without having manifested any indication of improvement, at half-past five on the following morning, the whole illness having been of less than eleven hours' duration. It is worthy of note, that this boy had lived up in a garret, and that none others in the house were ill. *Case* 3rd, a boy, aged 6½, admitted Nov. 9, in severe collapse, having been ill only nine hours. During the stage of consecutive fever into which he passed, for several days the urine was all but suppressed; it afterwards contained blood, albumen, and desquamative casts of the renal tubules. On the 19th, the secretion became more free, and amounted to four ounces in the day. It has since increased, and is not now albuminous. The boy, however, suffers much from vomiting, and his recovery is still doubtful.

The London Hospital.—No cases.

The Westminster Hospital.—No cases.

Charing-cross Hospital.—No cases.

St. Mary's Hospital.—In the first week of November, a young man, by trade a baker, and who had been living comfortably, was admitted, under the care of Dr. Sibson, suffering from well-pronounced symptoms of cholera. Under treatment by the dilute sulphuric acid, and the very assiduous application of external warmth, he recovered, and has been discharged.

The St. Marylebone Infirmary.—For the following report we are indebted to Mr. Filliter, the Resident Medical Officer. In respect to the important question of the sulphuric acid treatment, Mr. Filliter states, that his experience leads him to believe that it is of no use in any but the very first stage of the disease, and that even then it does not always arrest the diarrhœa. This opinion seems borne out by the following:—

Case 1.—Jeremiah F., an Irish lad, aged 7, admitted Nov. 6, in stage of collapse. Had been attacked with cholera eighteen hours previously, which was preceded by diarrhœa; no evidence of contagion. Died Nov. 8. *Treatment.*—Dilute sulph. acid in ♏xx. doses, every two hours; changed on the approach of the congestive stage for stimulants and mild mercurials.

Case 2.—Susan S., aged 3, daughter of a labourer; admitted Nov 7. Had suffered from diarrhœa for twelve hours; collapse set in about twelve hours after admission. Died Nov. 10. *Treatment.*—Dilute sulph. acid, in ♏x. doses, every half hour for twelve hours; subsequently, hyd. c. cretâ and Dover's powder.

Case 3.—James W., aged 32, a labourer, admitted Nov. 7, in the stage of incipient collapse; had been treated for diarrhœa previously. Died Nov. 11. *Treatment.*—Dilute sulph. acid, in ʒss. doses every two hours, for twenty-four hours; afterwards, aromatic astringents; both alike ineffectual in checking the diarrhœa and vomiting. Calomel and opium and salines were also given with no better success.

Case 4.—Philip S., a labourer, aged 32, admitted Nov. 8, in stage of complete collapse: seized with cholera two hours previously; diarrhœa, ten hours. Was at work three hours before admission. Died, Nov. 9, at 1 a.m., six hours after admission. *Treatment.*—Dilute sulphuric acid, in ʒss. doses, of which he only took two doses. He sank, apparently, from shock to the system. *Post-mortem.*—Peritoneal coat of intestines somewhat injected; the contents a thin, gruel-like fluid, about two quarts; the mucous membranes, especially of ileum, finely injected; solitary glands of small intestine enlarged; stomach full of fluid, and slightly ecchymosed; urinary bladder empty and contracted; blood dark-coloured, semi-coagulated, not inspissated.

Three of this patient's children, aged respectively 3, 6, and 8 years, and occupying one room of a house in a small court, died within two days of their father, of cholera.

Case 5.—Bridget H., aged 54, washerwoman, admitted Nov. 8, in the stage of incipient collapse. Had been attacked with cholera; twenty-four hours before with premonitory diarrhœa. A boy in the same house was attacked two days before and died; she had not been with him. Recovered on 17th, after slight relapse. *Treatment.*—Dilute sulphuric acid, in ʒss. doses, every half hour.

Case 6.—Mary W., aged 34, a shoe-binder, admitted Nov. 8, in stage of collapse, had suffered from diarrhœa for 10 days. She resided three doors from the house in which the four cases alluded to above had occurred. The cause of this outbreak of the disease appeared to be the effluvia from the sewers, which had just before been opened in four surrounding streets. Died, Nov. 10. *Treatment.*—Dilute sulphuric acid in the first instance, for about twelve hours; afterwards, opiates and stimulants.

Case 7.—Jeremiah M., aged 42, a labourer; admitted Nov. 11, in stage of collapse; seized twenty-eight hours before with cholera. Two cases of cholera had occurred in a house situated in the same court in which he resided; but it does not appear that he had any communication with them. Died, Nov. 15, of consecutive fever and pneumonia. *Treatment.*—Dilute sulphuric acid for about twenty-four hours, and occasional doses of chloroform (♏xx.), which somewhat relieved the cramps. Scarcely any beneficial effect resulting from the use of the acid, acetate of lead and opium were substituted: on the supervention of symptoms of congestion, mercury and chalk, with salines.

Case 8.—Mary C., aged 38, charwoman, admitted Nov. 12, in stage of collapse; seized with cholera twenty hours before admission. No evidence of contagion. Recovered, Nov. 20. *Treatment.*—Dilute sulphuric acid, with the addition of calomel and opium on second day.

The consecutive fever, where it occurred, was marked chiefly by symptoms of oppression and congestion. No general febrile re-action in any case.

In all cases assiduous fomentation with turpentine to legs and belly was maintained for some hours, and generally with restoration of warmth to surface.

Four severe cases of choleraic diarrhœa, treated during the month in the Infirmary with the acid in large doses, recovered.

It will be seen from the reports which we have given from time to time of the cholera, during the present epidemic, as exhibited in the practice of the London hospitals that it

has been unusually fatal, since at least three-fifths of the cases admitted have died. It must be remembered, however, that cases of the worst kind, and in the worst stage, constitute the class usually taken to these institutions. We are informed on all hands that diarrhœa is now not in the least prevalent, and, from the fact that we have to record almost no cases occurring during the last three weeks, it may be judged that the disease is subsiding for the present. A manifest tendency to general prevalence in London may be noted to have existed during the first week of November. Several gentlemen who have had opportunities of making *post-mortem* examinations of cholera patients during the last few weeks, concur in stating, that they have observed more of coagulation in the blood in the heart and large vessels, than was usually the case during former epidemics. It is difficult, however, to say, what the value of this observation may be, as there is a discrepancy among observers as to what the usual state of the blood in this respect was in former years.

GUY'S HOSPITAL.

CASE OF MERCURIAL TREMORS.—TONIC TREATMENT.—RECOVERY.

[Under the care of Dr. BARLOW.]

Mercurial tremor, *tremblement mercuriel*, or, as it has erroneously been termed, mercurial palsy, is happily one of those diseases which have all but disappeared before advancing science. Formerly, when it was the custom for workmen employed in gilding, to have to hold their materials during the stage in which the mercury was being driven off in an old hat, permitting the vapour to escape freely into the room, almost all employed were sooner or later made victims. Now, however, in most gilding-shops a closed cylinder has been substituted for the hat, the waste of quicksilver is prevented, and its volatilisation into the apartment avoided, with the effect of rendering the disease in question a very unusual one, incident only to the careless. The following well-marked example of it has recently come under notice, and possesses some features of great interest.

William Wilson, aged 40, a short, spare, nervous-looking man, was admitted, under Dr. Barlow's care, into Stephen Ward, on August 10th, 1853. He was by trade a water-gilder, an occupation in which he had been engaged, more or less, for twenty-five years. He stated, that he had felt the effects of the mercury very soon after he first began to work with it, and that about eight years afterwards his sufferings had become so severe that he abandoned the calling, and got a situation as a porter. He remained at the latter occupation, with occasional intermissions, for seven years. Whenever he returned to the water-gilding, he soon relapsed into a nervous state. He used to become emaciated, his hands lost steadiness, and he had constipation, with occasional gripings; when at other work, however, he enjoyed good health. The temptation of larger wage had, notwithstanding, induced him ultimately to continue at the more dangerous avocation, and for ten years past, as far as his health would permit, he had worked regularly at it. It must here be explained, that, when gilding, he did not always employ mercury; and that only with certain articles had he conducted the decomposition of the amalgam in the open apartment. During the whole of this period he had been very nervous and tremulous, his gums, without much sponginess, had been gradually absorbed, and most of his teeth had fallen out; ptyalism had never occurred. There had been also much sense of soreness in the muscles of the arms, which felt very weak, habitual constipation, headache, inability to speak plainly, occasional giddiness, but never any tendency to fainting. About seven years ago he was admitted, under Dr. Babington, into Guy's Hospital, for an aggravation of these symptoms, and, after about a seven weeks' treatment, was discharged convalescent.

Aug. 10.—We have mentioned in the previous history almost all the symptoms from which he now suffers. He is quite unable to hold either hand steady for a moment; the muscles are wasted and thin, and always in a state of spasmodic activity. It is with the greatest difficulty he can manage to feed himself. The affection is not so severe in the legs; he walks very slowly, and with a tottering gait; he contrived, however, to come up stairs without assistance, carefully holding on by the bannister all the way. In bed his movements are often sufficient to shake the bed; he is kept awake much by headache and by a twitching pain in the belly and back. Tongue clean, pulse very soft, urine clear, and natural in quantity; bowels costive; open every alternate day.

The treatment Dr. Barlow prescribed consisted in the frequent use of the cold shower-bath, and the exhibition of tonics, with warm aperients. A draught, containing equal parts of the decoction of aloes and the compound iron mixture, was ordered to be taken three times daily, and a diet of meat, with a small quantity of beer and wine was allowed. Under the employment of this course of medication rapid and steady improvement resulted; the constipation was overcome, the headache and abdominal pain ceased, and the man regained much better control over his muscles. When discharged, on Oct. 19, after about nine weeks' treatment, he had gained much flesh, could walk with ease, and hold out his hands with considerable steadiness. He was directed to continue the tonics some time longer, and to avoid the return to his occupation for as long as possible.

We may pass by without comment, since it speaks for itself, the illustration of good therapeutics afforded by the above case; on another point, however, it may be well to say a few words. One of the most important questions in relation to mercurial poisoning is, its imputed competency to the simulation of syphilitic diseases. It is common to hear some surgeons speak of certain diseases, nodes, etc., as "due rather to the mercury administered than to the original syphilitic affection." Dr. Graves, in his Clinical Lectures, has it thus: "The mercurial cachexy resembles in many respects the venereal. Emaciation, night-sweats, pains in the bones, nodes and osseous caries, cutaneous eruptions and ulcers, redness and ulceration of the throat, loss of appetite and debility, are common to both." Writing in the "Cyclopædia of Practical Medicine," Dr. Darwall expresses the same opinion: "The workmen who employ quicksilver are subject to all those diseases to which latterly the name of pseudo-syphilis has been applied, as ulcerations of the mouth and fauces, eruptions, rheumatic pains in the limbs, and, in short, all the affections which in former times were comprehended under the title of cachexia." Now, in reply to such assertions as these, we have such cases as the preceding. Here was a man who for twenty-five years had been at very frequent intervals the subject of mercurial poisoning; yet he had never had nodes, sore throat, eruption, or any symptom which could by possibility have been confounded with syphilis. He was also quite unaware that such symptoms had ever occurred among his fellow-workmen. We have before us the notes of four cases in which (for lupus and obstinate glandular struma) the medicinal use of calomel—one grain daily—was persevered in for more than a year, with several others of nearly like duration; and of all these the same assertion might be made. Biett asserts, as the result of his experience at the Hôpital St. Louis, that of 500 to 600 patients who came under his treatment for mercurial tremors, not one ever presented any form of node, or other disease of the bones. Mr. Startin—now of the London Hospital for Cutaneous Diseases, but who was some twenty years ago, house-surgeon to the Birmingham Hospital—informs us, that in the latter town mercurial diseases used to be very common, but that he never saw a single instance in which they assumed any of the features of syphilis. Further, it is a matter susceptible now-a-days of frequent proof, that syphilitic patients who have never taken a particle of mercury, are still liable to severe forms of periostitis and ulcerating skin disease. Now, in the face of these negative facts, it does seem to rest with those who assert that mercurial treatment may aggravate syphilis in any more specific way than by undermining the constitutional powers, to give proof of their opinion, and adduce cases in which the drug has, unaided, produced pseudo-syphilitic phenomena. There is, of course, nothing to hinder a water-gilder from catching venereal disease, and nothing to render it compulsory upon him to divulge to his credulous medical attendant that such has been the case. For the present, therefore, we prefer, waiting more carefully-collected evidence, to refer to such source of fallacy the instances which have given rise to the current belief.

There is one other very interesting subject connected with metallic poisoning, on which we must say a few words,—viz., the curative power possessed by the iodide of potassium, as recently asserted by M. Melsens, in a paper in the "Annales de Chimie et de Physique." In no case of mercurial poisoning have we seen that mode of treatment resorted to. In many cases of palsy from lead, however, we have had opportunities, in the different metropolitan hospitals, of watching its effects. Of the latter we must report, that they have been by no means constant; in a few cases, great improvement has resulted, but, in the larger number, the drug, after a fair trial, has been laid aside for more efficient measures. One fact would seem to militate strongly against the supposed eliminative powers of the iodide as it regards mercury, —viz., that, when administered together, they certainly do not counteract each other's influence. Cases of secondary syphilis, in which a mercurial pill is given night and morning, and a draught containing the iodide during the day, often progress most rapidly. During such treatment, it is, further, not common for severe ptyalism to occur. The observation, also, of Dr. Budd, of Bristol, respecting the occasional manifestation of profuse salivation on

exhibition of the iodide after the relinquishment of the mercurial, though undoubtedly true in a few cases, seems rather to apply to the exceptions to the rule than to its examples.

ST. THOMAS'S HOSPITAL.

LARGE DIFFUSE ANEURISM OF THE CAROTID.—LIGATURE.—FAVOURABLE PROGRESS.—SUBSEQUENT INFLAMMATION OF SAC.—HÆMORRHAGE.—DEATH.—AUTOPSY.

[Under the care of Mr. SOLLY.]

The following are the particulars, from the notes of Mr. Morgan, one of Mr. Solly's dressers, of the case of carotid aneurism to which we alluded last week:—

Charles Briggs, a stout, healthy-looking man, of florid complexion, aged 60, by trade a builder, was admitted on October 19. The tumour was in the right neck, extending along the course of the artery, from about an inch and a-half above the clavicle to a little higher than the angle of the lower law. It pulsated very forcibly, and was altogether about the size of a large fist. The man had not any head symptoms or local pain, but he had suffered for about three weeks with a hacking cough. He stated, that, six weeks before admission, he had been troubled with a sensation of soreness in the left side of the neck, which, after a while, passed to the right side, where it remained stationary; and two weeks later, he perceived, for the first time, a beating swelling in that part, which rapidly increased to the size of an egg. During its progressive increase, he suffered much from darting pain in the vertex of the head, and was only comfortable when lying on his back.

There was thus no difficulty as to diagnosis, and considering its very rapid enlargement no question could be entertained as to the propriety of immediate treatment. On the 22nd, accordingly, Mr. Solly placed a ligature low down on the trunk of the common carotid. The operation was performed with very great care, and, excepting that the vessel was found deeply placed, and pushed over to the outer side, nothing unusual occurred during it. Immediately on the tightening of the ligature, the tumour ceased to pulsate, became less tense, and somewhat diminished in size. The patient was not under the influence of chloroform, and bore the pain with great fortitude. Mr. Solly stated afterwards, in some remarks on the case, that the motive for withholding the anæsthetic was his anxiety not in any way to risk the increasing by such means the cerebral disturbance which must necessarily ensue on the cutting off one of the two main sources of supply of blood to the brain.

During the evening and night directly following the operation, the patient was in a most satisfactory condition; he slept well without opium, had a quiet pulse, and seemed in every way comfortable. On the next day there was a feeble pulsation felt in the tumour, which continued during several days following.

On the fourth day there were distinct evidences of the establishment of a collateral circulation.

On Nov. 4th (14th day), the ligature came away. With the exception that the tumour had not become solid or diminished in size so much as could have been wished, everything had hitherto done most favourably. The man had enjoyed a good appetite and cheerful spirits; his pulse had been steady and regular, and there had been no head symptoms whatever.

On the 11th (21st day) the wound being nearly healed, there was observed some swelling around the tumour; the man had also a troublesome cough.

12th.—The swelling had increased, and twelve leeches, followed by a poultice, were ordered to it.

13th.—He has passed a restless night; the swelling is softer, and extends further back; cough troublesome, with copious expectoration; to take three times daily a pill containing two grains of calomel with extract of hyoscyamus.

14th.—The swelling has much extended, and presses forwards under the chin; it is yet softer. The patient experiences some difficulty in swallowing.

In the evening, at the time of Mr. Solly's second visit, the state of things had become urgent; there had been a slight oozing of venous blood from the wound; the respiration was difficult and hurried; the man's countenance anxious, slightly livid, and bedewed with a cold sweat. Considering that there was imminent danger of suffocation, Mr. Solly, after consultation with Mr. Clarke, made a small opening into the upper part of the sac, when there escaped a gush of fetid air, followed by a small quantity of serum. The incision was then enlarged downwards to the extent of two inches, and some masses of decomposing coagula removed (no pus). No arterial bleeding ensued. The procedure afforded very great relief, and the man passed, on the whole, a comfortable night after it.

15th.—Decidedly better. There is still, however, a little venous oozing from the original wound. During the afternoon, the pulse acquired better power, and the breathing became more free. In the evening, however, during a fit of coughing, a jet of arterial blood took place. Pressure was immediately resorted to, and the House-Surgeon, Mr. Complin, was called. After his arrival, in attempting to change fingers, a jet of blood of large size was projected at least three feet from the bed, which evidently came from a large vessel in the upper part of the sac. The man became very faint, and a sponge dipped in a solution of gallic acid having been pressed into the part, the bleeding was arrested. Soon afterwards Mr. Solly saw the man, and, approving of what had been done, decided not to interfere further for the present. Subsequently, however, the bleeding recurred, and extravasation into the cellular tissue of the neck taking place, Mr. Solly was again sent for at one a.m. The difficulty of breathing, from pressure of the effused blood having become great, Mr. Solly on his arrival at once extended the incision upwards towards the ear, intending to prevent further bleeding by putting a ligature on the external carotid above the sac. This, however, was found impracticable, owing to the very soft condition of the sac itself, and the want of perceptible pulsation in its distal trunks. Palliative measures were consequently again resorted to, the sponge saturated with gallic acid solution being re-applied, and pressure kept up. No return of bleeding took place in the night. On the following morning, at nine a.m., Mr. South and Mr. Solly met in consultation, and the injection of the perchloride of iron into the sac was decided on. From two to three drachms of the acid solution of this salt were accordingly thrown in, and, at the same time, in order somewhat to lower the circulation, three minims of the tincture of aconite were ordered to be given every six hours. No further hæmorrhage recurred during the day.

On the 17th had passed a quiet night. In the evening a gush of arterial blood again took place, but was arrested by pressure, after which half-an-ounce of the perchloride solution was again injected into the sac, with the effect of inducing immediate coagulation of the blood which it contained.

On the 18th, in the morning, another profuse arterial hæmorrhage occurred, but it was from the original wound. It was arrested by pressure and the injection as before. In the evening the man slept a good deal, but frequently started up in a nervous, excited manner. Late in the evening there was a flow of venous blood from the lower wound, and the injection was again resorted to. It was observed that he had partly lost power over his left arm.

19th.—Has passed a restless night, frequently wandering in his mind, and much troubled with hiccough. There has been some bleeding, and also an oozing of clear serum from the lower wound. The left arm is quite paralytic, and the left leg partially so. He is evidently sinking, delirious at times, and only occasionally conscious.

20th.—Death took place at seven this morning, coma having gradually come on and been complete for two hours previously.

Autopsy.—On examining the seat of disease, it was found that the aneurismal sac was so imperfect, that the original tumour must have been in part diffused. At the point where the ligature had been applied, both ends of the vessel were perfectly obliterated; above, the external carotid entered by an open mouth into the sac. In the middle of the trunk of the left common carotid, there was found extensive disease of the arterial tunics, and a small aneurism in progress of formation. The lower part of the thoracic, and the whole of the abdominal aorta, were studded with atheromatous patches, and in several places much softened. The heart, with the exception of some patches on the mitral and aortic semilunar valves, was healthy. The lungs were much congested, and the bronchial tubes contained pus. On the surface of the brain was a considerable quantity of serous effusion, raising the arachnoid from the convexities of the convolutions. Both lateral ventricles were also distended with serum. In the substance of the right hemisphere, not far from its surface, were two small abscesses, each of them about a quarter of an inch in diameter, and containing a greenish-yellow pus. One of them was situated in the upper part, not far from the longitudinal fissure, and the other at the base of the middle cerebral lobe. The surrounding brain structure appeared quite healthy, and there was not the least evidence of any softening having taken place.

ROYAL LONDON OPHTHALMIC HOSPITAL.

CASES OF ARTIFICIAL PUPIL, ETC.

[Under the care of Mr. DIXON.]

CASES such as the three following may be ranked as among the most pleasing triumphs of modern ophthalmic surgery. They show how much, when the three essentials are present—a dexterous hand, good instruments, and an accurate knowledge of the structural condition to be rectified—may be effected in cases of great apparent hopelessness, by a procedure in itself the most simple. The first of them is an example of loss of sight from complete closure of the pupil by lymph effused in the course of iritis. When this occurrence, which is not at all unfrequent, happens to a person, as in the present instance, who is already wanting one eye, the restoration of the affected organ becomes a matter of extreme importance.

Case 1.—IRITIS.—CLOSURE OF THE PUPIL BY LYMPH.—RESTORATION OF GOOD SIGHT SEVEN YEARS AFTERWARDS BY THE OPERATION FOR ARTIFICIAL PUPIL.

Mary Ann T., aged 29, presented herself at the hospital with her eyes in the following condition:—The left globe enlarged, the cornea prominent, and hazy throughout; its circumference indistinct, the adjacent selerotic being thinned, and of a leaden hue. She had very little vision in this eye, merely distinguishing large objects. Of the right eye she was quite blind; it had been attacked with iritis about seven years ago, for which she stated she had taken mercury, and applied belladonna, and was long under treatment. The textures of the globe now appeared healthy, excepting that the pupil was contracted, puckered, and filled with a whitish membrane. When atropine was applied, two minute dark dots showed themselves, one at the upper, the other at the outer angle of the pupil. They seemed to be clear spaces where the pupillary margin was not adherent to the capsule of the lens, and appeared to indicate, that, although the capsule was covered with opaque deposit to an extent corresponding to the contracted area of the pupil, it might perhaps at other parts be transparent, and, together with the lens, unaffected by the old disease which the eye had undergone. The little black dot at the outer angle of the pupil, if it really were an aperture, seemed barely sufficient to admit the point of a Tyrrell's hook.

July 8.—Having punctured with the broad cutting-needle the outer margin of the cornea, just on the equator of the eyeball, Mr. Dixon passed in a blunt hook with a shortened bend; inserted its point very carefully at the small spot where the pupillary margin appeared to be free, and succeeded in drawing out a considerable portion of iris, which was cut off. A large transverse opening resulted, and the lens and capsule which were thus exposed were found to be perfectly transparent. No irritation followed, and the next day the little corneal wound was closed, and the anterior chamber refilled with aqueous humour. Two days later the patient could read common newspaper type quite well. She has continued to improve, and now enjoys very good vision.

Case 2.—ALMOST COMPLETE DESTRUCTION OF THE EYEBALLS BY PURULENT OPHTHALMIA.—RESTORATION OF SIGHT IN ONE EYE BY OPERATION TWENTY-SEVEN YEARS AFTERWARDS.

The operation in this case was attended with much disadvantage in its performance, on account of the rolling motions of the eyeball, and from the circumstance that no part of the cornea was quite clear. Its result is encouraging to the adoption of a similar procedure in many like cases, which have probably been given up as beyond hope of benefit.

Mary Ann H., aged 27, came to the hospital in the following state:—The left eyeball collapsed and lost; the right smaller than natural, and constantly rolling about. The cornea of the right small, and densely opaque throughout two-thirds of its extent; the upper and outer part hazy, but allowing the iris to be seen through it. No vestige of pupil, that portion of the iris having become identified with the dense and slightly prominent cicatrix at the centre of the cornea. The lens was presumed to be absent, and to have escaped through the large ulcer which had given origin to the cicatrix. The patient had been reduced to her present pitiable condition by an attack of severe purulent ophthalmia just after birth. She had retained, however, the perception of light, and could even recognise the colours of bright red or yellow surfaces, if held close to the eye, but beyond this she had not from the earliest infancy enjoyed the faculty of sight. On the 14th of October, Mr. Dixon made an artificial pupil opposite the upper and outer part of the cornea, puncturing the latter with a broad cutting needle, the point of which was made to penetrate the iris close to its union with the corneal cicatrix. A Tyrrell's hook, with a shortened bend, was then passed in at the little aperture made in the iris, and a small portion of the latter drawn out and cut off. A good pupil resulted, and this was farther improved a week later by the removal of a fine band of iris which ran across the aperture. Hardly any irritation followed these operations, and within a few days of their completion the patient could test her newly acquired powers of vision. She is very intelligent, and learned the forms of most common objects with great quickness, distinguishing certain objects as square or round the first time they were presented to her. She will, in a short time, be furnished with a convex glass to compensate for the want of a crystalline lens.

Our next case is an example of what often happens after operations for cataract by extraction, viz., that the attainment of complete success is prevented by the occlusion of the pupil by some opaque matter. In this way a little film of lymph or a band of shrivelled capsule placed exactly in the axis of vision may entirely defeat the hopes of the patient. If, however, the surgeon be aware of the real nature of the case, the completion of the cure is very easy, and may, as the following shows, be effected even many years after the original operation.

Case 3.—EXTRACTION OF CATARACT.—SUBSEQUENT OCCLUSION OF THE PUPIL WITH LYMPH.—DOUBLE NEEDLE OPERATION.—SIGHT REGAINED.

Thomas P., aged 72, had the operation of extraction performed on both eyes by the late Mr. Tyrrell; the right eye in 1841, the left in the year following. Three years ago "inflammation" attacked the left eye, which is now a mere button in the orbit. Mr. Dixon found the right eye in the following state:—The cornea clear; the cicatrix of the wound barely traceable; the pupil contracted to a mere pin-hole, and filled with a membrane of old inflammatory deposit; the iris bulging forwards in pouches, so as almost to touch the cornea throughout the greater part of its extent. The patient had good perception, not only of direct light, but of that reflected from light-coloured surfaces, such as a sheet of paper or a hand.

Sept. 23.—Using a spring speculum to expose the eyeball, Mr. Dixon introduced two needles (Mr. Bowman's method) through the opposite margins of the cornea, and with them stretched open the pupil. A very small clear space resulted, through which the patient could at once discern large objects. The next day, as there was no irritability about the eye, Mr. Dixon repeated the use of the needles, and succeeded in enlarging the opening to the extent he desired. It was still small; but, being quite central and perfectly clear of opaque membrane, gave the patient excellent vision. With a convex-glass he can now read "minion" type, having been unable even to guide himself about during the last three years.

Medical Times & Gazette.

SATURDAY, DECEMBER 3, 1853.

NAVAL MEDICAL OFFICERS.

DURING the past Parliamentary session, sixty-six petitions were presented to the House of Commons from the Royal College of Physicians of Edinburgh, from the President and Council of the Royal College of Surgeons in Ireland, from members of the Provincial Association, and from members of the Medical Profession in all parts of the country, praying that Naval Medical Officers should be placed on an equality with their brethren in the Army, as ordered by the Sovereign in Council, and recommended by the Parliamentary Commission.

A large number of petitions are now in reserve, ready for presentation as soon as Parliament meets, should the Admiralty still persist in refusing to acknowledge the rights of their own officers. We have been informed that the London Colleges of Physicians and Surgeons are not among the number of petitioners. Both bodies are, as usual, behind

their brethren of Edinburgh and Dublin in any public movement in support of the rights of their licentiates and members.

Some of the petitions refer exclusively to the claims of the Assistant-Surgeons. Others draw attention to the superior classes of Medical Officers also. We have repeatedly pointed out the peculiar claims of the Assistant-Surgeons to the support of their Medical brethren. Those of the senior officers have not been so much insisted on. It appears desirable, therefore, that the Profession should be made acquainted with the precise position of these officers, and the objects which may be attained by petitioning the House of Commons.

We have carefully gone through the case of the Navy Medical Officers, and have arranged the results under the following heads. We find:—

I. That by an Order in Council in 1805, the Medical Officers of the Navy were placed on an equality in "RANK, PAY, AND DESIGNATION," with the Medical Officers of the land forces.

II. That this order was not carried into effect with regard either to *rank, pay, or designation* until 1840, when, on the recommendation of the Naval and Military Commission appointed by the House of Commons, the *designation* of the two classes of officers was equalized, but their *rank and pay* was not.

III. That since 1840, the *designation* of the Medical Officers of the two services, as "Inspector-General of Hospitals," "Deputy Inspector-General of Hospitals," "Surgeon," and "Assistant-Surgeon," has been nearly the same; but the Army Medical Officer of the rank of Inspector is called "Inspector-General," whereas the Navy Medical Officer is termed "Medical Inspector;" but the rank of the Naval Medical Officers has continued to be below that of officers of the same designation in the land forces. Thus, while in the army an Inspector-General ranks with a Brigadier-General, and a Deputy-Inspector with a Lieutenant-Colonel, a Medical Inspector-General in the Navy only ranks with a Lieutenant-Colonel, and a Deputy Inspector with a Major. The rank of the Naval Medical Officer is still further degraded by a regulation, that he is to rank *after* officers of his own rank; "*with but after*" is the contradictory language of the order, which is as incomprehensible, as it is contrary to the express commands of the King in Council. Further, in the Army, a rank exists between that of Surgeon and Deputy-Inspector, namely, Staff-Surgeon of the first class, ranking with a Major. No corresponding class of officers, either in rank, pay, or designation, has been appointed in the Navy.

IV. That the pay and half-pay of Army Medical Officers is greater than that of corresponding ranks in the Navy in the following particulars:—

1. The pay of an Inspector-General in the Army, immediately on appointment, is 36s. per day. If he have served in any rank more than twenty years, 38s.; and, if more than twenty-five years, 40s. A Naval Medical Inspector is only paid 31s. 6d. when employed afloat, and 33s. when attached to hospitals on first appointment, until he has served ten years in that rank.

2. The pay of a Deputy-Inspector in the Army varies from 24s. to 30s. per day, according to length of service. In the Navy, 20s. per day is the highest pay of a Deputy-Inspector when serving afloat, and 27s. 6d. when attached to hospitals.

3. Staff-Surgeons of the first class in the Army are paid from 19s. to 24s. per diem, according to length of service. No corresponding "rank, pay, or designation," exists in the Navy.

4. The following are the two scales of pay of Army and Navy Surgeons:—

	Army.	Navy.
Under 10 years, full pay service	13s.	11s. and 12s.
From 10 to 20 ,,	15s.	14s.
From 20 to 25 ,,	19s.	18s.
Above 25 ,,	22s.	18s.

showing a difference of 1s. to 4s. per diem in favour of the Army Medical Officer.

5. Assistant-Surgeons in the Army are paid 7s. 6d. per diem on appointment. In the Navy these officers are only paid 7s. for the first three years. After ten years' service in the Army their pay is 10s.; in the Navy it is only 9s.

6. In addition to the pay of their respective ranks, officers at the head of the Army Medical Department, on foreign stations, when serving with an army in the field, receive from 10s. to 20s. per diem, according to the size of the Army, and 5s. per diem when serving in a colony where the forces consist of 1500 men and upwards. No such additional pay is given to the principal Medical Officer of a fleet on a foreign station.

7. The half-pay of Medical Officers in the Army is also greater than that in the Navy. The following is the scale:—

	Army.	Navy.
Inspector-General (according to servitude)	20 0 to 30 0	15 0 to 21 0
Deputy-Inspector	8 0 to 20 0	13 0 to 15 0
Staff-Surgeon	7 6 to 17 0	No corresponding rank.
Surgeon	6 0 to 15 0	5 0 to 15 0
Assistant-Surgeon	4 0 to 7 6	2 0 to 5 0

8. No compensating allowance is made by rations, or in any other way, for the diminished pay of the Naval Medical Officer. On the contrary, a soldier servant is allowed in the Army, while none is allowed in the Navy; and Army Medical Officers not supplied with quarters are allowed lodging-money, varying from 10s. 6d. to 21s. weekly.

There can be no doubt, that if Petitions are presented to Parliament in considerable numbers, and numerously signed, that the Admiralty will at last remove the disadvantages under which the Medical Officers of the Navy have so long laboured, notwithstanding the explicit terms of the Order in Council in their favour; that a class of "Flag-Surgeons," or "First-class Surgeons," will be created to correspond in "rank, pay, and designation" with the first-class Staff Surgeons *in the Army*; and that the "rank, pay, and designation" of the other classes of Medical Officers in the two services will be equalised.

We are convinced that these changes would have a most beneficial effect on the Naval Medical Service, by offering greater inducements to men of ability to enter and remain in it,—by removing a feeling of discontent excited in many minds by a sense of unjust treatment, and by offering to Surgeons a reward for exertion not afforded by a rank so far above the reasonable expectations of a large majority of these officers as that of Deputy-Inspector.

DEMORALISING ADVERTISEMENTS.

On Tuesday last, an admirable article appeared in the *Morning Chronicle* upon the suppression of open undisguised profligacy, and the punishment of vendors of indecent publications. The satisfaction we must all feel at the recent successful prosecution of the notorious Dugdale by the Society for the Suppression of Vice, and at his well-deserved imprisonment for two years, could not be more forcibly expressed than by the able writer in the *Chronicle*. We could not desire to see more vigorous exhortations to local authorities to suppress the scandalous shops where such filthy wares as those of Dugdale are sold, or more convincing arguments that the vindication of public morality ought not to be left to the precarious powers of a voluntary society, but that the recent example of the success of private vigour ought to stimulate public and official efforts in the cause of national decency and morality. The doctrine of the *Morning Chronicle* is admirable. Its practice is disgraceful. In that very Number of Tuesday last, in which the Editor appears as the champion of purity, the most conspicuous place in the paper is occupied by advertisements of two filthy books. The first,—on "Nervous and Generative Diseases,"—is *illustrated with forty-five coloured engravings*, and contains the newly-discovered preventive lotion, observations on loss of capacity resulting from

youthful abuse, and numerous other matters equally fit for the consideration of the mothers, wives, and daughters of those who allow the *Chronicle* to appear on their breakfast-table. The second advertisement,—the fiftieth edition of the "Silent Friend," illustrated by 100 anatomical explanatory coloured engravings,—contains the usual announcements about generative incapacity, impediments to marriage, the diseases resulting from infection, the means of preventing infection by a simple application, the duties of marriage, the causes of unproductive unions, and so on. On the following day this is repeated, and another work of the same class, illustrated by 147 woodcuts, is added to the shameful catalogue.

It may be asked, and the question cannot be considered an unreasonable one, why should the Society for the Suppression of Vice prosecute Dugdale for selling indecent publications, and not prosecute the newspapers by means of which these publications are make known? Exposure of the filthy sheets in a dark window in Holywell-street is surely a far more innocent proceeding than a daily parade of the title-pages and table of contents before the women of England in the columns of the journals, which find their way into every house. It is not so much Lamert, Curtis, Culverwell, or Dugdale, who are demoralizing the youth of our country as the newspapers. The disgusting trash would never meet the eye of modest maid or matron were it not for the newspapers, and the alluring facilities they afford of obtaining the mental poison sent to any address in a sealed envelope by enclosing postage-stamps.

The *Times*, and many of the leading provincial papers, have set the example of refusing to insert any advertisement of a demoralising tendency. Why should a journal like the *Morning Chronicle*, which adopts such a high tone of honour in its leading articles, continue to participate in the profits of the infamous impostors who pander to the excesses of the sensualist, and fatten upon the fears they excite in the young and ignorant.

We are sorry to have to notice any paper by name, but all general exposures have proved useless; and really, when the principles advocated and the practice followed are so totally at variance as in the case upon which we have been commenting, we have fair grounds for expressing a hope that our daily contemporaries may either cease the encouragement they afford to the vendors of indecent publications voluntarily, or that they may be compelled to do so by a successful prosecution on the part of the Society for the Suppression of Vice.

THE DUBLIN HOSPITALS.—THE VACANCY IN STEEVENS'.

Among the causes which have largely contributed to the reputation of the School of Surgery in Dublin during the last half-century, was the estimation in which the first great hospital established in Ireland was held, both by patients and pupils. In the great Metropolis of the world from which we write, we can boast of the munificence and charity of private individuals who endowed with their wealth the noble hospitals, some of which bear their names, and all of which afford refuge to the destitute, medicine for the sick, and prompt surgical advice in case of accident. They have in the chief city of the Sister Kingdom several large hospitals; but they are proud, and justly proud, to say that they were erected and endowed by members of the Medical Profession. Patrick Dun, Bartholomew Moss, and Richard Steevens, called into existence the three great institutions of the Dublin School of Medicine—those of Physic, Midwifery, and Surgery. Since its erection, the surgeons of Steevens' Hospital have taken a prominent part in the progress of the healing art in Ireland, both as teachers and private practitioners. It is unnecessary to go very far back in order to establish this proposition; the names of Croker King, Stewart, Harvey, and Obrey, have not yet quite passed away; and, in more modern times, those of Colles, John Crampton, and Wilmot, are still household words in the medical literature of the three kingdoms.

There is—or, we should rather say, there was—an office among the medical appointments of Steevens' Hospital, which has in no small degree contributed to the reputation of that establishment, and has also been the groundwork of the character earned by some of the most distinguished surgeons of the Irish School of Medicine — we allude to the situation of resident-surgeon. For many years Steevens' was the only hospital in Ireland, with the exception of some of the county infirmaries, where there was a resident-surgeon. This officer had a handsome suite of apartments; some time ago so extensive that a large portion thereof was devoted to five-and-twenty apprentices. He had also a competent salary, and, what was still better, a number of beds, which were generally filled with accidents and remarkable cases for operation. Can it be wondered at that, with these advantages, Abraham Colles and James William Cusack, who in succession filled this office, attained the eminence they so justly acquired? It was while resident-surgeon in Steevens' Hospital, that the latter first attracted the attention of the Profession by the boldness of his operations, and, in particular, his removal of the lower jaw in cases of osteo-sarcoma. Having filled the situation for many years, these gentlemen resigned their residency, and became the great consultants and the great teachers in the Irish Metropolis.

The mode of election to the Dublin hospitals is of a very mixed character: Government patronage, purchase, collegiate influence, and family compacts, have each their weight and importance in the several institutions. We cannot say that we are at present dissatisfied with the present working of the system, and certainly the public and the schools have no reason to complain. We could point out individual instances in which each of these modes of election has been most beneficial.

Mr. J. Cusack, jun., has resigned, and the Governors of Steevens' Hospital are called upon to elect a resident-surgeon in his stead. There is a rumour afloat, that the resident-surgeoncy, as originally held by those gentlemen, who filled it with such benefit to the Institution and to science, is about to be abolished, and that the resident-surgeon, although he may, by the charter and regulations of the hospital, be entitled to the salary and rooms, etc., shall not have any patients. A portion of this rule has already been acted upon. It is also said, that another of the by-laws now about to be insisted upon is, that the future resident shall not be allowed to practise. Whether this law may be advantageous or otherwise to the future School of Medicine in Dublin remains to be proved. We have heard of certain "doings," with respect to "invitations," Government influence, etc., etc., to which, however, we give little credit. What we say is, let the best man have it.

Royal Society.—The anniversary of this Society was held on Wednesday, the Earl of Rosse in the chair. The Copley medal was presented to M. Dove. of Berlin, for his work on the distribution of heat over the surface of the earth; and the Royal medal to Mr. Charles Darwin, the eminent naturalist, for his works on natural history and geology. After the meeting, the Fellows of the Society and their friends dined together at the Freemasons' Tavern.

THE CHOLERA.

Dr. Macloughlin has continued his useful researches. The following are copies of a continuation of his letters to the Registrar-General:—

"Sir,—As to the case of cholera reported without any premonitory diarrhœa, who died at No. 6, Holland street, St. Saviours, Christ Church, on the 17th October, and returned in your Weekly, 22nd October, I have been to the house, and I have seen the landlady and a lodger who attended on the patient from the moment he was seized with cramps till his death; and I have also seen the patient's brother-in-law and this man's wife, both of whom were with their relative till the moment of his death.

"By the landlady and the lodger I am informed that they noticed that the patient had been very frequently, during the 16th October, to the water-closet; but that he appeared in good health and spirits up to the moment he was seized with cramps, at about ten o'clock at night.

"His brother-in-law and his sister-in-law state, that for the last two months he was 'bad in his inside;' that he was in the habit of taking rhubarb to settle his inside; that the day he was taken ill with cramps, not feeling so well as usual, he took rhubarb at about eight o'clock, to settle his stomach, and that at ten o'clock he was seized with cramps, vomiting, etc., and died next morning.

"In this case we have the evidence of the landlady and her lodger, that this man did go that day to the water-closet more frequently than usual; and we have the testimony of his brother-in-law, and that of his sister-in-law, who state that he was 'bad in his inside' for about two months; and we have the fact that he was not well at seven o'clock, as he took rhubarb at eight to settle his stomach. Therefore, this man had certainly for a day, if not for two months, a derangement in his bowels; and it is not surprising that, at ten o'clock, he should be seized with spasms after taking the dose of rhubarb.

"This case, therefore, is not a case of cholera without any premonitory diarrhœa.

"The next case in your Weekly Return of the 22nd of October, reported as a case of cholera without any premonitory diarrhœa, is that at Bermondsey, St. James's, No. 18, Gedling-street, the child of a shoemaker, two years old, reported to have had no premonitory diarrhœa, having been placed in bed at ten o'clock on the evening of the 15th of October, and found before twelve in collapse.

"The father and mother informed me that the child's habit was to go to stool once a-day. That the day before her being taken ill they gave her a dose of rhubarb, in consequence of some slight eruption on her skin; that this dose of rhubarb acted three times that day copiously, and that the next day she had a fourth copious evacuation; that she ate her food as usual, was put to bed at ten, and at about twelve was found to have vomited, and to have had a copious serous evacuation. Assistance was sent for, but she soon sank, without much spasms.

"There can be no doubt but that this was a case of cholera; but was it a case of cholera without any premonitory diarrhœa? Certainly not.

"The child's habit was to have but one stool daily; therefore, when forced by a purgative to have four copious evacuations in about thirty hours, it was more than her constitution could support; and the fifth, with vomiting, ushered in spasms and collapse.

"We must not be misled by the fact, that the child ate her food and appeared in perfect health at ten o'clock, when put to bed.

"You have above, the case of the man at No. 6, Holland-street, St. Saviour's, Christ Church. He ate his food, was in good spirits, and appeared in perfect health, till the moment he was seized with vomiting and spasms; yet that man had the premonitory symptoms in him, certainly for one day, if not for two months.

"And in your Return of October 8, you reported a case of cholera at Poplar, where the patient had had a diarrhœa for six weeks, who ate and did his work as usual, and appeared in perfect health to his wife and relatives till the moment he was seized with spasms, vomiting, etc.

"Therefore the apparent good health and spirits of the patient when he was put to bed must not deceive us; that good health and spirits were only apparent; the child had at that moment received the fatal blow to the constitution, and the consequences were but too soon to be evident, as you see in the two cases above reported.

"Consequently, this child's case was not one of cholera without any premonitory diarrhœa; it was, on the contrary, a case of cholera with a premonitory diarrhœa of at least thirty hours.

"However distressing it may be to all concerned, I must say that this child's death was brought on by the improper administration of the purgative. To all who have seen cholera, and especially several outbreaks of the disease, it has been forced on their observation how susceptible patients are, even to the smallest dose of a purgative medicine, which at another time would have no effect on them, and especially females, whose bowels are at all times very capricious, some days acted on most violently by a small dose of medicine, and some time after not moved by a dose even ten times as strong.

"Although the following case might have run into cholera in a few hours more, yet there can be no doubt that the fatal attack was hurried on by the improper use of a purgative medicine. It is the case of a boy, seven years old, reported in your Weekly of the 29th of October, as having died of cholera, and reported without any premonitory diarrhœa.

"I saw the uncle and aunt of this child, and also the medical attendant. From the uncle and aunt I learned, that, at about six o'clock on the morning of the 26th of October, the child had a very copious liquid evacuation; that he remained in bed; that, at about nine, he had another, and then felt sick at stomach; that he refused his breakfast, that, at about ten o'clock, the aunt gave him a dose of rhubarb and salt (not salts); that, in a few minutes after, he vomited and was purged; that, a short time after, he again vomited and was again purged; that then spasms came on; that the medical attendant was sent for, who saw him at twelve o'clock, then sinking. The medical attendant did not inquire whether he had had a diarrhœa the day before, nor could the child's relatives give any account of his state of health the day before. It is evident that the child was ill before he took the rhubarb and salt; but the dose, no doubt, fatally turned the scale against him.

"However, even admitting that the child was in perfect health the day before, we have here four hours from the first liquid evacuation till the first symptoms of cramps. Therefore this case had a premonitory diarrhœa, which was overlooked.

"I am, &c. "D. Macloughlin, M.D.

"34, Bruton-street, Berkeley-square, Nov. 3, 1853."

The following extracts from a letter by Dr. Macloughlin to the President of the Board of Health are worthy of attention:—

"My Lord,—The following is the paragraph on cholera to which I alluded, and which emanated from the General Board of Health:

"Extract from the *Times*, November 8, 1853, and relative to a case of reported cholera which occurred at Lewisham, October 28, 1853:—

"'The mere absence of purging and even vomiting at the time is no evidence that the case was not one of malignant cholera. Indeed, the very worst cases of this formidable disease are those where these symptoms are wholly or partially absent, the powers of life being struck down at once by the poison.'

"As this is a question of the first importance—whether cholera occurs without purging, or even without vomiting—without, in fact, giving any warning of its approach by a symptom or by a train of symptoms—will your Lordship permit me to ask on what grounds the Board came to the conclusion that cholera can take place without purging and without vomiting?

"If this knowledge has been obtained by any member of the Board at the bedside, I trust there will be no objections to state where such cases occurred in London, that the facts may be verified.

"If the Board have made the above statement on the authority of books, or on the authority of persons not sufficiently conversant with medical inquiries, I am certain they will in future pause before they give circulation to statements that cholera can take place without purging and without vomiting, which is contradicted by accurate researches at the bedside, and by accurate researches after death."

THE METROPOLIS.

Cholera, it is gratifying to observe, subsides, and last week was fatal to only 46 persons. In the first 14 weeks of the epidemic of 1848-49, (reckoning from 1st October,) it destroyed 529 persons; in the same number of weeks of the present attack, commencing 21st August, it has carried off 744, or 215 persons more than in the former. But the epidemic beginning at an earlier season in 1853, the mean temperature has been, on an average 5° higher; and, making allowance for this circumstance, there does not appear any sufficient ground to conclude that the distemper now prevailing is of a more virulent character than that of 1848.

IRELAND.

The *Cork Examiner* of Tuesday evening says:—"We regret to state, from accounts we have received, that Asiatic cholera has made its appearance in this city. Last evening an order was given by the Mayor for the burial of a man who was attacked on Friday,

and died yesterday. He was attended by Dr. Fowler, who states that the case was one of decided Asiatic cholera. Another case occurred in Lag-lane, and we have been just informed of the occurrence of a third. All the cases have been in those localities which are distinguishable for their filth and squalor."

PROVINCIAL.

RETURNS DURING THE WEEK ENDING NOVEMBER 26, 1853.

NAMES OF PLACES.	Cases.			Deaths.	
	Diarrhœa.	App. Cholera.	Cholera.	Diarrhœa.	Cholera.
Dundee	860	37	42	—	28
Leith	—	2	1	—	1
Arbroath	—	2	1	—	—
Dalmeny	—	1	1	—	—
Cupar Fife	—	—	1	—	—
Liff and Benvie	—	—	3	—	3
Glasgow	—	—	2	—	1
Edinburgh	2	—	—	—	—
Auchterhouse	—	—	2	—	—
Isleham	—	—	2	—	2
Workington / Cockermouth	—	—	1	—	1
Durham	—	—	—	—	1
Bridport	—	—	—	—	1
South Shields	—	—	5	—	1
Tunbridge	—	—	1	—	2
Liverpool	—	—	10	—	13
Ely	—	—	3	—	3
Romford	4	—	2	—	—
Havant	—	—	—	—	1

The following analysis of the classes in which deaths occurred from cholera during the prevalence of the recent epidemic in Newcastle has been made by the Local Registrar :—

Districts.	Gentry.	Tradesmen.	Artificers and Labourers.	Total.
All Saints' (west of the Ouseburn)	0	56	362	418
St. Nicholas' & St. John's	2	69	267	338
St. Andrew's	17	89	141	247
Westgate, Elswick, and Binwell	17	96	234	347
All Saints' (east of the Ouseburn)	1	6	170	177
	37	316	1,174	1,527

At a special meeting of the Whittle Dean Water Company, authority was given to apply to Parliament next session for powers to direct into their reservoirs at Whittle Dean streams which now find their way into the north Tyne, and it was resolved to bind the Company not again to resort to the Tyne without leave being first granted by the Town Council.

CHOLERA ABROAD.

The *Union Médicale*, of Nov. 19, contains the announcement of some cases of cholera at Paris :—

"The first case in Paris occurred on the 11th of November. Since that time, several other patients, male and female, have been admitted into the different hospitals. Moreover, there have been observed some cases disseminated in the ninth and eleventh arrondissements. Some died; others, when heard of, were in a dangerous state. But for two whole days no new cases were admitted into the Hôtel-Dieu. Premonitory diarrhœa was a constant phenomenon."

The *Union* of November 22 contains the following:—

"The number of cases in Paris presents no alarming features. It has varied between five and nine a-day since the appearance of the last number of the journal. A very few cases have come from the town; the patients admitted into the hospitals have come from the fifth, eighth, and ninth arrondissements. On the 21st (Sunday), there were fewer cases than on the preceding day."

Erratum.—In our last Number, the attacks and deaths from cholera were stated as 1328 of the former, and 1607 of the latter. The attacks should have been 3328. We took the numbers from the *Deutsche Klinik*. They would show that the mortality has varied from 23 per cent. at Stettin to 65 per cent. at Christiana, which is about the per centage in our own provinces.

PROBABILITY OF DURATION OF FATAL CHOLERA CASES.—Of 19,232 fatal cases of cholera (1849) in males, 315 terminated in 6 hours, leaving 18,917 alive; 3030 died in the next 6 hours, leaving 15,887 alive at the end of the 12th hour; 4965 died in 12 and less than 18 hours, leaving 10,922, or rather more than half the number of those who die, alive at the end of 18 hours. If a man is to die of epidemic cholera, it is probable that he will die in the first day (24 hours) as out of 19,232 males who die, 10,187 die within, and 9045 survive, that period.—*Registrar-General.*

REVIEWS.

Practical Pharmaceutical Chemistry: an Explanation of Chemical and Pharmaceutical Processes, with the methods of testing the purity of the Preparations; deduced from Original Experiments. By Dr. G. C. WITTSTEIN. Translated and Edited from the Second German Edition. by STEPHEN DARBY, Practical Pharmaceutist. Pp. 619. London. 1853.

THE fact that this book has reached a second German edition proves the esteem in which the chemical labours of Dr. Wittstein are held in his own country. We are informed, on the authority of Dr. A. Buchner, who writes a Preface, that the researches are all original, and that many of them have been undertaken at his suggestion, and have been carried out under his supervision. The numerous formulæ described in this volume, and the ingenuity of the processes detailed, give ample evidence of the industry and talent of Dr. Wittstein; but we regret that the translator has adopted the German nomenclature of the substances described. Although these names may be just as good as, or perhaps better than, the English ones, yet they will certainly be unintelligible to the majority of English readers. When Epsom salts figure as magnesium oxidatum sulphuricum depuratum, and tartar emetic as kalium oxidatum tartaricum stebiatum, and other well-known drugs are clothed in similar sesquipedalian appellatives, we really require for the general reader a vocabulary of explanation at the end of the book. We repeat, that we have no objection to the German names, and indeed we very much admire the ingenuity of our Teutonic neighbours in the construction of their scientific terms, but we think it the duty of an English translator to convert them into the corresponding phrases in his own language.

On the Advantages of the Starched Apparatus in the Treatment of Fractures and Diseases of the Joints. By J. S. GAMGEE. 8vo. Pp. 89. London. 1853.

THIS work may be studied with great advantage by any surgeon who does not treat fractures by the starched apparatus. The author describes minutely the plan of Seutin, and illustrates the method of application and the effects by the narration of cases occurring in University College Hospital. He also appends some very sensible remarks on the superiority of the starched apparatus over ordinary splints in general practice, in hospitals, and in military service. It is a very useful little book.

An Account of some Cases of the Epidemic Cholera, successfully Treated by Hot-water Applications. By FRANCIS ARTHUR BULLEY, F.R.C.S., Surgeon to the Royal Berkshire Hospital, Reading. Pp. 34. London. 1853.

IN this Pamphlet, which is reprinted from a Number of our Journal, the author advocates the use of hot-water applications in cases of epidemic cholera. He adduces several cases in which this plan has proved successful; and, although he does not believe that it will restore the patient when collapse has commenced, yet, in the earlier stages of the disease, the considers it to be a remedy of undoubted efficacy

The Druggist's Handbook of Practical Receipts. By T. F. BRANSTON. Pp. 256. Liverpool. 1853.

THIS is an evident plagiarism on the popular work of Beasley. It is a bad copy of the original, not containing half the amount of matter.

Handbook of Natural Philosophy and Astronomy. By D. LARDNER, D.C.L. 8vo. Pp. 852. London. 1853.

WE can recommend this Handbook to those who have some knowledge of mathematics, and wish to increase their knowledge of astronomy. There are four introductory chapters on Meteorology, which, though scanty, are good.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

UPON SYPHILITIC CONTAGION BY CIGAR SMOKING.

By Professor SIGMOND, of Vienna.

In 1850 there circulated a report throughout Vienna, that the smoking of cigars prepared in the Government factories had produced syphilitic contagion. Sigmond proceeded immediately to investigate the matter to its foundation. Independent of the fact that certain intelligent and credible Americans had assured him of the falsehood of the statement, that in the Transatlantic manufactories negroes suffering from syphilis were occasionally employed, he proves that no single case of infection from cigar smoking could be found worthy of credit. He found, moreover, that the health of the persons engaged in the tobacco factories was remarkably good. There prevailed the greatest order and cleanliness, and but few of the people employed ever suffered from illness. In the year 1852, only 3 of them applied to the hospital with venereal ulcers; but 53 persons ascribed their syphilitic affections during the same period to cigar-smoking; 4 with blennorrhœa; 17 with secondary syphilis, namely, ulcerations of the tonsils and gums; 3 with fissures of the lips; 2 with sores of the lips and tongue, (which all the patients affirmed to have been the primary affection even when they were suffering, at the same time, from primary sores of the external organs); 6 with mercurial sores in the cavity of the mouth; 2 with sores on the lip of doubtful character; 5 with herpes labialis and lingualis; 14 with no real complaint at all. There were but two cases in which such an occurrence as that here supposed was possible, and frequent experiments by inoculation, taken from the sores on the lips, proved that even then syphilis was not the cause of the disease.—*Wien. Med. Wchnschr.* 1853.

TREATMENT OF INFLAMMATIONS BY IMPERMEABLE COVERINGS.

By ROBERT LATOUR.

The source of animal heat lies in the ganglionic nervous system. Animal heat itself requires capillary circulation, and the distribution of the blood over the body and in the different organs. When this warmth becomes raised, inflammation ensues; but the increased heat is not the consequence of excited circulation, nor of an excess of blood flowing to the affected parts; but, conversely, the circulation is more active, because the heat is raised. Increase in the quantity of fibrin is first the consequence of inflammation. As atmospheric air is an important element in the production of animal heat, so must the withdrawal of the same be an important curative measure in inflammations. The author employs, for the attainment of this end, a mixture of 30 grmm. collodion, 15 deci.-grmm. turpentine, and 5 deci-grmm. of castor-oil, which he lays over the affected parts, 2—4 ctmtr. beyond the boundary of the inflammation. In this way, 88 cases of different sorts of inflammation were treated, and with the most striking results, viz., all forms of erysipelas (three cases cured in a few hours), furunculus, anthrax (advancing to rapid cure in twenty-four hours), acute articular rheumatism, pleuritis, gout, etc.

No mention is made of the effect of an impermeable covering in preventing the exhalation of the watery parts of the blood, and thus preventing the inflammatory stasis.—*L'Union*, 1853.

CURE OF TOOTHACHE BY EMETICS.

By CESAR FREDERICQ, of Gent.

The pain caused by a carious tooth, observes the author, is sufficient to induce the sufferer to try every means for relief. Of all topical antiodontalgics, creosote, as a cautery, appears to me to possess most advantage. But besides these remedies, there is one too much neglected in my opinion: I mean, the use of emetics. Ipecacuanha, given in a vomitive dose, in cases of toothache, has been followed by a success wholly unexpected. It answered even in cases where the neuralgia has remained after the extraction of the tooth. Emetics constitute a valuable resource in cases of odontalgia without caries. There are many varieties of toothache. It may be symptomatic of other affections, or it may be produced by an ephemeral cause. Commonly the pain is attributed to the caries, but, if so, why should not the pain be permanent in a carious tooth? Why do not people suffer continuously? Some determinate cause must be at work for the production of pain; and this varies considerably. The author believes that gastric disturbance often coincides with odontalgia, and that the close sympathy which exists between the stomach and the brain, explains why a powerful impression made on the former should exert an influence on the nerves of the head.—*L'Observateur des Sciences Médicales.*

UPON REDNESS OF THE FACE IN TYPHUS.

(From the Clinic of Dr. Gietl, of Munich.)

By Dr. ZUCCHARINI.

A somewhat uncommon complication of typhus is erysipelas faciei. The disease ensues, when not excited by local causes, from absorption of the secretions, *e. g.*, altered intestinal secretion; purulent deposits; softened internal organs, as the spleen. As involving the face, it is often connected with a morbid condition of the mucous membrane of the frontal sinuses, the antrum Highmorianum, or the sphenoidal sinuses. Erysipelas occurs mostly at the height of typhus, never at its commencement; rarely in convalescence; but especially in patients with dry, fissured tongue, brown deposit on the teeth, gums, and lips, sooty discharge from the nares, pain in the neck on swallowing, deafness, sounds in the ears, with pain and discharge. The fever occurs some days before the eruption, but rarely with headache. The redness first shows itself about the root of the nose. Occasionally the brain becomes involved, as the erysipelas spreads over the head; then delirium supervenes; the patient may die of apoplexia nervosa, or of inflammation of the brain or its membranes. Complications often mask some of the features of the disease. There may be parotitis or otitis. The former becomes dangerous from diffused suppuration. The otitis may cause death through pyœmia. Fatal atrophy often follows erysipelas. In the cavities of the cranial bones, namely, the antrum Highmorianum. In the sinuses, the mucous membrane is found after death in an inflamed state. When typhus is not accompanied by erysipelas faciei, these cavities retain their usual healthy appearance. In 480 cases of typhus, erysipelas of the face occurred 17 times. It was most common in crowded wards. The month of March exhibited the greatest number. The prognosis was unfavourable; six of out twenty usually died. The treatment consisted in cleansing the cavities by the injection of cold or tepid water. In supporting the strength by the administration of quinine, camphor, wine, musk. In secondary affections of the brain it became necessary to abstract blood.—(*Wien. Med. Wchnschr.* 1853.)

COMMUNICATION TO SHOW THE EXISTENCE OF SYPHILIS IN FRANCE IN THE FIRST CENTURY OF THE CHRISTIAN ERA.

M. Becquerel communicated to the Medical Society of the Hospitals of Paris the inductions of an antiquary of the Côte-d'Or, who, in the ruins of a temple situated near the source of the Seine, where it was the custom to take baths, met with a number of inscriptions, ex-voto, attesting the cure of different diseases of the genito-urinary apparatus by the use of the waters. These *ex-voto* were lithographed, and they were seen to record examples of tumours of the scrotum, of buboes, of destruction of the penis, and of other alterations which might be referred to syphilis. If these conclusions be correct, it establishes the fact of the existence of syphilis in the thirtieth year of the Christian era. A Commission, consisting of MM. Legendre, Requin, Becquerel, and Gillette, was appointed to examine the evidence.—*L'Union.*

UPON THE CHEMICAL COMPOSITION OF SWEAT.

By Dr. P. A. FAVRE.

The author's experiments are distinguished from those which have preceded them, by the enormous quantity of material employed, namely, 55 litres in the whole.

No reference is made to the German discoveries, and the author appears to be unacquainted with Schottin's investigations, conducted two years ago in Lehmann's laboratory, and related in Schmidt's "Jahrbuch," (LXXIV.) The most striking results which the author obtained were the discovery of an acid containing nitrogen (acide sudorique), and of urea in the normal perspiration. Lactic acid, the presence of which Lehmann and Schottin have denied, was

again found by Favre, who likewise obtained chloride of soda and of potash in large quantities, and alkaline and earthy sulphates and phosphates in small quantities.

He obtained the sweat by confining a man in a vapour-bath, and making him drink large quantities of water; his feet were in a plated pan, and he was covered by a cloth. A detailed account of the mode in which the experiments were conducted would be too long for this Journal. He found that the perspiration of the same individual was subject to but little variations. When he followed out the changes which the secretion of the skin experienced at different periods of sweating, he remarked, that it reacted acid in the first half-hour, neutral or alkaline in the second half-hour, constantly alkaline in the third. Sweat of the last kind did not smell unpleasantly; also acid sweat lost its strong odour after standing a few hours. The more minute investigation of sweat collected at different periods, showed, that, during the first half-hour, a less quantity was secreted than later, and that during the second and third half hours the quantity remained the same. The proportion of solid parts to the watery did not vary materially in different periods of the sweating process. The greatest amount of mineral ingredients was about the second period. In the third half-hour there was the least quantity of the "organic-acid salts." Contrasting the urine with the sweat, it follows, that in the former there is a preponderance of the chlorides, but in a far greater degree an excess of sulphates and phosphates and organic substances. The author is engaged with Andral in investigating the pathological conditions of sweat.—*Archiv. Gen.*, 1853.

GENERAL CORRESPONDENCE.

SALINE INJECTIONS IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

Sir,—Among the various remedies recommended and used for the treatment of Asiatic cholera, the injection of saline solutions into the veins has been repeatedly very successful in rousing momentarily patients, when every other means had proved unavailable. Different formulas have been given for the composition of such injections. Dr. Owen Rees recommends the following:—

Chloride of sodium	3 oz.
Phosphate of soda	1 oz.
Carbonate of soda	1½ oz.
Sulphate of soda	½ oz.

This is to be dissolved in a little water, and the solution gradually diluted with small proportions of distilled water, at the temperature of from 58° to 63° Fahr., occasionally testing it with a urinometer, until it has attained the specific gravity of 10·30; the whole fluid is then to be heated to 98° Fahr., when it will be ready for use.

Dr. Owen Rees considers that the specific gravity of his solution ought to be the same as that of the serum of blood; and assumes it, therefore, to be as high as 1030. I may, perhaps, however, be allowed to observe, that serum, containing 80 parts of albumen, besides 8 or 10 parts of salts dissolved in 1000 of water, must have a much higher specific gravity than if it consisted only of a solution of 8 or 10 parts of inorganic salts in 1000 of water, and, consequently, that the specific gravity assumed for the above solution far exceeds what it ought to be, if the gravity is raised by saline matter only. This assertion, moreover, is proved by experiment, as I have ascertained that the specific gravity of a liquid, containing, in 1000 parts of distilled water, 10 parts of inorganic salts, such as occur in the blood, according to the proportions given by Nass, in his analysis of that fluid, does not exceed 1004, at the temperature of 68° Fahr.

Perhaps, therefore, I may venture to recommend the following formula:—

Water	10 oz.
Chloride of sodium	31 grs.
Phosphate of soda	5 grs.
Carbonate of soda	6 grs.
Sulphate of soda	1 gr.

which is to be heated to 98° Fahr. when required for use. The specific gravity of the above solution is 1004 at 68°, and between 1000 and 1001 of 98°; its composition is as nearly as possible identical with that of the serum of blood deprived of its organic principles.

The following are the calculations from which this formula has been obtained.

According to Nass 1000 parts of blood contain 7·999 of salts.

	Soluble salts.		Insoluble salts.
Alkaline phosphates ..	0·823	Lime	0·183
Sulphate of soda ..	0·202	Phosphoric acid ..	0·201
Carbonate of soda ..	0·956	Sulphuric acid	0·052
Chloride of sodium ..	4·690	Magnesia	0·015
		Silica	0·043
	6·671	Oxide of iron	0·834
			1·328

The number 6·671 for the soluble salts is, however, under the average, if we consider other analyses of blood made by trustworthy chemists. We may assume it to be at the highest about 10. According to the proportions given in the analysis of Nass, 10 parts of the soluble salts of blood dissolved in 1000 parts of water will consist of

Alkaline phosphate, or phosphate of soda	1·233
Sulphate of soda	0·302
Carbonate of soda	1·433
Chloride of sodium	7·030
	9·998

Ten ounces of the solution will contain, therefore, a little more than the hundredth of an ounce of phosphate of soda; and if a fluid ounce of distilled water weighs 437·5 grains, the amount of that salt will be 5·29, or about 5 grains. The proportions of the other salts have been calculated by the same process.

I shall avail myself of the first opportunity to put this formula to the test, hoping it will yield favourable results.

I am, &c. Wm. Marcet, M.D.

Laboratory of Chemistry Applied to Physiology and Pathology, Chapel-place, Belgrave-square.

PREMONITORY DIARRHŒA IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have seen Mr. Turner, 31, Lower Phillimore-place, Kensington, relative to the case of cholera without premonitory symptoms, which he says he met with four years ago.

Mr. Turner informs me that he did not inquire whether the patient had had evacuations more frequently than usual for a few days or a few hours previous to the attack of spasms; therefore the case cannot be considered as a case of cholera without premonitory symptoms.

Mr. Turner saw this woman going about apparently in perfect health, yet she might have, at that very time, a diarrhœa of some weeks' duration, and a painless diarrhœa, which gave her no uneasiness, and consequently did not arrest her attention. This is an every-day occurrence. The man reported in the Registrar-General's Weekly Return, 8th October, as having died at No. 4, Margaret-street, Poplar, of cholera, is a case in point. He had diarrhœa for six weeks; as he told me, he never was in better health till the moment he was seized with cramps—and this was confirmed by his wife and relatives. And, again, the case at No. 6, Holland-street, St. Saviour's. He ate, drank, and did his work as usual, and he was, as usual, as cheerful, till the moment he was seized with cramps; but, if we are to believe his landlady and a fellow-lodger, he had a diarrhœa at least for twelve hours before he was seized with cramps; and, if we are to believe his brother and sister in-law, he was "bad in his inside" for nearly two months before he was seized with cramps. Therefore, we are not justified to trust to the appearance of the patient, and to say that the disease only began at the moment the patient began to complain of spasms.

I am, &c. D. Macloughlin, M.D.
Member of the Legion of Honour of France.

34, Bruton-street, Berkeley-square, London,
Nov. 27, 1853.

RUPTURE OF THE UTERUS.

[To the Editor of the Medical Times and Gazette.]

Sir,—If you think with me that the record of cases such as the following may be of use in directing us to a more correct calculation as to the comparative frequency of the accident, and that the case possesses sufficient interest in itself, I shall be glad if you can find space for its insertion in your Journal.

I was summoned at 3 a.m., on Friday, Oct. 28th ult., to attend B. S., aged 38, in her twelfth labour. I arrived at her house, a

distance of five miles, a little before 4 a.m. I had attended her in two previous confinements; the first time, after a protracted and severe labour, the child (male) was still-born, and had probably been dead previous to the commencement of labour. The second time, I was in the house not longer than an hour before a live male child was born, but it was weak and sickly-looking. It lingered two months, and then died.

When I arrived, I found my patient looking extremely well, being in better condition than I had ever previously known her. On examination, I found her in the first stage of labour, the mouth of the uterus dilated to the size of a crown-piece, and the head presenting; the membranes were ruptured. This latter fact may be explained by the presence of a midwife, who was in attendance a short time before my arrival, but I did not ascertain the truth of it. There was ample space in the pelvis for an ordinary child. The pains were slack, but much complained of; and there was occasional vomiting. The patient had not felt any movement of the child since the commencement of the pains, and she expressed herself as certain that the child was dead. Up to 7 a.m., the labour progressed very slowly, though the first stage was now completed. At the above hour, as there was no apparent contra-indication, and the pains did not improve, at the urgent request of the patient, I gave her a dose of the ergot; half an hour after I gave her another dose. As it did not seem to effect much change, I thought it better not to give more, and determined to wait. During the whole of this period, she complained that the pains were not like labour pains, were much worse to bear, and entirely confined to the lower part of the abdomen. At half-past eight a.m., I went down to breakfast, leaving her in charge with the midwife, but within hearing of the least noise from the patient. I left her in bed. While at breakfast there did not appear to be any suffering, but just as I finished I heard the pains had again set in, and I immediately joined her. I found her out of bed, and was given to understand that she had been bearing some pains, kneeling by the bedside, but that she had "smothered them." I got her into bed, and found the head bearing well down towards the perinæum. I at once cheered her with the prospect of a speedy delivery. The pains continued of a moderate strength, but she soon became violently excited, cried out that "the pain was dreadful, of an intense burning character, which never left her, and which she could not live under." After an ineffectual attempt to restrain her, she got out of bed, but scarcely had she done so, when I observed her suddenly become deathly pale, and she said now, quite calm, "I feel very waffish." Instantly it occurred to me that rupture of the uterus had taken place. Lifting her into bed, I found the child had considerably receded; the pulse was scarcely perceptible at the wrist. I gave her a little spirits and water, sent off for the forceps, and for a medical friend seven miles off. It was now about ten o'clock. After she got the spirits she rallied a little, and then fell into a quiet sleep, occasionally waking and feeling faint. All pain had left her. A little before twelve the forceps arrived, and, while down stairs preparing them, I was afterwards told she had asked, "What was that crack?" I immediately proceeded to deliver her with the forceps, and, after a little difficulty, succeeded in locking them, and began to extract. Immediately on doing so she commenced to complain of the "burning" pain, and, as I proceeded, she became excited in the same violent way as before, but, having more help, we restrained her. In about half an hour, after much labour, I succeeded in delivering the head, but, as I did so, she expired. The shoulders defied all my efforts to extricate them, and I was obliged to be content and allow the child to remain. It showed no symptoms of life. Dr. Thompson, the gentleman I sent for, did not arrive until after her death.

On Sunday, the 30th ult., I got the consent of the husband for a *post-mortem* examination; and that afternoon, about fifty hours after death, assisted by Dr. Thompson, the body was opened. Immediately on cutting into the abdomen, the breech and legs of the child, together with the placenta, were found lying in the peritoneal cavity. The contracted uterus was found low down in the left iliac region, hid from sight by the intestines. The rent was, of course, extensive, and situated in the anterior wall; but whether it was continued through the os tincæ we could not ascertain, as the child occupied the entire pelvis, and could not be moved. There was probably about a quart or more of coagulated blood surrounding the uterus.

I refrain from making any remarks on the case, as my communication is already too long. I will only add, that the cause of the accident must be explained in some other way than by uterine contractions; and dissection, as far, at least, as I could ascertain, showed neither disease of the uterus nor thinning of its walls.

I am, &c. JAMES BARRON.

Gosforth, Cumberland, Nov. 4, 1853.

THE LEVER RING FORCEPS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In my paper on the lever ring forceps, published in the last number of your Journal, I find that I did not give credit to the right gentleman for the invention of the principle of the lever in combination with the tube. Its discoverer appears to be M. Charrière, the celebrated instrument-maker of Paris; and the inventor of the scissors is Mr. Wilde, who gave a description of them, with drawings, in the *Medical Times* for December 7, 1850. I should add, that the lever ring forceps are made by Messrs. Weiss. I am, &c. J. TOYNBEE.

18, Savile-row, Nov. 24, 1853.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

NOVEMBER 22, 1853.

Dr. BARKER, Vice-President, in the Chair.

A paper was read by J. Toynbee, Esq., F.R.C.S., Aural Surgeon to St. Mary's Hospital, relating

SOME PATHOLOGICAL RESEARCHES INTO THE DISEASES OF THE EAR.

(FIFTH AND SIXTH SERIES.)

The author gave the results of the fifth series of his researches into the cause of deafness, and presented a list of the appearances shown by *post-mortem* examinations of the organs, since the publication of his last paper. He classified his dissections thus: Ears from deaf persons whose deafness was known, and which had been examined by himself during life, 134; ears from deaf persons, unaccompanied by histories, and not examined during life, 41; ears diseased, but without histories, 226; healthy ears, 207. The author contented himself by giving a list or tabular view of the morbid conditions he had seen, referring the more minute description, as regards treatment, etc. etc., to future communications. He stated, that further researches had induced him to modify the opinion formerly expressed by him, that deafness seldom depends upon the obstruction of the faucial orifice of the Eustachian tube, inasmuch as a thickened condition of the mucous membrane covering the said orifice is liable to cause obstruction by preventing the tensor and levator palati separating the walls of the canal. In many cases of advanced deafness, a diseased condition of the auditory nerve or its expansions was found. In the sixth series, the author gave in a tabular form, the results of the examinations made after death of 1013 diseased ears. He mentions that such facts as the existence of a dermoid layer of the tympanum and the general closed condition of the Eustachian tube, have only recently been pointed out. The author concluded by stating, that many important aural diseases, such as anchylosis of the base of the stapes to the fenestra ovalis, have until now been wholly unknown.

The 1523 cases, from the descriptions of which the details in the following Table have been taken, may be thus classed:—

136 diseased ears from deaf persons with histories.
223 diseased ears from deaf persons without histories.
654 diseased ears from persons without histories.
510 healthy ears.

A TABULAR VIEW OF THE MORBID APPEARANCES FOUND IN 1013 DISEASED EARS.

MEATUS EXTERNUS.

Containing a collection of cerumen	71
,, ,, ,, and epidermis	9
Distended and dilated by a collection of cerumen	5
,, ,, ,, ,, and epidermis	1
Containing a collection of cerumen and rye seeds	2
,, ,, ,, the osseous walls being absorbed in parts	3
Containing a collection of cerumen and epidermis, the osseous walls being absorbed in parts	4
Containing a collection of cerumen, the osseous walls being absorbed in parts so as to expose the cavity of the mastoid cells	1
Containing a collection of hairs	1
,, ,, cotton wool	1
Containing a molluscous tumour	5
,, ,, the osseous walls being absorbed in part	3
Containing a molluscous tumour which projects into the cerebral cavity	1

Containing a molluscous tumour which projects into the mastoid cells ... 1
Containing a collection of pus ... 10
" " mixed with epidermis ... 1
Having polypi growing from its walls ... 1
" " " the bone being carious ... 1
The dermis so much atrophied as to leave the bone denuded ... 2
" hypertrophied ... 2
" congested ... 7
" soft ... 1
" soft and red ... 2
" soft and detached from the bone ... 2
" soft and thick, the bone being carious ... 1
" ulcerated, the bone being exposed ... 1
Osseous walls rough ... 1
" carious ... 7
" absorbed in parts ... 2
" presented an orifice superiorly ... 3
" " " inferiorly ... 1
Osseous canal much contracted ... 3
Having rounded growths from the osseous wall, so that the calibre of the tube was much diminished ... 14

MEMBRANA TYMPANI.

Opaque ... 15
Vascular ... 7
" and thick ... 3
Relaxed ... 4
Tense ... 10
" and atrophied ... 2
Inner surface connected to the promontory by bands ... 32
" adherent to the incus ... 9
" " stapes ... 4
" " stapes by membranous bands ... 11
" " incus " ... 1
" " all the ossicles " ... 2
" " " and the promontory by bands ... 6
Outer surface more concave than natural ... 34
" " " and thick ... 4
" " " " opaque ... 4
" " " " thick and opaque 1
" " " " soft ... 1
" " " " tense ... 2
Very concave externally, and inner surface in contact with the promontory ... 10
Very concave externally, and inner surface connected to the promontory by membranous bands ... 13
Very concave externally, and the whole of the inner surface in contact with the promontory, the tympanic cavity being obliterated ... 7
Very concave externally, thick, and adherent to promontory ... 3
Thicker than natural ... 66
Thick and unyielding, like cartilage ... 5
" white ... 12
" soft ... 2
" tense ... 5
" attached to the incus by membranous bands ... 1
" vascular, and connected to the incus by bands ... 1
" opaque " " ... 4
" tense, and congested ... 2
Containing deposits of calcareous matter ... 14
" spots of cartilage ... 2
Flat externally ... 6
" thick, and white ... 4
Epidermoid lamina thick ... 8
" " absent ... 5
Dermoid lamina very vascular ... 1
" " thick ... 4
" " and vascular ... 3
" " detached from the fibrous lamina ... 1
Radiate fibrous lamina absent, apparently destroyed by ulceration ... 3
Radiate fibrous lamina absent in parts, apparently destroyed by ulceration ... 2
Dermoid and fibrous laminæ, absent in parts, apparently after ulceration ... 3
Fibrous laminæ destroyed by ulceration in parts ... 6
" entirely destroyed by ulceration ... 4
" " the mucous lamina attached to promontory ... 2
Fibrous laminæ containing black pigment cells ... 3
Mucous lamina thick ... 2
All the laminæ destroyed by ulceration, excepting the epidermoid ... 3
All the laminæ destroyed by ulceration excepting the mucous 2
Perforated ... 47
Absent, apparently destroyed by ulceration ... 21
Perforated, the remaining portion being adherent to the promontory ... 9
Perforated and thick ... 1
Perforated, thick, and concave, and adherent to the promontory 2
" by molluscous tumours ... 2
Upper part detached from the bone ... 2
The circular cartilage exposed ... 1

TYMPANIC CAVITY.

Contents.—Mucus ... 65
Blood ... 6
" and mucus ... 1
" and lymph ... 1
Serum ... 10
" and mucus ... 3
" and lymph ... 1
Lymph ... 6
Epithelium ... 2
" and oil ... 1
Scrofulous matter ... 20
Calcareous matter ... 8
Cerumen ... 1
Cholesterine ... 1
" and mucus ... 5
Cellular tissue ... 2
Oily matter ... 1
Pus ... 17

State of Mucous Membrane.—More vascular than natural ... 75
More thick than natural ... 211
" " and very vascular ... 16
So thick as to bury the stapes ... 27
" fill the tympanic cavity ... 6
Ulcerated ... 24
Pulpy ... 5
Having black pigment cells beneath it ... 2
" serum " ... 1

Membranous Bands Between.—Malleus and promontory ... 6
Malleus, incus, and promontory ... 1
" and stapes ... 1
" and promontory ... 6
Incus and promontory ... 5
" stapes and promontory ... 3
" and malleus ... 1
Stapes and promontory, the mucous membrane being healthy 79
" " " " thick 48
" " " " vascular 6
" promontory, and pyramid ... 1
All the ossicles ... 30
" and promontory ... 9
Tensor tympani muscle and stapes ... 3
Chorda tympani nerve, incus, stapes, and promontory ... 2
" and upper wall of tympanum ... 1

CAVITAS TYMPANI.—OSSICULA.

Malleus.—Adherent to the promontory ... 1
Absent, apparently from caries or ulceration ... 4
Partly removed by caries ... 1
Malleus and incus lying in the mastoid cells ... 1
Fixed by ligamentous anchylosis to the upper wall of the tympanum ... 3
Osseous ... 2
The body anchylosed to incus ... 3
The long process detached from the membrana tympani ... 3
" " fractured ... 1
" " in contact with the promontory ... 3
" " adherent to incus ... 1
" " detached from the body ... 1
" " absent ... 2
" " carious ... 3
" " exostosed ... 1
Incus.—Absent ... 4
Long process absent ... 2
Partly removed by caries ... 8
Disconnected from stapes ... 14
" " and malleus ... 1
Fixed by membranous anchylosis to the orifice of the mastoid cells ... 2

Stapes.—The base anchylosed by bone to the fenestra ovalis ... 49
" " " the base being expanded ... 4
The base anchylosed by membrane to the fenestra ovalis ... 35
" " " the base being expanded ... 4
The base anchylosed by bone to the fenestra ovalis, an exostosis around the fenestra ... 2
The base of the stapes attached to the fenestra ovalis more rigidly than natural ... 66
The base projecting into the cavity of the vestibule ... 3
" expanded and more fixed than natural ... 7
" " projecting into the vestibule ... 2
Detached from incus, and attached to the membrana tympani 1
Anchylosed to incus ... 2
Detached from fenestra ovalis and incus ... 2

Disconnected from the fenestra ovalis	1
Partially absorbed	1
Atrophied	1
Absent, apparently from ulceration	2
All the Ossicles.—Less moveable than natural	4
Absent apparently from ulceration	2
Disconnected from each other	1
Carious	2
Osseous Walls.—Thickened	1
Carious	6
Upper wall partly deficient	54
Lower wall ,, ...	25
Osseous lamina between mastoid cells and lateral sinus incomplete	2
Osseous lamina between mastoid cells and cavity of cerebellum incomplete	1
Canal for portio dura nerve incomplete	2
Carotid canal contracted	7
Eustachian Tube.—Containing mucus	10
,, lining membrane congested	1
Containing mucus, lining membrane thick	2
Lining membrane congested	5
Guttural portion; mucous membrane red and soft	2
Bands of adhesion connecting the walls	3
Stricture in osseous part	1
,, cartilaginous part	2
Very large	2
Tensor Tympani Muscle.—Atrophied	14
Attached to stapes by a band	1
Auditory Nerve.—Atrophied	5
,, and congested	2
Vestibular portion atrophied	1
In a state of suppuration	1
Having a tumour attached to it	1
Having blood effused around it	2

INTERNAL EAR.

Vestibule.—Membranous labyrinth thicker than natural ...	8
,, ,, atrophied	20
,, ,, congested	2
,, ,, containing blood	1
,, ,, ,, pus	2
,, ,, ,, red serum ...	2
,, ,, ,, an opaque fluid	3
,, ,, otoconie absent	3
,, ,, ,, more abundant than natural	8
Membranous labyrinth, fluid deficient in quantity	10
,, a membranous band dividing it ...	2
An exostosis from its walls	3
Black pigment cells more abundant than natural	1
Cochlea.—Blood-vessels distended	2
Cochlearis muscle (?) red	1
,, hypertrophied	4
Black pigment very abundant	4
Fluid opaque	2
,, of a dark colour	2
,, red	3
,, deficient in quantity	8
Lamina spiralis thick	1
Containing pus	1
Semicircular Canals.—Upper osseous wall of the superior semicircular canal absent	2
Posterior osseous wall of the posterior semicircular canal absent	1
Obstructed by otoconie	2
Otoconie more abundant than natural	2
Containing pus	1
,, calcareous matter	2
,, blood	1
Carious orifice from tympanum into the superior canal ...	1
Membrana Fenestræ Rotundæ.—Thick	4
Thick and tense	1
,, opaque	2
Red and pulpy	1
Having bands of adhesion covering its outer surface	4

A paper was read

ON INFLAMMATION,

by T. S. Statham, Esq., assistant-surgeon to University College Hospital. The author divided inflammation into two types, sthenic and asthenic. He stated his opinion, that the latter was always due to the presence of a morbid animal poison, which must be the result of decomposition. He acknowledged that the essence of this poison had not been discovered, but stated that its presence was shown by its effects,—viz., weakening of the vital forces, increase of the watery secretions, prevention of the formation of fibrin. He remarked its specific effect upon the inflammatory process which it creates, and likewise modifies, causing effused plasma to take a less developed form. He described its progress through the body by contiguity, and stated that a special character of the disease consisted in the absence of any prominent local symptom. An account of the phenomena attending pyæmia was given, and the appearances shown by *post-mortem* examinations in this disease were described. The author gave his opinion, that absorption of animal poison was caused by glandular imbibition rather than by venous absorption, and gave the results of experiments on rabbits to prove the correctness of his opinion. He denied the existence of any peculiar odour of the breath accompanying pyæmia. He differed from Dr. Jenner as regards the theory of pyæmic fever, stating his opinion, that if the blood had been so polluted as to produce suppuration in an uninjured part of the body, death would have ensued to the patient. The causes of purulent deposits were fully discussed, and great reference was made to the works of Hunter and others. General tonic treatment, with local depletion, was recommended as the best under all circumstances.

Mr. Henry Lee gave his opinion, that no pathological specimens existed to show that this poison was imbibed into the system through the lymphatics. He described the mode in which pus corpuscles were formed in the blood, namely, that by the specific action of this poison fibrin was effused from the serous coats of veins, which exudation, not being properly organised, softened, and was carried through the system by the blood.

Mr. Erichsen remarked, that low inflammations were greatly on the increase, and that treatment now ceased in many cases, in consequence, to be antiphlogistic. He stated his belief, that pyæmia and low inflammation were not synonymous, inasmuch as in the former the morbid action was diffused throughout the body, while, in the other, it seemed to be more local. He agreed with Mr. Lee upon the subject of venous absorption. He differed with Mr. Statham upon the subject of the odour of the breath in pyæmia.

Dr. Simpson made some severe remarks upon the paper just read, giving it as his opinion that it was deficient in practical value; and concluded by exhorting the surgeons and physicians of the different hospitals to bestow great attention upon the subject.

Mr. Carter referred the Society to a work by William Clowes, who lived in the reign of Queen Elizabeth, and to his opinions upon the general belief that then existed as to the poisonous nature of gun-shot wounds, and their general effect upon the system.

Dr. Schulhof wished to know what microscopical or chemical proof existed of any such poison as described. He expressed doubt as to the philosophy of reasoning and drawing deductions from that which all the previous speakers acknowledged was a mere hypothesis.

Dr. Mayo complimented the author upon his paper, and administered a severe rebuke to those that seemed disposed to check the spirit of inquiry exhibited in it.

Mr. Statham, in reply, stated, that he was fully aware of the imperfections of the paper, as he had been more accustomed to the knife than to the pen. He stated, that his opinion was formed after nine years' study, and after close attention to the natural phenomena observed in experiments upon animals. As regards the peculiar odour of the breath in pyæmia, he had totally failed in discovering it.

MEDICAL SOCIETY OF LONDON.

November 26, 1853.

Forbes Winslow, M.D., D.C.L., President, in the Chair.

Mr. H Lee exhibited the preparation of a case mentioned by him at the last meeting of the Society, in which the profunda femoris vein, with its branches, was plugged with a mass of fibrin. This had resulted from the introduction of purulent matter into the blood from an abscess on the inner side of the thigh; and, in order to show that morbid products have such an action, he detailed certain experiments performed on animals by M. Gaspard. M. Gaspard injected into the right jugular vein of a moderate-sized dog two and a-half ounces of thick fetid fluid, derived from the maceration of cabbage-leaves in water at 77° Fahr. The dog became faint, and vomited several times. Some hours afterwards, there was great uneasiness and oppression, with recurrence of the vomiting and continued faintness during the day. A most copious, fetid, and black evacuation took place in nine hours afterwards, consisting of a little fæcal matter, with a large quantity of corrupted blood and mucus. This was repeated some time afterwards. On the following day the animal had lost strength, and lay on its side, or staggered as it walked. The most remarkable symptom, however, was palpitation of the heart, accompanied by

a very extraordinary force and sound, such as would occur from long-continued hypertrophy of the heart, or of aneurism of the large arteries. The animal was better on the 3rd and 4th days, but still there were great thirst, fever, and vomiting. On the 5th day, the symptoms were aggravated with extreme weakness, a tottering gait, excessive thirst, red eyes filled with gum, nostrils swollen and obstructed, and the mucous membrane of the mouth tumid, and of violet-red colour. In the middle of the day there was a liquid, greyish-white evacuation, resembling pus in its odour, consistence, and appearance, mixed with some clots of putrefied blood. Death occurred during the following night. On a *post-mortem* examination, the lungs were found of a dark colour, with some black patches, but still crepitant. The left ventricle of the heart presented several brown stains, resembling ecchymoses, infiltrating its tissue. Its internal surface was of the colour of lees of wine, and offered a singular contrast to that of the right side. The right ventricle contained a hard fibrinous concretion, two drachms and a-half in weight, of a light yellow colour, and having the external appearance of grease. It was of the same consistence throughout, and was free at all points, except a small portion of it which was attached to an inflamed spot on the inner surface of the ventricle. No appearance of the injected fluid could be detected in the clot. It was prolonged into the pulmonary artery, vena cava, vena azygos, axillary vein, and even into the right jugular vein.

Dr. Routh remarked that, while such results had followed from some of the experiments, they were not found in all. Putrid pus had been injected into rabbits without injury, and it is well known that wounds from dissection are usually innocuous. The results mentioned by Mr. Lee must arise from other circumstances, as those of epidemic influences and bodily weakness. It is well known that hectic fever, a symptom of purulent infection, does not usually follow the introduction of pus within the system, since large abscesses are daily observed to be absorbed without any evil effects whatever following.

Mr. Lee admitted that the results from experiments were not always consistent, but since certain symptoms had followed in numerous instances, he believed that they were due to the cause indicated.

Dr. Mackenzie fully corroborated Mr. Lee's statements, and affirmed, that a vitiated state of the blood and an altered condition of the vein do induce stagnation of the blood, closure of the vessel, and phlebitis.

Dr. Tilt then read a paper on

INTERNAL METRITIS AND UTERINE CATARRH.

The object of Dr. Tilt's paper was to draw attention to the more obscure forms of uterine disease which have their seat in the mucous membrane which lines the neck and the body of the womb. He described subacute inflammation of the mucous membrane of the neck of the womb, contending, that to that disease alone the term uterine catarrh should be applied; and showed, that by giving it to acute inflammation of the neck of the womb, the French pathologists had been led to use uterine injections into the cavity of the womb to the danger of the patient's life, and for a complaint amenable to much milder treatment. Subacute inflammation of the mucous membrane lining the womb was said to be characterised by the usual uterine pains and hysterical phenomena, and by inconsiderable swelling, if any, of the neck of the womb, which was sometimes only painful on pressure laterally applied, the discharge being rarely muco-purulent, generally mucous, and sometimes sanious; and Dr. Tilt detailed several cases in which this occurred for years. In addition to the known means of treatment, Dr. Tilt strongly advocated the topical application of tincture of iodine to the inner and outer surface of the womb,—the dressing to be repeated every four or five days. Dr. Tilt stated, that acute inflammation of the mucous membrane of the body of the womb could not be distinguished from the inflammatory affections of the whole organ, but that in some cases of menorrhagia this mucous membrane was alone affected, and threw off a false membrane different from the decidual membranes which have been hitherto described. Dr. Tilt proved his assertion by exhibiting a morbid specimen, taken from a young woman who died of menorrhagia under Dr. Watson. Dr. Tilt thought that future researches would show that there was a chronic inflammation of the body of the womb going on in most of those cases of dysmenorrhœa which were accompanied by exfoliation of the mucous membrane of the womb. He suggested this as a matter of inquiry, and spoke in praise of hypogastric issues in this tedious complaint. Dr. Tilt then described a form of internal metritis, to which he gave the name of hemorrhagia, to mark the symptom by which it was habitually accompanied. He illustrated this variety by a case in which the treatment usually employed was useless to arrest the disease, astringent injections, cauterization of the neck of the womb with the nitrate of silver, as well as internal remedies being without avail; whereas, when large doses of morphine, two grains per diem, were given to allay pain and calm hysterical symptoms, the sanguineous and semi-purulent discharges were checked, and the patient recovered. Another variety of internal metritis was described under the name of "fibro-plastic," because it was characterised by the growth of fibro-plastic vegetations on the surface of the womb—these vegetations giving rise to sanguineous discharges and uterine symptoms, developed to an unusual degree of severity. With regard to the local treatment of the various forms of internal metritis, Dr. Tilt deprecated the use of uterine injections on account of the uncertainty of their action, either in a similar set of cases, or even in the same patient—admitting, however, that they might, perhaps, be useful in some cases of the fibro-plastic variety. In that disease he recommended the careful introduction of Recamier's curette, a uterine sound a little larger than Dr. Simpson's, somewhat curved at its extremity, and hollowed out under its curvature, so as to remove the vegetations by gentle abrasion. Dr. Tilt had also found this instrument very useful in removing portions of retained placenta, the presence of which were indicated long after parturition, by flooding, by an enlarged body of the womb, and by uterine symptoms. He also mentioned sundry improvements in the construction of this instrument, which he had confided to the known dexterity of Mr. Coxeter. In exhibiting this instrument he also showed another larger instrument, which had been used by Recamier for the same purpose as the smaller, when the internal neck of the womb was widely dilated by inflammatory action—a circumstance of rare occurrence. Dr. Tilt next brought forward another plan of treatment, which he had found very successful in one case of the fibro-plastic variety, which was, after the application of the speculum, to introduce into the cavity of the body of the womb Dr. Simpson's uterine sound carefully surrounded by cotton-wool, saturated with tincture of iodine. The vegetations came away with a sero-purulent discharge after a few days; the operation was again repeated, and the patient was in a short time relieved of a sero-sanguinolent discharge, which had lasted for years, and her health was restored.

In conclusion, Dr. Tilt insisted on the very numerous instances of disease in which tincture of iodine had been with perfect impunity introduced into the tissues of the body, and from that, and still more from the results of known practice, he inferred that tincture of iodine and iodide of iron, were the topical applications from which Practitioners would derive the greatest assistance in the treatment of uterine diseases.

Mr. Streeter expressed his horror at the use of a large curette which the author had exhibited and Recamier had invented, for the removal of portions of retained placenta, and considered it to be a most dangerous instrument.

Dr. Henry Bennett did not understand why the mucous membrane of the neck of the uterus should be infinitely more prone to inflammation than that of the body of that organ; and since Recamier, and the French writers in general, had failed to make this distinction, he could place no confidence in their statements. He had most rarely met with the latter disease, but believed that it would be indicated by exalted sensibility of the organ, enlargement of the cavity, a patulous state of the os uteri, a sero-purulent or bloody discharge, and a marked reaction on the general health. The mere presence of hæmorrhage, or of fibrinous casts, would not prove its existence, since the former attends many uterine diseases, and is a characteristic of certain idiosyncrasies, while the latter may simply be a thickening of the membrane which is usually present at the menstrual period. The treatment of inflammation of the mucous membrane of the canal of the cervix is simple and effective, while that of the body is beset with difficulty and some danger. He had known the introduction of a bougie, with the intent of dilating the canal, not only give intense pain, but induce abscess of the broad ligaments, and in general he would hesitate to manipulate on the cavity of the womb. He had employed the nitrate of silver and the acid nitrate of mercury.

Dr. Greenhalgh had frequently met with cases in which muco-purulent discharge was accompanied by symptoms of disease of the cervix uteri, and believed that uterine catarrh is due to inflammation of the mucous membrane of both the body and the canal. He also referred to Dr. Churchill's authority in support of the statement that uterine catarrh is distinct from disease of the os uteri. In the acute forms of the disease, he would employ the hot-bath, with mercury and Dover's powder; and in the chronic states would direct a change of air and improvement of the general health. He would not affirm that the application of potassa fusa and other local remedies was improper, but he believed it to be rarely called for. As a rule, he objected to local interference.

Dr. Mackenzie stated, that all mucous discharges proceed from

the neck, while those which are serous or bloody proceed from the body of the womb. He had attended a case of inversion of the uterus, and had observed that irritation was not followed by a mucous secretion, but by an effusion of the elements of the blood. Fibrinous casts may be formed by the solidification of this effused substance, without the presence of inflammation. He believed, that true metritis is quite distinct from catarrh, and that the catarrh may be observed in connexion with a pale, soft, smooth, and cool os uteri. He believed catarrh to be due to general causes, and to be most readily removed by the exhibition of steel and other remedies to improve the health. He had found local astringents, as alum and nitrate of silver, to fail, although they had been assiduously and properly applied.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 25th ult. :—

Coghlan, John Joseph, Old Cavendish-street.
Delpratt, Sam., Hon. East India Company's Service, Bengal.
Dowson, Edward, Whitby, Yorkshire.
Lomas, Henry Wm. Freer, Derby.
Mason, William, Ashby-de la-Zouch.
Roberts, William, Mynyddy-gaf, Anglesea.
Simmonds, Henry Morris, Lindfield, Sussex.
Stevens, Alfred, Hammersmith.
Thomson, John, Belfast.
Vincent, Philip, Camborne, Cornwall.

APPOINTMENTS.

Naval.—Assistant-Surgeon Cecil Crandell (1843), recently serving in the Dædalus, 20, on the Pacific station, to the St. George, 120, guardship of ordinary, at Devonport.

Military.—5th Foot: Assistant-Surgeon Thomas Ravenscroft Whitty, from the Staff, to be Assistant-Surgeon, vice Hanley, appointed to the Staff. Hospital Staff: Assistant-Surgeon Dudley Hanley, M.D., from the 5th Foot, to be Assistant-Surgeon to the forces, vice Whitty, appointed to the 5th Foot.

Militia.—East Kent: James Beattie, gent., to be surgeon, vice Sicard, resigned.

VACANCIES.

Medical.—The situation of Medical Superintendent of the Provincial Lunatic Asylum, Canada, is now vacant The salary is 500*l.* per annum, with residence. A resident Medical Officer is wanted for the City of London and East London Dispensary. Salary 60*l.* per annum, with apartments, coals, etc.

DEATHS.

Benson.—Nov. 21, deeply lamented, Joseph Benson, Esq., late of Brudenell-place, New North-road, in his 73rd year. M.R.C.S. Eng. 1803.

Cowan.—Last week, Surgeon David Cowan (1800), at Southsea, where he had resided since he retired, after having been many years a Surgeon of Portsmouth Dockyard. Mr. Cowan served as Assistant-Surgeon of the Superb, at the taking of St. Domingo, and was for many years Surgeon to the household of His late Majesty William IV., when Duke of Clarence.

Draper.—In April, in the Canterbury Settlement, New Zealand, in his 25th year, William Draper, Esq., M.R.C.S.

Kendrick.—Nov. 24, at 11, Robert-street, Hampstead-road, John Kendrick, Esq., M.R.C.S., aged 58.

Lanyon.—Nov. 12, at Camborne, near Redruth, Cornwall, after a short but severe illness, Richard Lanyon, Esq., Surgeon, aged 45 years. M.R.C.S. Eng., 1832; L.S.A.; Surg. Disp.; author of Prize Essay on Diseases of Cornish Miners, given by the Polytechnic Society of Cornwall, published in their "Reports." His loss will be long and deeply regretted by numbers both of the rich and the poor, to whom his professional skill and unfailing kindness rendered him an invaluable friend.

Botanical Society of London.—The seventeeth Anniversary was held on Tuesday evening, at the Society's rooms, the Treasurer in the chair.

Libel.—The Queen *v.* O'Shea and Others. — In this case, before Mr. Justice Crompton, Nov. 24, Mr. Serjeant Shee moved for a rule to show cause why a criminal information should not be filed, at the instance of Dr. William O'Conner, against Michael Keating O'Shea, and others, for a libel in a Dublin paper called the *Weekly Telegraph*. The libel stated, that the applicant was not entitled to put "M.D." at the end of his name, and imputed generally that he was an impostor. The affidavits denied all the imputations in the libel, and stated that, in October, 1832, the applicant was examined for three days before the University of St. Andrews, in Scotland, as a candidate for the degree of M.D., and that after such examination he had been declared to have passed his examination, and he received the degree of M.D.; and the applicant denied that he was a saunterer about the House of Commons, as imputed in the libel, but he occasionally went there to see Members.—Mr. Justice Crompton said, he thought the article libellous; perhaps the object would be attained by publicity.—Rule granted.

The Late Black-balling at the Medico-Chirurgical Society.—The Committee of Graduates of the University of London met on Tuesday last, and among other things fully considered the circumstance which led to one of their Graduates being black-balled at the Medico-Chirurgical Society. After a full discussion of the question, it was the unanimous opinion that the hostile attitude assumed by the College of Physicians towards the Graduates of the London University, as evinced on this and other occasions, rendered it imperative on the Committee to take immediate steps for securing to their Graduates those privileges which were guaranteed by the Ministers of the Crown at the time of its foundation. For this purpose communications will be addressed to the Home Secretary, as well as to the Senate of the University, and a Bill prepared for giving to their degrees in medicine the same licence to practise as that enjoyed by the Universities of Oxford and Cambridge. There are, moreover, good grounds for believing that this line of policy will be approved of and supported by the Senate of the University.

The Ranelagh Sewer.—The following communication has been received by Dr. Aldis, in reply to a Memorial transmitted by him to Viscount Palmerston, from the Western Medical and Surgical Society, on the subject of the Ranelagh Sewer :—

"Metropolitan Commission of Sewers,
"1, Greek-street, Soho, Nov. 26, 1853.

"Sir,—I am directed by the Metropolitan Commissioners of Sewers to acquaint you that the Memorial of the Western Medical and Surgical Society respecting the open part of the Ranelagh Sewer, extending from the King's-road, Chelsea, to the River Thames, communicated by you to Viscount Palmerston, has been transmitted by His Lordship to this Commission ; and, in reply thereto, I am instructed to inform you, that the explanation furnished in the letter addressed to you from this office, September 30, 1852, to which I have to refer you, are still substantially applicable, and that an effectual remedy can only be provided in conjunction with the main drainage works, which it is the intention of the Commissioners to carry out immediately that the means of doing so shall be placed at their disposal.

"I am directed to add, that the Commissioners entertain the hope, that certain works proposed to be executed by private parties may effect a considerable mitigation of the evils complained of.

"I am, Sir, your obedient servant, "E. H. Woolrych,
"Secretary."

Causes of Insanity.—In a paper read before the Society for Improving the Condition of the Insane, a statistical account of 2392 cases of recovery, under the care of Sir Alexander Morison, is given. In 1428 of these, the causes of the disorder are stated, of which the following is a summary: In 386, hereditary predisposition ; in 181, intemperance ; in 172, pregnancy, childbearing, abortion, lactation, etc. ; in 116, disappointments, reverses, embarrassments, losses, and privations ; in 76, religious excitement ; in 62, grief ; in 50, disappointed affection ; in 43, anxiety and vexation ; in 39, terror ; in 53, epilepsy ; in 23, falls, blows on the head, etc.; in 8, paralysis ; in 29, causes of more rare occurrence. Of the remaining cases, for which no cause was assigned, the disorder had previously occurred in 270.

Mortality Notabilia.—The mortality of the metropolitan districts has risen considerably during the week. In the preceding week the deaths registered were 1162 ; in the week that ended on Saturday last they were 1339. The mean weekly temperature has suffered a great fall. In the last week of October it was 55·5°, in the four weeks that followed it was 48·9°, 45·7°, 38·5°, and (last week) 36·7°. In the ten corresponding weeks of the years 1843-52 the average number of deaths was 1093, which, raised in proportion to increase of population, becomes 1202. There is an excess in last week's return, amounting to 137. Diseases of the respiratory organs have suddenly become more fatal ; they rose from 180 in the preceding to 297 in the last week ; in this class bronchitis rose from 68 to 134, pneumonia from 92 to 124. Phthisis was fatal in the two weeks respectively in 133 and 166 cases.

Births.—Last week the births of 777 boys and 665 girls, in all 1442 children, were registered in London. The average number in eight corresponding weeks of the years 1845-52 was 1387.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·998 in. The mean temperature of the week was 36·7°, which is 5·1° below the average of the same week in 33 years. The mean daily temperature was below the average on every day of the week, and the depression on Tuesday was nearly 8°, and on Wednesday nearly 12°. The mean dew-point temperature was 35·8°. Wind, calm ; movement of the air, 280 miles. Rain, 1·25 in. Lowest temperature of Thames, 40·1. Electricity positive and tension strong.

DEATHS *in the Metropolis for the week ending Saturday, November* 26, 1853.

Causes of Death.	Nov. 26. 0	15	60	All Ages.	Sum of Ten Weeks.
All Causes	652	409	278	1339	10931
Specified Causes	645	409	277	1331	10898
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	226	65	20	311	2426
Sporadic Diseases:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	25	20	50	503
3. Tubercular Diseases	58	147	10	215	1747
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	71	36	48	155	1216
5. Diseases of the Heart and Blood-vessels	4	25	30	59	389
6. Diseases of the Lungs and of the other Organs of Respiration ...	171	62	64	297	2340
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	17	21	13	51	584
8. Diseases of the Kidneys, etc. ...	1	5	6	12	117
9. Childbirth, Diseases of the Uterus	...	6	2	8	113
10. Rheumatism Diseases of the Bones, Joints, etc.	3	2	1	6	88
11. Diseases of the Skin, Cellular Tissue, etc.	...	3	...	3	11
12. Malformations	3	...	...	3	47
13. Premature Birth and Debility ...	41	1	...	42	213
14. Atrophy	28	...	7	35	199
15. Age	...	...	50	50	517
16. Sudden	4	...	3	7	101
17. Violence, Privation, Cold, and Intemperance	13	11	3	27	288
Causes not Specified	7	...	1	8	33

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BOOKS RECEIVED.

The Irish School of Medicine. By T. S. Holland, M.D. Cork. 1853.

Asiatic Cholera: its Cause and Cure. By T. Harvey, Esq. London: Wilson. 1853.

Report on Insanity Among Europeans in Bengal. By J. Macpherson, M.D., Bengal. 1853.

Villa Volpicelli. By H. B. Hamilton. London. 1853.

Dysentery Considered in a Pathologico-Anatomical and Practical Point of View. By Dr. P. Bleeker. Calcutta. 1853.

Chemistry. By Dr. Sheridan Muspratt. Part I. Glasgow. 1853.

The Asylum Journal. No. 1.

The Druggist's Hand-book of Practical Receipts. By T. F. Branston. Liverpool. 1853.

On Diseases of the Rectum. By James Syme, F.R.S.E. Third Edition. Edinburgh. 1854.

Cholera. A Report on the Late Visitation at Liverpool. By R. Gee, M.D. Liverpool. 1853.

The Surgeon's Vade Mecum. By R. Druitt. Sixth Edition. London: Renshaw; Churchill. 1854.

Hooper's Physician's Vade Mecum. Fourth Edition. By W. A. Guy, M.B. Cantab. London: Renshaw. 1854.

Surgical Anatomy. By Joseph Maclise, F.R.C.S. Second Edition. Fasciculi 1 and 2. London: Churchill. 1853.

Clinical Lectures on Pulmonary Consumption. By Theophilus Thompson, M.D., F.R.S., Physician to the Brompton Hospital for Consumption and Diseases of the Chest. London: Churchill. 1853.

Stricture of the Urethra; its Pathology and Treatment. The last Jacksonian Treatise of the Royal College of Surgeons. Hy Henry Thompson, M.B.Lond., F.R.C.S., Surgeon to the Marylebone and to the Blenheim Dispensaries, formerly House-Surgeon to the University College Hospital. London: Churchill. 1853.

Hand-book of Chemistry, Theoretical, Practical, and Technical. By F. A. Abel and C. L. Bloxam. London: Churchill. 1854.

The Unconstitutional and Illegal Proceedings of the Council of the Pharmaceutical Society. By W. Dickenson. London: Freeman. 1853.

TO CORRESPONDENTS.

Mr. Levison's case had better not appear at present. It may turn out to be some malignant growth from the orbit.

John North, Esq., of Brecon, has favoured us with an account of a plan he has adopted very successfully in treating fractures and diseased joints. He says,—"The materials used are very thick mucilage and lint. After placing the limb in the proper position, giving to the surface over which the splint is to be applied a good coating of olive oil, strips of lint are to be dipped in the mucilage and applied layer upon layer, until of sufficient thickness. The lint should not be quite saturated with mucilage; it is therefore necessary to squeeze out a conside rable portion. Three layers of ordinary lint will make a splint of sufficient strength. A dry roller is next to be bound over the whole, so as to exert sufficient pressure to keep every portion in close contact with the skin. It is better that the mucilage should be as thick as it can be made, and applied warm, both for the comfort of the patient, and that it may dry the sooner. The whole may be removed when dry, the outer bandage cut away, and the edges trimmed; it may then be lined with chamois leather, covered with oiled silk or coated with varnish, thus forming a firm, tight, and well-adapted splint, which may be kept in its situation by straps or rollers. When applied to the knee, ankle, elbow, or wrist, it should of course be formed into two splints, to encase the joint; this is easily effected by leaving a small longitudinal space efore and behind uncovered."

Drs. Burrowes and Kirkes' Clinical Illustrations shall appear next week.

We have not space this week for *Dr. Gibb's* letter from Montreal on the treatment of cholera by calomel.

Mr. Chalk's case shall appear next week.

Dr. Moriarty's paper has not been forgotten.

A Subscriber.—The only medical appointments in the gift of the Court of Directors are Assistant-Surgeoncies, which are all military. These military Assistant-Surgeons, eventually Surgeons in time, fill all the appointments mentioned by our Correspondent at the option of the local governments, in whose gift all these appointments are.

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg Mr. Martin will do me the favour to read my letter to the Registrar-General, of the 7th inst.; he will then have an idea what is meant by premonitory diarrhœa; and if he will then read my letter of the 14th October, in your journal of the 19th inst., he will there find the case of his patient; and as what is there stated was taken from his own mouth, and from the relatives of the patient, he will see that that case was not a case of cholera without any premonitory symptoms. According to his words, and the report of her relatives, the patient had a diarrhœa for at least three hours before spasms came on.

And, I again repeat, Mr. Martin himself informed me that he had not inquired as to the state of her bowels up to four o'clock, nor could her relative give any information. His patient having walked about four miles can be no proof that she had not at that time a diarrhœa for some days, if not for some weeks. And I must again refer to the case at Poplar, and the case at No. 6, Holland street, to show the necessity there is to make the inquiry into the state of the bowels previous to the moment the patient applies for advice.

However, as I wish only to call attention to the fact that this woman had a diarrhœa for at least three hours before she was attacked with spasms, I must decline to take notice of expressions which are foreign to a scientific inquiry. I am, &c.

Dr. Macloughlin, M.D.,
Member of the Legion of Honour of France.

34, Bruton-street, Berkeley-square, London, Nov. 29, 1853.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your Number of Nov. 19, p. 543, I read the following:—"City Dispensary, Queen-street, Cheapside.—A large number of the female patients of this charity attended at this Dispensary lately, for the purpose of presenting to Dr. Habershon a handsome silver vase, as a testimonial of their appreciation of his services." Can it be possible that any legally qualified medical gentleman, within the four walls of Cockaigne, has accepted of "a handsome silver vase," from a number of female patients of the above charity, confessed paupers? I am, etc. M.D.

W. W.—The Dublin Medical Press has, with great ingenuity, turned two cases of death from chloroform in the London Hospitals into three. Mr. Quain is converted into a surgeon of St Bartholomew's. It is difficult to conceive how a compiler could make such a blunder even when copying from two London Journals at the same time.

Mr. Maclaughlin's case of child born without limbs shall appear next week.

Communications are in type from Dr. Speer, Cheltenham; Mr. Hill; A Medical Student; Horace Dobell, Esq.; and Francis Day, Esq., 1st Madras Fusiliers.

COMMUNICATIONS have been received from—

Dr. Cogswell; Dr. E. Smith; T. R. Jones, Esq.; Mr. H. Thompson; Dr. Burrowes; Dr. Kirkes; Dr. Peacock; Mr. Lyall; Mr. Woodman; Dr. Holland, Cork; Dr. Ayre; Dr. Gibb; H. Ludlow, Esq.; Dr. Aldis; Dr. Brander; Dr. Arnott; R. Quain, Esq.; Dr. Snow Beck; James Cowen, Medical Reformer! Dr. Moriarty, Dieppe; Dr. Scott; Henry Smith, Esq.; Dr. Maceware, Glasgow; C. H. Moore, Esq.; Mr. Bindley; Mr. Dymond; Mr. Simmons; Mr. Flower; Mr. Wilson; Mr. Lawrence.

ORIGINAL LECTURES.

CROONIAN LECTURES, 1853,

DELIVERED AT

The Royal College of Physicians.

By THOMAS MAYO, M.D., F.R.S.

ON

MEDICAL TESTIMONY AND EVIDENCE IN CASES OF LUNACY.

Lecture I.

(Concluded from page 571.)

In dealing with the two grounds which I have recently considered, for imputing insane delirium, namely, the presence of inconsecutiveness of thought, and that of certain delusions, how does the medical witness conduct his inquiry and arrange his evidence? He makes, or he ought to make, each of these elements throw light on the other. Where incoherency and inconsecutiveness exist, there is little difficulty. Continual inconsecutiveness, I believe, involves the presence of morbid delusions, *i. e.*, is sure to produce them; and is, therefore, the most important element in the proof of insane delirium. Sometimes, however, where natural talent and a cultivated understanding retain their influence on the insane mind, the diagnosis becomes very difficult. It may then be enabled so far to observe the normal order of thought, as to give what are called rational answers. It can associate the idea of personal inconvenience and unfitness with certain sequences of thought expressed in words, so as to avoid such expressions. Delusions are kept concealed by the patient, or may themselves be ill-marked examples of the notional kind. It here becomes difficult to obtain evidence that may justify a certificate of the insane state; and yet the refusal of a certificate may be full of danger to life, to property, and to domestic comfort. (a) Here the evidence of incoherent and unreasonable conduct, always present in the insane state, but not peculiar to it, must eke out the defects, though it must not supersede the application, of the intellectual criterion of insanity. But I need not say, how much the tact of an experienced medical inquirer will avail towards making out a latent delusion where none have been previously discovered, and where no evidence of delirium is attainable, so far as conversation is concerned, through the presence of incoherency. It was thus, in the early part of this century, that the ingenious Mr. Haslam evolved and luminously exposed an immense and systematic delusion in the mind of Mr. Matthews, a lunatic placed in bedlam by the parish-officers of Camberwell, and presumed by Dr. Birkbeck, and also by his own relations, to be unjustly detained there. It would appear that, in repeated conversations, these persons could obtain from him no evidence of incoherency or delusion; whether his freedom from the first state—for he was at all times coherent in conversation—blinded Dr. Birkbeck to the possible existence of delusions, or that eminent physician failed to obtain a clue to those of Matthews, extensive and complicated as they actually were. Now, the non-detention of Matthews, on the ground that he was recovered, was likely to have involved serious mischief, for he appears to have been, in fact, a very dangerous lunatic; yet the affirmation of his persistent insanity by Drs. Powell, Toort, Simmons, Ainslie, and Pepys might have failed to satisfy the convictions of a jury in the absence of specific proof of delusion, such as was obtained by Mr. Haslam.

The pen of the insane sometimes brings to light their incoherency and inconsecutiveness, which have been far less apparent in their conversation. I know, indeed, no better study of the peculiar articulations by which the insane mind fastens together the disjecta membra of thought than the monograph of Mr. Spencer Percival has afforded me.

Among the recent cases of questionable insanity, none have attracted more attention than that of Colonel Dyce Sombre. Those who in the year 1848 maintained the persistence of his insane state, (his general management of his own affairs being confessedly sane and consistent, his conversation coherent and consecutive), had to depend for their proof upon the supposed presence of some delusion or delusions. Of hallucinations, that is, sensible false perceptions (my first head) they had no proof; at least, the small attempt at proof utterly broke down. But there was one persistent error of thought, which *might* constitute a notional delusion, such as I have described as indicating insanity; and the question was, what did it amount to? Was it a delusion only in that popular sense of the term, in which every one who is mistaken may be said to be deluded, or was it an insane delusion? I am not introducing this case with a view to its discussion as a whole, but merely as in this point illustrating a great difficulty, which overhangs the subject of diagnosis in mental disease. With *objective* false perceptions there is comparatively small difficulty, provided they are believed in as real by the percipient; there is far greater difficulty with the mere subjective notional delusions; and I fear I must not aspire to rescue this part of my subject from the domain of empirical tact, or place it on a scientific basis. The question on which the case of Dyce Sombre turned in the inquiry ordered by the Lord Chancellor in 1848, was, whether a certain notional delusion which had sprung up in his mind, while he was confessedly insane, and which still maintained its hold, was a proof of persistent insanity. Now this question was divisible into two parts, both highly deserving our attention. 1st. Whether the delusion was essentially an insane one; in which case its persistence without any other evidence of insanity would be conclusive against the sanity of the patient. 2nd. Whether, having confessedly sprung up during the insanity of Dyce Sombre, it must be regarded, though not intrinsically, an insane delusion, still implying, so long as it should last, a taint of insanity caught as it were from the morbid state in the course of which it commenced. Those who maintained the sanity of Dyce Sombre answered both these questions in the negative. The first was easily disposed of: the delusion in question was a mistake equally conformable with the natural character of the man and the habits in which he was brought up. To the second question an affirmative answer would involve the supposition, that once mad a man is always mad, or certainly can never with confidence be pronounced sane. But madness does not pervert all those associating processes by which opinions are formed, neither should it be presumed to remove on its disappearance all those trains of thought which have been set up in the mind during its presence, or the opinions resulting from them. What is *implied* by cure, is mainly, that the power of self-control has been regained; for on this latter point it must be admitted, that although the evidence of the invasion of insanity is not complete until its intellectual symptom, delirium, has occurred, still no recognised intellectual improvement can be taken as conclusive evidence of a cure until moral self-control is restored. The first of these provisions is claimed by the special interests of the patient,

(a) This danger is materially obviated in the Act of 1853, admitting into the evidence of insanity, which is to be expressed in the certificate, "Facts indicating insanity communicated (to the certifier) by others." An admission of this kind was contained in the body of the former Act, but not in the schedule of the certificate.

and in order that his liberty may not be invaded on inadequate grounds; the latter is requisite for the defence of society. Meanwhile, with respect to moral self-control, it is justly assumable, that this has not been regained if *certain* delusions had not been abolished, but it had never been proved that the one persistent delusion of Dyce Sombre belonged to that class.

In a case to which I was called in by Dr. Monro, a few years ago, it was our painful duty to resist the liberation of a patient, an old lady, whose confinement, under certificates, had continued for sixteen years. For six years she was described as having been in a state, first, of acute, then of chronic mania. For many years we learned that she had regained the power of conversing consecutively and sensibly, indeed, without the smallest evidence of incoherent or irrational remark, and such appeared to us to be her present state. The objections which existed to her being then considered sane, if she had been insane up to the time we saw her, on the ground of her advanced age, weighed on our minds, but seemed insufficient. The evidence of her attendants, who considered her still insane, on the ground of occasional outbreaks of temper, was that of interested witnesses. She was a patient in chancery, and the visiting physicians had become favourably disposed to her enlargement, as a sound-minded person. Now, the question was in this instance determined in our minds by a discovery which we made of a very remarkable notional delusion, which held its ground in her mind. In a set of drawers in this lady's bed-room, and in certain trunks there, to which we were conducted without her knowledge, we witnessed a large, very heterogeneous, and dirty collection, (dirtiness had been a symptom of her insane state,) consisting of old bottles, broken cups and saucers, brass nobs, bits of old string, shreds of linen and cloth, small bundles of wood, such as light fires, pieces having been apparently picked up and tied together; a cup, containing dirty food of the most disgusting appearance, which had evidently been long there; bits of valueless stone, coals, nails, etc. This accumulation, which could not have been extemporised by the attendants to make out a case, and of which, accordingly, the patient must have been long aware, would have occasioned strong doubts as to her sanity, even if no prior grounds of suspicion had existed; but, carefully preserved by one who, up to a recent date, had been so far suspected of insanity that she had not been set free by the visiting commissioners, who was in her 71st year, and therefore the less likely to have obtained a cure, it became, in the opinion of Dr. Monro and myself, a conclusive ground for resisting this lady's immediate enlargement.

We have in the above case a notional delusion, apparently of sufficient weight to decide a question as to the presence of lunacy. It may be usefully compared with a process of thought occurring in another mind, which many will consider as equally constituting a notional delusion, but to which no one, either in the age in which it occurred, or in the present day, would attach equal or similar force, as affording proof of such disease. I allude to the case of Emanuel Swedenborg, but with no intention of enlarging upon it here. It is, however, suggestive, and brings before us an important incident in the estimate of notional delusions, namely, that they have not the same force in making out a case of insanity as delusions of the special senses. A notional delusion generally demands auxiliary proof from the context of the patient's character and circumstances. This was furnished in the case of the old lady, by her known previous insanity, and the improbability, arising from her age, that it was cured. But it was not furnished in that of Swedenborg by any other element in his intellectual or moral condition. Neither does this latter case stand alone as illustrating the importance of a just estimate of this element of the judicial question under suspected lunacy. The aberration, the notional delusion, of Swedenborg, if it was one, is the same as, or but little removed from, the settled conviction of a body in the United States, amounting to thousands; many of these persons highly educated, some of them highly gifted, and in public offices of great trust, certainly far removed from any definite suspicions of lunacy. In the domain of mind, indeed, as well as of matter, the discovery of one age may have been the imputed miracle or hallucination of a former age.

In the case of M'Naghten, tried 1844, for the murder of Mr. Drummond, we have an instance of notional delusions permitted to constitute evidence of insanity without any discovered incoherency of language or of thought, although the wayward character of his past life might make it probable that such incoherency and inconsecutiveness may have existed. The notional delusions were, however, such as experience proves to be frequent in the insane. Formerly, when resident at Glasgow, he had frequently affirmed suspicions of the existence of a conspiracy against him; these, it was alleged, he had repeated at Boulogne, where, on landing, he fancied he saw spies lurking in a watch-box. Faces, he said, were made at him in the streets, fists shaken at him, and stones thrown. He had pressed the Sheriff of Glasgow for protection from his fancied enemies. Here was strong presumptive evidence of notional delusions, which the medical witnesses affirmed, and which the Court accepted on their affirmation, as adequate to substantiate a plea of delirium. Subsequently, this opinion has obtained confirmation from the authorities of Bedlam, where Macnaghten has repeatedly exhibited well-marked maniacal paroxysms. Thus far I am justifying the evidence of the medical witnesses in this important trial; not, however, its results in relation to the sentence of the Court, the consideration of which would be at present out of place, though it has, in fact, a very important bearing on the whole subject, as I shall point out at another time. Contrast the above case with that of Bellingham, the murderer of Mr. Percival, in respect to whom the plea of insanity was overruled. Neither of these murderers exhibited incoherency of expression or thought. Bellingham's avowal, that ill-usage led him to the performance of his crime, supplies the act with a motive belonging to the ordinary laws of the human mind, and delusive (if unfounded) only in that sense in which every mistake might be so called. The immediate occasion of the murder was indeed a very natural one to a moody and malignant mind, such as Bellingham seems to have been. He had been roughly repelled in one of his intrusive applications at a Government office a short time before the deed; and it was not unlikely that he should select Mr. Percival for his victim, for he had made to him a personal application, and been refused. There was, in truth, no point in his case tending to fix upon him the plea of insanity, unless his "strong expectation of being acquitted," according to the report of the case, can be interpreted into a morbid notional delusion. It is but just to observe, in favour of those who objected at the time to the verdict in Bellingham's case, that but little time was given for the collation of evidence in proof of his being a lunatic.

The subject of delirium has to be estimated in relation to a form of it, which in its acute form certainly may be accepted as a proof of insanity; while, in its chronic form, wherein delusions and incoherency of thought are less patent, it will still fall within the intention of the certificate, as disqualifying the patient for self-control, under the head of unsoundness. This is delirium tremens. The symptoms of it are well known to the audience whom I am addressing, whom I merely wish to remind that they may be called upon to affirm or negative them, where the most important interests of society may be perilled if a wrong conclusion be arrived at by judge and jury. This caution is indeed the more required, that the plea of delirium tremens may easily be brought to bear upon cases in which the thing itself has no existence, or does not exist in its practical development; *e. g.*, where a person, predisposed, perhaps, to this state, is truly drunk, not delirious. Such was, apparently, the well-known case of Captain Johnson. This officer put to death, or severely wounded with a sword, successively and on different days, several of his sailors. He had previously, on shore, drunk largely, and was probably during the time under the influence of alcoholic liquors. The plea, on which alone he could escape a verdict of murder, was the disorder in question, as being the only recognised mode in which drunkenness is construed into lunacy. The proof that this disorder had existed was nowhere to be found in the appearance of the criminal on trial, or in the depositions of those who witnessed these tragical acts. It was assumed by the counsel for the criminal, and good-naturedly but unscrupulously conceded by the Attorney-General and the Court. Under this co-operating influence, it cannot be wondered that the jury surrendered their judgment, and found a verdict of lunacy. Shortly after his escape, I saw Captain Johnson in the criminal department of Bedlam. His manners seemed quiet and reserved; his countenance hard and morose, but no part of the expression of it indicated predisposition to mental disease, the absence of which was strongly affirmed by the medical authorities at Bedlam.

The medical witness is often called upon to advise the

Court, whether the case be civil or criminal, in ascertaining the reality or non-reality of what is called a lucid interval. The term is judicial; and the meaning which it is intended to bear, according to the *Jurist*, in the report of Lord Brougham's judgment, in the case Waring *v.* Waring, such, that "to constitute a lucid interval, the party must freely and voluntarily, and without design of pretending sanity, confess his delusion." It is, of course, also presumed, that he is coherent at the time. Here the medical witness must bear in mind that he is not called upon, in complying with this definition, to declare that the lucid patient is so recovered that he would give that patient a discharge from surveillance, or certify his return to sanity.(a) Thus in the case of Cartwright *v.* Cartwright, we find the Court deciding in favour of a will made by a person confessedly or obviously insane, but presumed at the time of making it to be under a lucid interval. "It was proved in general that the habit of the person (a single woman), and her condition of body, and her manner for several months before the date of the will in question, was that of a person afflicted with many of the worst symptoms of insanity, and continued so certainly after the will was made." It appears from evidence, that, for some time previously to the date of the will, she was very importunate for the use of pen, ink, and paper, which were at first withheld from her by the direction of her physician, Dr. Battie. Her importunity continuing, he at length consented, in order to quiet and pacify her, that she might have them, observing, that it did not signify what she should write, as she was not fit to make a proper use of pen, ink, and paper. These being carried to her, her hands, which had been previously tied, were unloosed, (b) and she sat down to a bureau to write. Her attendants, who were watching her outside the door saw her write upon several pieces of paper in succession, which she tore up and threw into the grate, walking up and down the room in a wild and furious way, and muttering to herself. After one or two hours spent in this way, she finally succeeded in writing a *will*, which suited her, though it occupied but a few lines. It was decided by the Court, (Sir William Wynne,) that she had a lucid interval while making the will, the validity of which was consequently established. The grounds of this decision were, that "the will made a natural and consistent distribution of her property; in short, that it was a rational act, rationally done." Hence it was to be inferred, that her mind was visited by a lucid interval at the moment of making it: "For," says the Court, "I think the strongest proof which can arise as to a lucid interval, is that which arises from the act itself; that I look upon as a thing to be first examined, and, if it can be proved and made good that it is a rational act rationally done, the whole case is proved." Meanwhile, the civil powers conceded in this act to the lunatic convey no imputation on those who, either at the time or afterwards, were keeping her in durance.

On the other hand, in the case of Waring *v.* Waring, we find Lord Brougham *setting aside* a will made where the insanity was far less proved, but dissimilarly situated to the above in this respect also, that no temporary lucidity presented itself,—certainly no lucid interval is suggested by the act itself, as in the Cartwright case. The will was made in favour of a person unknown to the maker, and it sets aside a brother, towards whom she has taken up a delusion that he is a Roman Catholic.

Such are the civil cases regarding the subject of lucid interval, which the Court has decided mainly upon principles applied by medical witnesses. As these questions concern the civil powers which may be conceded to persons under lucid intervals, so there is another kind of question which equally calls for our discretion in the giving of opinions, —the more so, because here there are strong inducements to us to contemplate the case as advocates as well as witnesses,—namely, what extent of criminal responsibility the insane may acquire. Some amount of this may presumably be demanded during a lucid interval, when it is considered, that much of our own improved treatment of the insane, in the present day, turns upon the power of self-control which they can be induced to exhibit, under the influence of certain motives, even when no lucid interval is supposed to exist,—an admission which we must make, in spite of the more general fact, that a deficiency of influence from motives is observable in the insane state. The answers of the Judges applied to after the acquittal of M'Naghten for the murder of Mr. Drummond by the House of Lords, on the state of the law relative to crimes committed by persons supposed to be insane, or afflicted with monomania, certainly comprehend and apply, *à fortiori*, to persons under lucid intervals, and they affirm the responsibility of all persons who have the capacity for recognising the meaning of the law, and of knowing that they are acting contrary to it. These answers of the Judges I shall again refer to in another place, when I am discussing the conditions under which they may be applied to persons of diseased mind. But I must here advert to the very contrary views expressed by Dr. Rae, in a work (a) of great value on the subject now before me, "It has been admitted," says Dr. Rae, "that, with certain reservations, the civil responsibilities of the insane are unimpaired during the lucid intervals, because the mind is sufficiently restored to enable the individual to act with tolerable discretion in his civil relations. In respect to crimes, however, the matter is altogether different for reasons that will be not without their force. These reasons are, that the crimes which have been alleged to be committed in a lucid interval, are generally the result of the momentary excitement produced by sudden provocations. But these provocations put an end to the temporary cure by immediately reproducing that pathological condition of the brain called irritation, and that this irritation is the essential cause of mental derangement, which absolves from all the legal consequences of crime." "The conclusion is, therefore," proceeds Dr. Rae, "that we ought never, perhaps, to convict for a crime committed during the lucid interval, because there is every probability that the individual was under the influence of that cerebral irritation which makes a man insane." Thatthis law (!) is not conformable with the dicta of the Judges above alluded to, will not be disputed, if my interpretation of those dicta is accepted; that it is not more conformable with the interests of society will also, I think, be admitted. Consider the parity of reasoning to which it leads. It has been recorded by Dr. Esquirol, that out of 2814 recoveries of the insane, 292 have recurrences of the disease. These persons, then, had obtained temporary cures, and I know not how Dr. Rae could refuse to any criminal outbreak of which they may hereafter be guilty, the same immunities from punishment, and on the same grounds which he confers upon persons presumed to labour under the temporary recovery afforded by a lucid interval. Accordingly, all these persons will, according to Dr. Rae's admission, in regard to the latter case, be permitted to act in the most important civil relations, as if sane, and yet be privileged to commit criminal acts without any liability to the punishments of crime.

It must be confessed, that the conditional responsibility which the law, and as I think the reason of the case, attributes to the insane, is not easily applicable in practice, either under lucid intervals, or under such other phases of the insane state as might seem to justify it. The law, as I shall have again more fully to point out, will remain a dead-letter, or will be continually ignored by the sympathies of judges, juries, and, I may add, of medical witnesses, unless some practical distinction can be arranged which may enable the responsible insane to undergo some lower degree of punishment than that inflicted on similar delinquents being of sound mind. The position of many such persons under capital charges is at present anomalous. They are acquitted, in defiance of the law as laid down by the judges respecting M'Naghten's case, because the punishment at present appertaining to their offence would be too severe; and then, instead of being consigned to confinement in a gaol, as a secondary punishment, they are consigned to it in an asylum, as a place simply of detention. This becomes a scene of severe virtual punishment to some of them, of gratification to vanity and idleness to others; those, meanwhile, to whom it is a grievance, as they do not regard it in the light of a punishment, derive from it none of the preventive effects of punishment on future conduct, while the public, for the same reason, find it equally unproductive of good as as an example to persons of actually diseased mind, or to that large class of other persons who are drifting into disease under uncontrolled eccentricity. To this point I shall return when I am considering unsoundness of mind.

(a) See Prichard, "On the Different Forms of Insanity," p. 196.
(b) It is probable that the ligatures, thus loosened, need never have been imposed, considering the results of their removal.

(a) "On the Medical Jurisprudence of Insanity."

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS
No. XII.

INSTRUCTIONS TO ARMY MEDICAL OFFICERS FOR THEIR GUIDANCE ON THE APPEARANCE OF SPASMODIC CHOLERA IN THIS COUNTRY.—RESULTS OF THEIR OBSERVANCE AT NEWCASTLE.

We have been favoured with a copy of the instructions issued to Army Medical Officers by the Director-General of the Army Medical Department. They are worthy of careful consideration at present, and become especially important in connexion with the recent outbreak of cholera at Newcastle, and the entire escape of the troops quartered in that town from the developed form of the disease.

INSTRUCTIONS.

When Cholera shall have been Officially Reported to be Prevailing in the Country, but distant from Military Stations.

"1. Medical officers will exercise more than common vigilance in the discharge of their professional duties; they will devote more than ordinary attention to the interior economy of their corps, the constitution of the men, and to every circumstance, however remotely affecting their health.

"They will be expected to be cognisant of every military arrangement involving the health of the troops, and to put themselves in communication with their commanding officers on any alteration or arrangements in the ordinary duties, which they may consider beneficial or likely to afford greater security.

"2. Every possible precaution must be taken to guard against intemperance, crowding in small ill-ventilated rooms, use of unwholesome food, deficiency of clothing, bedding, fuel, etc.; and, if found to exist, measures must be taken to correct or remove them.

"3. Medical officers are to attend the ordinary parades, and observe the health of the men, without exciting suspicion.

"4. Great attention to personal cleanliness is to be enjoined, and the men cautioned carefully to avoid unnecessary night exposure and damp, and to change their clothes when wet.

"5. Especial care is to be observed in the cooking of vegetables; and lamb, pork, and stale fish interdicted.

"6. Roasted or baked meat is to be provided twice a-week, instead of boiled meat.

"7. Drains, dust-holes, privies, and the removal of accumulated filth, are be specially attended to.

"8. The barrack bedding is to be aired daily, but not in the open air in winter; and great caution observed as to the perfect dryness of fresh supplies.

"9. As attacks of the disease seem to be frequently determined by exposure to wet, damp, unusual intemperance, and other irregularities, every means should be taken to prevent those.

"10. At this period, all ailments, particularly diarrhœa, require the strictest attention; and the commanding officer should explain to the men the importance of immediately reporting themselves when they feel in any way unwell.

"11. Where there is any suspicion of the approach of cholera, immediate steps are to be taken to establish a separate ward in hospital, to which every case not strongly marked is to be sent on admission.

"12. An abundant supply of hospital bedding, dresses, and medicine, is to be kept in readiness.

"When the Disease has appeared among the Military of a Station, or the Inhabitants in its immediate vicinity.

"13. The avoidance of all unnecessary alarm cannot be too stronly enjoined; and it is hoped that Medical officers, by their own example, will endeavour to allay apprehension in those suffering from, or in any way connected with, the disease.

"14. On the appearance of cholera in a corps, health inspections are to be made at morning and evening parades, and a daily inspection of every individual attached to the regiment.

"15. Each soldier is to be provided with two cholera-belts, as part of his necessaries. Flannel waistcoats, if thought necessary for individuals, are to be provided at their own expense.

"16. Married men (if out of mess) should each be provided with a ration the same as the single men; and it is also desirable, in barracks in which the disease exists, that the women and children should have sufficient and regular meals.

"17. Soldiers should be cautioned against intemperance; and drunkards and all men of weakly or susceptible habits, should be limited to a certain quantity of liquor at the discretion of the Medical officer.

"18. As a precautionary measure, but particularly in infected localities, drills, parades, and duties generally, should, as much as consistent with discipline, be reduced, and favourable hours and weather chosen for them; but, above all, the number of sentries, especially at night, should be diminished, so that in no case shall the men have less than three nights in bed.

"19. Good fires are to be provided in the barrack-rooms, to increase ventilation, and to diffuse a cheerfulness,—which last should be promoted in every way.

"20. Coffee or warm drinks are to be provided to the men before morning and night duties. A hot evening meal enforced, and breakfast, if possible, supplied at the usual hour to every man before leaving his barrack-room.

"21. In the event of the appearance of cholera among the civil population in the neighbourhood, the troops should be confined to barracks (a), and all intercourse prevented. When the disease prevails in a corps, it may be found beneficial to encamp it—a proper site being selected for the purpose.

"22. During confinement to barracks, the minds of the men should, as much as possible, be amused and occupied; and, under proper regulation, occasional marches into the country, and trap-ball or other games in an adjoining field, permitted.

"23. Officers' servants are to be under the same restrictions as others, and no person from the town to be admitted into barracks.

"24. If practicable, a considerable reduction of the numbers in barrack should take place, as well to insure a purer atmosphere and more thorough ventilation, as to make room for the accommodation of women and children, and, if necessary, for a temporary hospital, or observation ward. Overcrowding, under any circumstances, is to be avoided—great attention paid to cleanliness and ventilation, and the floors and passages dry rubbed—not washed.

"25. Personal washing, and that of clothes, is to be done in sheds or store-houses appropriated for the purpose, and not in the barrack-rooms.

"26. The quality of the beer to be used by soldiers, is to be ascertained by a competent person, and the acid in porter or ale, corrected by chalk or carbonate of soda.

"27. Where cholera is present in the neighbourhood, the women and children are to be accommodated in barracks, or aired house in the vicinity, and to be put under similar restrictions as to intercourse. Where this cannot be done,

(a) This is only enforced when it is not practicable by means of a military police to keep the soldiers away from infected localities.

soldiers with their families who are permitted to live out of barracks, are to be excluded therefrom, or placed in a temporary barrack until it is considered safe to admit them—their quarters during this separation being frequently inspected.

"28. Where a house is hired for the women, they may be required to pay their usual rent, and coals supplied by Government at prime cost.

"29. Diarrhœa, either as precursory, co-existent, or prevailing by itself, should, as a measure of safety, be regarded as closely allied to cholera; and where bowel complaints prevail in a corps stationed in an infected district, a spare room should, if possible, be set apart for the accommodation of the healthy of any room that may become unusually subject to that complaint; and the room thus vacated must be whitewashed, cleansed, and fumigated, so as to be ready for any similar occurrence. This applies still more strongly where cholera actually exists in a corps. Cases of common cholera are to be removed to the observation ward.

"30. The Regimental Hospital is to be appropriated to the treatment of cholera, and the ordinary cases of sickness accommodated in barracks; or where this cannot be done, in a hired house, the authority of the Director-General for the latter arrangement being previously obtained.

"31. The appearance of cholera in places where troops are stationed is immediately to be reported to the Director-General, without waiting for it being officially announced by the Local Board of Health.

"32. From the moment that a case of common or spasmodic cholera occurs, a daily report is to be forwarded to the Director-General until further orders.

"33. A full report of each case among the troops, with detail of previous habits, intercourse, diet, exposure to cold, wet, etc., and other particulars, is to be forwarded to the Director-General.

"34. Daily reports of the progress of cholera among the civil population where troops may be stationed, will be required from Medical officers.

"35. Cases among women and children in barracks are to be admitted into hospital; those in quarters to civil hospital, under such regulations as may be adopted in parishes; for the former a separate ward or barrack-room is to be held in readiness.

"36. Cases among the troops of the East India Company are to be admitted into hospital; as also those specified as entitled to medical attendance in the hospital regulations.

"37. Medical officers are to visit their hospitals frequently, and to state the hours of visit in the Monthly Sick Report. They will be required to be always available for any sudden call of the service; and, when cholera prevails in the corps, are not to leave the barracks, except on imperative duty.

"38. Smoking, to those habituated to the indulgence, may be permitted.

"39. Corpses are to be removed to the dead-house without delay, buried as soon as possible, and conveyed in a covered cart—not on men's shoulders.

"40. *Post-mortem* examinations are not to be discontinued, but performed under such modifications as the occasion will readily suggest.

"41. Bodies of patients dying of cholera are to be sprinkled with chloride of lime, to be wrapped in a coarse sheet steeped in a strong solution of the same, and some of the powder should be put into the coffin.

"42. Medical officers are not to visit civilian patients in town, and are to conform to the same regulations and instructions as other officers.

"43. In infected places, Divine service should preferably be performed in barrack, instead of marching the troops to church.

"44. The old clothes of recruits are to be washed and fumigated; or, if necessary, destroyed, and new clothes issued.

"45. The clothes and bedding of cholera patients are to be immersed in cold water for forty-eight hours; then washed and steamed in boiling water, and dried in the open air.

"46. The place whence a patient is taken is to be thoroughly washed, the bedding and bedstead removed, and fumigation made by chlorine gas, if possible; if not, by nitric acid gas, or fumes of vinegar.

"47. The barrack bedding is to be removed with cholera or suspicious cases to the hospital, or observation ward.

"48. Provisions brought from town should be delivered at the barrack gate.

"49. Deserters, recruits, and men from escort or furlough, on rejoining, should be separated from the other soldiers for a period varying from seven to twenty-one days, according to circumstances.

"50. Attention is called to Her Majesty's Orders, in the book of instructions for regimental hospitals on contagious diseases, extraordinary sickness, inspection of barracks and quarters, ventilation, and fumigation.

"51. For the purification of drains, privies, clothes of recruits, etc., chloride of lime will be issued by the Ordnance Department, on the requisition of the commanding Officer.

"52. Bearers are to be applied for to the Ordnance Department, and a horse and covered cart hired for the conveyance of the sick, should the distance from the hospital require it."

The result of the observance of these instructions will be seen by the following extract from a very creditable report by Dr. W. F. T. Ivey, Assistant-Surgeon 6th Royal Regiment, and Dr. H. C. Boate, Assistant-Surgeon 6th Dragoons:—

"Everywhere around us the devouring plague has left its fatal impress; yet have we been hitherto spared. Numerous cases have occurred in our immediate neighbourhood, and in some of the houses in which the soldiers' families are accommodated several deaths have taken place among the civil population. These are situated at distances varying from 50 to 200 yards from the barrack-gate. In the village of Spital Tongues, about 250 yards to the north of the barracks, the diseases prevailed to a frightful extent for many days, scarcely a cottage escaping without numbering one or more victims. The barracks are situated about three-quarters of a mile from the centre of the town, and form part of the outskirts in a north-westerly direction. Immediately on ascertaining that the fatal scourge was abroad in our streets, aided by the ready co-operation of the officers, the following sanitary precautions were taken and are still continued:—We made a thorough inspection of all drains, sewers, privies, ashpits, and every other locality, both within and without the barracks, where filth was likely to accumulate, and had all offensive matters removed and effluvia corrected by the liberal and daily distribution of chloride of lime; the privies and ashpits by whitewashing. The custom of washing out the barrack-rooms was discontinued, and dry rubbing substituted. Since the announcement of the epidemic, the troops have been medically inspected twice, and the women and children once daily. The provisions have been carefully examined; the mode of cooking the dinners varied occasionally from boiled to roast, or baked meats; the men strictly enjoined to apply immediately on the approach of any diarrhœal tendency, and the sergeants ordered to keep a careful watch, and to send any person to hospital who may be detected going more than once a-day to the privy. All hawkers of fish, fruit, and vegetables have been forbidden entry into the barracks, and the men cautioned to abstain from any irritating diet, and to keep from all the low and filthy parts of the town, as well as from situations where the cholera may be raging. They have also been confined strictly to barracks after evening roll-call, flannel belts have been taken into wear, and an extra allowance of fuel granted. Amusements in the vicinity of the barracks have been encouraged, and every endeavour made to procure from the troops a cheerful and ready compliance with our requirements without inspiring fear. The families of such soldiers as were married without leave, not being accommodated in barracks, have been daily visited at their lodgings, and every means put in practice to enforce and maintain cleanliness and ventilation. The landlords applied to whenever necessary for the removal of nuisances, and lime occasionally used for disinfecting purposes. In some instances families who have taken up their abode in situations which seemed objectionable, either as being overcrowded or as teeming with noisome effluvia, were advised to leave, and better apartments were procured for them.

"The result of these precautionary measures has surpassed our most sanguine expectations, and we beg to subjoin a tabular view of the strength of the garrison, with the number attacked with premonitory diarrhœa, etc."

Strength of the Garrison in Barracks, etc.

Corps, etc.	Officers.	Men.	Women.	Children.	Total.	Cases of Diarrhœa.					Cases of Dysentery					Cases of Cholera.					Deaths.
						Officers.	Men.	Women.	Children.	Total.	Officers.	Men.	Women.	Children.	Total.	Officers.	Men.	Women.	Children.	Total.	
6th Dragoons	4	82	11	21	118	3	168	4	...	175	...	...	...	...	...	...	...	...	...	...	...
6th Foot	10	304	29	46	389	3	252	9	11	275	...	6	...	2	8	...	...	...	...	...	...
Staff	...	5	4	3	12	...	1	...	...	1	...	1	...	...	1	...	...	...	...	...	...
Total	14	391	44	70	519	6	421	13	11	451	...	7	...	2	9	...	...	...	...	...	...
State Outside the Barracks.																					
6th Dragoons	...	...	9	14	23	...	...	3	...	3	...	...	...	...	...	...	...	...	...	...	...
6th Foot	1	...	33	47	81	...	...	13	13	26	...	...	1	1	2	...	...	...	1	1	...
Staff	2	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total outside Barracks.	3	...	43	61	107	...	...	16	13	29	...	...	1	1	2	...	...	...	1	1	...
Total in Barracks	14	391	44	70	519	6	421	13	11	451	...	7	...	2	9	...	...	...	...	...	...
General Total	17	391	87	131	626	6	421	29	24	480	...	7	1	3	11	...	...	...	1	1	...

From the foregoing statement we may fairly infer that, without the extreme vigilance and unremitting care bestowed, we should not have so entirely escaped its direful ravages. The cases of diarrhœa, by prompt treatment, have been mostly of an ephemeral character, the patients being restored to health on the day following that of the attack, and able to resume their accustomed avocations. Many of them came under observation twice or thrice at varying intervals of time, suffering from a return of the disease, which accounts for the apparent large average attacked. In a few instances, the affection was more protracted in the cure, and was attended with vomiting and griping pain in abdomen.

Here, then, we see a body of men living in an epidemic district, and suffering from epidemic influence, as proved by the prevalence of diarrhœa, yet protected entirely from the developed form of the epidemic disease. Such results are most satisfactory and encouraging.

ON THE THERAPEUTIC USES OF A NEW FERRO-MANGANIC PREPARATION.

THE "SACCHARINE CARBONATE OF IRON AND MANGANESE."

By STANHOPE TEMPLEMAN SPEER, M.D., Edin.

The introduction of the metal manganese into the domain of therapeutics, due, I believe, in the first instance, to the Belgian physician, M. Hannon, has within the last two years been followed by a careful investigation of its medicinal properties on the part of several French physicians.

From them, it would appear that this metal, when given in combination with iron, is capable of rendering signal services in those diseases where iron alone has been hitherto prescribed; and at the present moment, the ferro-manganic preparations hold a prominent place in Continental practice. As I am not, however, aware that they have yet undergone a trial in this country, or at least one the results of which have been made public, I venture to state shortly, what a limited experience of two years enables me to say upon this subject; inasmuch as during that period, I have embraced every legitimate opportunity of prescribing the combination mentioned at the head of the present communication.

In a paper published in the *Revue Médico-Chirurgicale* for June, 1849, M. Hannon first suggested the following preparations of manganese, viz., the carbonate, the tartrate, the phosphate, the neutral malate, and the iodide. With none of these was a similar salt of iron associated.

M. Petrequin, of Lyons, however, having taken up the subject of manganic preparations, published in the *Bulletin Général de Thérapeutique*, for March the 15th and 30th, 1852, two papers containing the results of his experience relative to the utility of the metal in question, when administered in conjunction with iron.

The preparations employed by him, consisted chiefly of the iodide and lactate of iron and manganese in the form of syrup, and of the carbonate of the two metals in the form of pill.

Being desirous of trying the effects of such a combination in some of the numerous cases where iron is usually indicated, I endeavoured to associate the two metals in the shape of a carbonate of the protoxide, and to retain them in this condition through the medium of sugar, as is done in the case of the saccharine carbonate of iron, very recently introduced into the London Pharmacopœia,—a chalybeate perhaps superior to every other, and possessing an advantage which few Practitioners will not recognise in these days of tasteless globules, namely, a complete freedom from that nauseous inky flavour which the preparations of iron usually impart to the palate.

The following is the formula I suggested, and according to which the preparation in question was made.

"*Saccharine carbonate of iron and manganese:*" Take of finely powdered sulphate of iron, ʒiij. ʒj.; carbonate of soda, ʒv.; sulphate of manganese, ʒj. ℈j.; white sugar, ʒiiss.

Dissolve each of the three first-mentioned ingredients in a pint and a-half of water, add the solutions, and mix them well; collect the precipitate on a cloth, filter, and immediately wash it with cold water; squeeze out as much of the water as possible, and, without delay, triturate the pulp with the sugar, previously reduced to a fine powder. Dry it at a temperature of about 120° Fahr.

The compound thus prepared, is a powder of a reddish-brown colour, and devoid of all taste, save that imparted by the sugar, with which the salts of the two metals are conjoined. The dose is 5grs., gradually increased up to ℈j., three times a-day; it should be given with the meals, or at least immediately after.

In the papers alluded to above, M. Petrequin asserts, that cases of anæmia, which had resisted the administration of iron alone, yielded rapidly to a combination of this metal with manganese. In confirmation of this statement, I may say, that in two cases which lately came under my notice, the one of chlorotic anæmia, with amenorrhœa, the other of uncomplicated traumatic anæmia, both of long standing, the saccharine carbonate of iron and manganese succeeded entirely, after iron alone, had failed. In each of these cases, its effects upon the composition of the blood, and through this, upon the general health, were extremely rapid, thus affording a contrast to the effects of the simple preparations of iron, which, even when eventually successful, are usually slow in their operation.

As far as my own experience enables me to speak, it is in blood diseases generally, that this combination will be found most serviceable, as well as in those functional affections of a nervous type which so frequently depend upon a depraved condition of that fluid; such, for instance, as the cardiac neuralgiæ and palpitations, occurring in connexion with chlorosis, anæmia, etc. In these cases it may be advan-

tageously associated with conium or digitalis, if irritability or over-action of the heart be a prominent symptom.

The compounds of iron and manganese are also stated by M. Petrequin to be of equal value in the treatment of anæmia, resulting from intermittent fever, from syphilitic or cancerous affections, and from phthisis. In none of the three first-mentioned diseases have I yet had an opportunity of testing the efficacy of the remedy; not so, however, with regard to phthisis, for of this I have, during the last two years, seen some cases in which anæmia constituted a prominent feature from the commencement of the disease, and in these the saccharine carbonate of iron and manganese, without acting so markedly as in the case of simple anæmia, nevertheless appeared to possess considerable power in improving the condition of the blood,—a result which, in the anæmia of incipient tubercular deposition, is often attained with great difficulty by iron alone. The preparation which M. Petrequin prefers in this disease, is the iodide of iron and manganese; but this is not unfrequently found to produce derangement of the digestive organs,—a complication of all others to be avoided in the earlier stages of the malady in question, so pre-eminently one of mal-assimilation.

Being entirely free from any unpleasant taste, its administration in a simple form, may be continued for a considerable time in young females,—the subjects of amenorrhœa, menorrhagia, chlorosis, dysmenorrhœa, and hysteria, when these affections are connected with an anæmic condition of the system; whereas, a preparation of strongly ferruginous savour will often, in such persons, become repugnant after a few days, and be then discontinued.

When, however, taste constitutes no barrier to the addition of other remedies, the pulv. ferri et maganes. carb. c. sacch., may be advantageously prescribed in combination with them.

I may here be permitted to digress for a moment from the subject in hand, to offer an excuse for having introduced a topic generally considered trivial and unimportant in the administration of a remedy, namely, its taste. But I would venture to suggest, that the benefit to be derived from medicine, frequently depends upon the length of time during which it can be taken; and this in its turn will as frequently depend upon the amount of disgust it may produce on the part of the patient. I think I may safely say, that I have never seen a single instance in which cod-liver oil, for instance, was distinctly loathed, without at the same time proving comparatively valueless in a therapeutic point of view. The state of mind of a patient, and more particularly of a young patient, who is dreading the approach of the hour at which some nauseous remedy must be taken, is decidedly unfavourable to the development of its beneficial effects, and this is especially applicable in chronic diseases, when long-continued perseverance is necessary, and when no immediate or palpable effects are to be produced by the remedy chosen. It is notorious, that in this country, little, if any, attention has ever been given to the means of rendering medicine, if not palatable, at least endurable; and I have no doubt that, in many instances, the conversion of an individual to the homœopathic system, has arisen from the inordinate quantity and undisguisedly nauseous quality of the drugs which legitimate medicine has doomed him to swallow. A change might certainly be made with advantage in this respect; in many instances pills containing powerful ingredients might be reduced to one-third their present size; and many a fluid prescription given in the dose of a wine-glassful three times a day, might be concentrated into a tea-spoonful, and diluted when in the stomach. Public opinion in this country, from having for a length of time leaned towards the injurious system of constant and copious drug-taking, now shows a strong tendency to run into another extreme equally injurious,—that of eschewing medicine *in toto*, and staking life and health upon certain minute bodies termed "globules, in which no power on earth can prove the actual presence of the remedy presumed to be given, and trusted to, for the removal of the disease.

To return, however, to the subject of the ferro-manganic preparation in question, I would further add, that in cases of uterine leucorrhœa occurring in pale, debilitated, anæmic females, the saccharine carbonate of the two metals will be found very useful, when given with powdered ergot of rye; the same combination will often be productive of the best effects in amenorrhœa from inertia of the uterus; and if this be accompanied by hysteric symptoms, I have found benefit from adding ℈j. of the powder, or ♏iij. of the oil of Valerian, to each dose.

Again, in cases of anæmia with much debility, flabbiness of the muscles, and constipation, it will be found very serviceable when given with powdered bark and aloes.

In chronic debility of the digestive organs, with want of appetite, clean but pale tongue and lips, sense of weight at the epigastrium after eating, with tendency to acidity, gastralgia, and costiveness from loss of tone in the muscular coat of the intestine, this compound of iron and manganese has proved beneficial, when given with carbonate of soda and powdered rhubarb. The above combination will also be found serviceable in the anæmia which accompanies chronic Bright's disease.

In the anæmia of children, this ferro-manganic salt will be found of great utility, particularly when given in combination with another preparation of which I have made some trial, and respecting which I would add a few words.

In a Number of the *Neue Medicinish-Chirurgische Zeitung* for 1850, Professor Mauthner, the well-known and able Physician of the Children's Hospital at Vienna, recommends, in the chronic anæmia of children, the extract of bullock's blood, prepared by straining the fresh blood through a horse-hair seive, and evaporating it to complete dryness in a sand-bath. This extract, when pounded in a mortar, forms a dark brown powder, void of taste or smell, and of which from a scruple to a drachm should be given at a dose. It may be successfully administered in the following forms of anæmia, as met with in children. First, in anæmia following chronic diarrhœa; 2ndly, in anæmia occurring after infantile typhus; 3rdly, in that which follows severe pneumonia—in such cases, if a previous tubercular diathesis exist, it will be powerless; 4thly, in anæmia resulting from the long-continued suppuration of abscesses and scrofulous ulcerations; 5thly, in the anæmia which follows scarlatinal dropsy; and in these cases Dr. Mauthner considers it superior to all other tonics. In the marasmus, however, of newly-born infants, and of those rapidly weaned, he regards it as of no value.

It is this preparation to which I have referred as affording beneficial results in many of the forms of infantile anæmia, when given (as I have hitherto done) in combination with the saccharine carbonate of iron and manganese, in the proportion of three grains of the double salt of the metals, with fifteen grains of the *extract. sanguinis bovini* in powder; the best time for its administration being immediately after each meal.

It is almost superfluous to add, that any derangement of the digestive organs should, as far as possible, be rectified before having recourse to these remedies.

Lastly, I would suggest a trial of this preparation in those forms of neuralgia where the carbonate of iron, though itself of such value, occasionally fails; and if these remarks, cursory and limited as they necessarily must be, should induce others to put this remedy to the test, in those diseases to which I have alluded, I feel satisfied that my encomiums will not be found exaggerated.

Cheltenham, Sept. 24, 1853.

CASE OF ULCER OF THE RECTUM, TREATED BY SIMPLE INCISION OF THE MUCOUS MEMBRANE.

By WILLIAM OLIVER CHALK, Esq.

T. C. S., aged 31, a married man, states that he has for many years past suffered from habitual constipation and hæmorrhoids. In July, 1849, he first experienced a flux of blood per anum, amounting, as nearly as he could guess, to about a table-spoonful in quantity. This continued daily for three weeks, and then subsided. He subsequently suffered from two or three such attacks in the course of the year, up to the month of May, 1852. In the June following he was seized, he says, one morning, with a "most distressing bearing down pain" in the rectum, from which, excepting on those days that the bowels have not acted, he has suffered constantly up to the present date, March 6, 1853. He also complains of a severe, aching, shooting, and burning within the sphincter ani, extending to the perinæum and neck of the bladder, during the paroxysms of pain, especially after a motion. He has a frequent desire to micturate, the urine passing either in a very small

quantity at a time, or drop by drop, causing a burning and smarting along the whole course of the urethra; and so severe at one time were these symptoms, that he was treated by his Medical adviser for a stricture of the urethra. He procures a daily evacuation of the bowels by enemata of warm water, as the action of purgative medicine has become intolerable. The use of the enema, without which he says "he could not get on," is followed by a few minutes' ease, when the pains return, lasting from six to eight hours and upwards.

He has lately obtained slight relief by sitting on a piece of cork so made as to push up and support the anus; but his sufferings have become so insupportable, that, unless they are speedily mitigated, he must, he says, give up his occupation, which is that of watch-pallet making. His general health is bad; the digestive functions are much impaired; tongue covered with a thick buffy fur, and red at its point; there is great epigastrial tenderness; pulse 84, full and jerking; skin hot and dry, especially in the palms of the hands; he is often assailed with severe abdominal pains, nausea, loss of appetite, and occasional vomiting of undigested food when the pains in the rectum are violent. He is subject to severe headaches. A consideration of the local symptoms here narrated, led me to conclude that they were occasioned chiefly by an ulcer of the rectum, which there was no difficulty in discovering. It was situated near to the point and to the right of the coccyx, of irregular form, as near as one could estimate by the touch, the size of a shilling, and excruciatingly painful under the examination. The sphincter was very unyielding, and there was a deep fissure on the right side extending to the verge of the anus. It would occupy too much space in these columns to describe the local and general treatment that preceded the operation; it need only be said, that his health was greatly improved, and the ulcer slightly. On the 23rd of April, chloroform being previously administered without bringing the patient fully under its influence, an incision was made in the mucous membrane beyond the ulcer, and carried through it and the fissure, in the manner recommended by Mr. Quain in his lectures(a), thus avoiding the more formidable proceeding of dividing the sphincter ani. A very small loss of blood ensued from the operation. The patient was directed to remain in bed, and an opiate draught to be taken at bedtime. On my visit the following day, at eleven o'clock a.m., I found him suffering severe pain, much excited, hot, and feverish, complaining of headache, and possessed with the idea that the operation had proved abortive. I learned, that about six o'clock a.m. his bowels were naturally and freely relieved with little pain (a small coagulum of blood having passed with the motion), and again at nine o'clock, but that time a large pile descended, and made its appearance at the right side of the anus; it was excessively tender, very tense, and of a livid red colour. This circumstance sufficiently explained the cause of his suffering. Some days elapsed before the effects of this accident were remedied, after which the success of the operation became manifest by the subsidence of all the distressing symptoms under which he had laboured so long. On the 13th of June I received a visit from my patient; his general appearance had greatly altered for the better; he said he had not been so well for years, and that he had resumed his occupation.

Were further testimony wanting than that already adduced by Mr. Quain of the thorough efficacy of simply dividing the mucous membrane for the cure of ulcers of the rectum, it would be afforded by the case narrated above, which was interesting from the more than usual severity of the accompanying symptoms, and its complication with hæmorrhoids. The ulcer was larger than usual, and the reflex actions resulting therefrom complex and severe; the general health, too, was much deranged,—an unusual occurrence, according to Mr. Quain.

From the history of the case, it would seem that constipation and the continual loss of blood were the proximate causes of ulceration,—at all events, the indications of it,—viz., the "bearing down, aching, and smarting," etc.,—did not come on until after the hæmorrhage had ceased, that event being marked by an accession of symptoms more especially referable to ulcer of the rectum. It is difficult, as Mr. Quain observes, to assign any reasonable cause for the periodicity in the cessation of pain after an evacuation observable in these cases. In this instance, it generally extended to five minutes only, and never exceeded ten; but, whatever it may be, this peculiar symptom, apart from the rest, may almost be considered pathognomonic of the disease. With respect to the contraction of the sphincter ani, it must, I think, be conceded, that the conclusion arrived at by this gentleman is essentially correct, viz., that the condition of the muscle is no more the actual disease than the spasm of the orbicularis in strumous ophthalmia. Of the operation may be said that which can scarcely be affirmed of any other involving a corresponding amount of relief, that the subsequent inconvenience arising out of it is so trifling, as scarcely to be regarded by the patient, while the subsidence of extreme suffering is almost immediate. Henceforth, in all probability, the division of the sphincter ani for this disease will give place to the simpler and safer plan of incising the mucous membrane only; but if otherwise, it is sufficiently obvious, from the successful issue of the cases recorded, that, as a general rule, recourse should be had, in the first instance, to it, and not to the more serious proceeding of dividing the muscle.

3, Nottingham-terrace.

(a) *Medical Times and Gazette*, July 10 and 24, 1852.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

REMOVAL OF A LARGE CONGENITAL TUMOUR (FIBRO-PLASTIC?) FROM THE HEAD OF AN INFANT.—RECOVERY.

[Under the care of Mr. ERICHSEN.]

With the exception of the various forms of nævus, of some perhaps of cutaneous outgrowths, in is a matter of very great rarity for tumours to occur in infantile life, while for them to be actually congenital is yet more unusual. The peculiar variety of tumour, of which the following case probably affords an example:—the fibroplastic, or according to the nomenclature of Mr. Paget, *myeloid*—has never before, as far as we are aware, been met with so early in life. It is not, however, merely on account of its rare pathological interest that the case is important, but especially as showing with what safety, under proper precautions, the excision of a large mass may be performed at so tender an age.

Maria Anderson, a healthy infant, aged five months. When born, a movable lump, the size of a walnut, had been noticed behind her left ear. During the first six weeks of life, it had remained stationary, but at the end of that time, had begun to increase in size, without, however, occasioning any pain. At the time of admission, it was a firm, solid-feeling, mass, fixed both to the skin and the deep parts, and about the size of a goose's egg. As it was reported to be rather rapidly growing, Mr. Erichsen determined to loose no time in attempting its extirpation. On August 31, accordingly, the tumour having for two hours previously been kept bathed in ice-water, the little patient was brought into the operating theatre. Chloroform having been administered, Mr. Erichsen crossed the surface by two incisions, at right angles to each other, and having dissected up the flaps, separated the tumour from its lateral and deep adhesions, and removed it. It was found to have been united, although not very closely, both to the superjacent skin and the periosteum below. But very little blood had been lost, and only two ligatures were necessary. The operation had been suspended for a short time during its performance, by the sudden occurrence of extreme faintness on the part of the infant; this, however, was soon rallied from, and the dissection continued: no more chloroform being administered. A fold of wet lint was laid in the wound, and no attempt at dressing the latter made, until about six hours afterwards, when no hæmorrhage having meanwhile occurred, the edges were brought carefully together. The healing process was effected without interruption, and after a short time the patient left the hospital in good health. On examination, the tumour was found to be lobulated, much in the manner of the kidney of a young animal; it was very firm, and its sections exhibited a whitish, semi-translucent, or gelatinous appearance. In its structure were several small cysts. The microscope detected a very large quantity of fatty constituents, not, however, arranged in any organed tissue, numerous large compound granular cells, some elongated and candate cells, a few bands of cellular tissue crossing in various direc-

tions, and lastly, sparingly interspersed, were the large, many nucleated, cell-like bodies, commonly found in the fibro-plastic tumours. Of these constituents, the fat molecules were by far the most abundant, and most uniformly present.

We must briefly direct attention to the preparatory treatment adopted in this case, since to it there was reason to believe a considerable share was to be attributed in the very favourable issue. It is too much the habit in this country to forget preparatory measures, by which neglect patients probably not unfrequently lose more blood than is absolutely unavoidable. Such simple expedients as the elevating of a limb to a considerable height, or even bandaging it when circumstances permit, prior to an amputation, the application of ice to a tumour previous to its excision are attended with no kind of inconvenience, and may, perhaps, now and then, by saving the vital fluid, exercise a material influence on the prospects of the patient. The application of ice may, indeed, serve another use, that of a local anæsthetic in benumbing the sensibilities of the part to be operated on. For this purpose it is much employed on the continent preparatory to the very painful procedure of cutting out the diseased toe-nail, an operation which many an Englishman is compelled to bear as best he may. One qualifying word may perhaps be necessary, that it is undesirable to apply ice to parts of very low vitality, for fear of inducing sloughing, or materially retarding the subsequent healing process.

CHARING-CROSS HOSPITAL.

CASES OF PARAPLEGIC ANÆSTHESIA.

[Under the care of Dr. ROWLAND.]

The two following cases afford instructive illustrations of a not unfrequent occurrence in nervine pathology, the dependence, namely, upon very different causes, of symptoms almost similar in kind. We shall append to them, in each case, the clinical remarks made by Dr. Rowland, by which their peculiar features will be rendered the more apparent:—

Case 1.—*Injury to the Back followed by Paraplegia.—Recovery.—Relapse Two Years Afterwards.—Almost Complete Loss of Sensation in the Lower Half of the Body.*—William Child, aged 30, a waiter. About three years ago he sprained his back severely in falling from some wooden steps in which his feet had become entangled. Palsy of motion, nearly complete, of the lower limbs followed immediately upon the accident. He was removed to one of the hospitals, where he was cupped and blistered on the loins. In three months he was sufficiently recovered to resume his occupation, although still experiencing some weakness in walking. He remained in much the same state until November, 1852, when he began to suffer acute pain in the thighs and legs, which confined him to bed for several months. It subsided at the approach of summer, but the sensation of both lower extremities had in the meanwhile been gradually failing, and the difficulty of walking had returned.

Admitted June 21, 1853.—At this time there is almost total absence of sensation in the lower half of the body; pinching, or otherwise irritating the skin, does not cause pain, although by some kind of impression he is able to recognise these applications. He can stand without assistance, and with the eyes directed to his feet he can walk a few steps, supported by sticks. In these attempts the body is bent forwards, and the limbs twisted into various distortions. The legs are cold; the urine dribbles continually, and it is slightly acid. He is much troubled with nocturnal emissions. There is neither pain on pressure, nor deformity in any portion of the spine. The appetite is good; the bowels regular; he has complete command over the sphincter ani.

An issue to be inserted in each side of the lower dorsal region of the spine, and a draught administered three times daily, containing a twelfth of a grain of bichloride of mercury, and four minims of the tincture of cartharides.

July 1.—The urine can now be retained. The temperature of the limbs is sensibly increased, and their sensation, he thinks, slightly improved.

9th.—An eruption of urticaria came out last night over the trunk and extremities. He complains much of the severe pain which it occasions in the palsied limbs. The draught is to be omitted, and a purgative powder given.

12th.—Eruptions gone. The former treatment is to be resumed.

26th.—He walks with rather more firmness, but is still obliged to fix the eyes upon his feet, without which he cannot move a step. The medicine gripes him; instead of the draught he is to take a pill containing one-sixteenth of a grain of strychnine.

The strychnine, after a few days administration, appeared to produce darting pains in the legs, and it was given accordingly at night only. Galvanism was daily applied to the affected limbs during several weeks. Sensation was partially restored, and the patient thought himself much better when he left the hospital towards the end of August.

The following were Dr. Rowland's comments:—In this case the palsy was not occasioned by injury or concussion applied immediately to the spinal column, but was the consequence of a severe wrench or sprain of the back. Probably some blood was effused within the spine at the moment of the accident, the paralysis gradually subsiding with its absorption; or the symptoms might have arisen solely from the shock to the vertebral column. The progress of the case has been marked by some curious circumstances. If the physiological laws commonly received respecting the functions of the different columns of the spinal marrow may be trusted, the disease is not at present in the same spot as that which it occupied in the first instance. Voluntary motion was lost originally while sensation remained. The reverse to this is now observed; sensation being nearly destroyed, but the muscular power, although not perfect, is in a great measure regained. It is probable, therefore, that the posterior or lateral columns are now affected. It can hadly be expected, that the existing symptoms will undergo the same favourable course as the former. Those which followed the injury soon began to subside, while his present complaints advanced gradually, and have now remained for a considerable period with scarcely any modification.

The pain which tortured this patient during the whole of last winter, and which he ascribes to rheumatism, was perhaps symptomatic of the spinal affection. It was confined to the lower extremities, and it finally gave place to anæsthesia. A similar course is often observed in diseases of nerves. In affections of the fifth pair, for example, the earliest sign is generally acute neuralgic suffering of the parts which it supplies, which, at a more advanced stage, is succeeded by the total deprivation of sensation. A remarkable occurrence, and one very difficult to explain, happened when this man was under treatment. The rash which came out on different parts of the body caused very great pain of the palsied limbs, although they were at the time insensible to ordinary impressions. Could this have been the result of a reflex action? In a hemiplegic patient lately in the wards who had lost sensation and voluntary motion of the left side, pinching the sole of the foot, although unfelt in that situation, produced a painful sensation in some other portion of the palsied limb; and it was remarked in Child, that the pain was not confined to the parts of the limb occupied by the rash. The question also arises whether the suffering that not unfrequently affects paralytic organs, may not often be dependent on local irritation, rather than expressive of action advancing in the nervous centre.

The necessity of fixing the sight on the anæsthetic limbs in attempting to walk is common to all cases of this description; but this patient had not a feeling of the absence of weight, or as if the ground was receding from him, which is observed sometimes in paraplegic anæsthesia. He complained only of a sense of insecurity in walking, or as if he were standing upon a surface too soft or doughy to sustain him.

There was no spinal tenderness, nor was there any deformity of the vertebral column. Such signs are, in fact, rarely observed in disease of the medulla unconnected with affections of the bony canal.

Although some little benefit seemed to have been effected by the treatment, and the patient himself was hopeful that, by the continued employment of galvanism, his health might be restored, there is too much reason to conclude that structural lesion has already advanced considerably within the spinal column.

Case 2.—*Loss of Sensation, and occasionally of Motion, in the Lower Extremities.—Hysteria.—Perfect Recovery of the Nervous Functions under Anti-hysteric Treatment.*—Sarah Poulton, aged 25, admitted August 16, 1853. She is tall, thin, and delicate-looking; began to menstruate at the age of seventeen; married at twenty-one, and had one child born two years after marriage. When engaged in her household work, she is much exposed to cold. The catamenia have usually been regular, but have now not appeared for two months past, which she attributes to having caught cold during their flow on the last occasion. For the last two or three months she has had severe pain of back and loins, and occasionally of the legs. She has also been troubled with pricking sensations in the calves and soles of the feet. Yesterday, when employed in sweeping her room, her legs seemed to give way under her; she fell to the ground, and has not since been able to stand alone. She has lately had several hysterical attacks.

The lower extremities are rather colder than natural, and there is an entire absence of ordinary sensation in them, but when the limbs are forcibly flexed severe pain is excited. She has also lost the power of moving them; there is pain, increased on slight

pressure, in the lower dorsal region of the spine and over the sacrum; the appetite is bad; the bowels constipated; the sleep disturbed; the urine is loaded with lithates.

A blister was applied to the spine, and, at first, a mixture containing the iodide of potassium and small doses of the bichloride of mercury was ordered, and afterwards the iodide of iron, with, however, scarcely any benefit. Subsequently she had two or three violent hysterical seizures in the ward, and there was then ordered a draught containing tincture of sesquichloride of iron, ɱxv.; tincture of cantharides, ɱiv.; and ɱxx. of the tincture of aloes, to be taken three times a-day.

She continued to take this medicine until November 16, and, at the same time, galvanism was applied to the palsied limbs. The improvement was manifest even from day to day. On the 26th of October sensation was nearly complete, and she was able to walk across the wards, but not without considerable assistance.

Nov. 16.—She can now walk with very little support; the sensation of limbs is but very slightly impaired; she has not menstruated; the legs, when flexed, are no longer painful.

℞ To take ɱiij. of Fowler's arsenical solution in water, with half a drachm of the compound tincture of cardamoms three times daily.

23rd.—Walks now without support; sensation perfect. For the last few days she has complained of pain in the lower part of the back and abdomen; the catamenia have not re-appeared. Rep.

On the 28th, sensation being natural, and motion nearly regained, she was discharged from the hospital, and Dr. Rowland took occasion to make the following remarks:—

Looking at this case from one point of view, the suspicion of structural disease within the vertebral column might be entertained. Thus, there were prickings and pains of the lower extremities, which suddenly terminated in loss of sensation and motion. But a closer acquaintance with the symptoms tended to remove such apprehension, for, besides the hysterical paroxysms that occurred both previous and subsequent to admission, a more minute analysis of the local symptoms gave results not easily reconcilable with the existence of organic lesion. The limbs were numb rather than decidedly anæsthetic. When force was used for the purpose of flexing the joints, the patient cried out with the pain, and the legs were sometimes painful, even when at rest. The pain of back varied from day to day, sometimes being very severe, at others almost null, while slightly pinching the integument covering the spine was at least equally productive of suffering as firm pressure. Moreover, the countenance was often flushed and excited, and there was a good deal of nervous agitation in her manner. These, and similar symptoms, interspersed with those more decidedly hysterical, soon removed all doubt as to the nature of the malady, an opinion which the subsequent history of the case has confirmed.

In this patient, a type of hysteria is presented which bears a near resemblance to structural disease. Instead of the instability or proteiform character usually belonging to the complaint, there were here symptoms pertinaciously continuing for a long period, and at length slowly and gradually subsiding under treatment. In the zeal for pathological discovery, affections merely functional, or which at least exist independently of any discoverable change in the texture of organs, have scarcely been allowed their due importance. In practice, however, it is highly essential to recognise them. Several examples of this kind have lately presented themselves at the hospital exhibiting various forms, but each case preserving its individuality for a lengthened period.

It is true that some cases of hysterical palsy are little more than mere fantasy, and are kept up in a great measure by the patient lending herself to the task, and refusing to exercise her command over the refractory muscles. A rough shock or a strong moral impression may at once remove the disorder; but it is very doubtful whether any such means would be productive of benefit in cases like the present. In some respects this form of palsy resembles that of the portio dura, caused by exposure of the face to a stream of cold air, which, although unassociated with cerebral disease, is often tedious in its cure. In like manner the hysterical paraplegia may commence with irritation of the uterine nerves. It is always accompanied by some kind of derangement in the functions of the womb, and is totally unallied with organic change, or any action conducting to such change in the brain or spinal marrow.

The pain of back of which this woman complained was of that kind commonly known as spinal irritation. It was by no means a constant symptom; but neither its accession nor its subsidence was marked by a corresponding change of the principal affection.

This spinal irritation appears to me to have had too great influence assigned to it in the causation of disease. It is one of those pathological conditions that dwindle into insignificance under steady observation. That it is commonly found in conjunction with hysterical affections is indeed undeniable, and so far it is valuable in diagnosis. Occasionally, too, applications to the tender points of the spine may seem to mitigate the other symptoms, but far more frequently this practice is followed by no good result. The spinal pain may be observed to come and go repeatedly in some cases, or to change its seat without occasioning the slightest mitigation of the hysterical troubles.

In the early part of the treatment of this patient iodine and mercury were given, but no benefit followed. The aloes and iron produced immediately an evident improvement. Sensation was restored to the affected limbs long before their power of movement was regained. She has latterly taken the arsenical solution, which is often found an excellent remedy in these complaints, and even in chronic palsy of cerebral origin when a tonic is required. Galvanism was employed in this case perseveringly by Mr. Muirhead, and it has no doubt materially aided in the recovery.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

EXPECTORATION OF CHALK IN PHTHISIS.

THERE have recently been under treatment at this Hospital several patients in whom the expectoration of small hard masses of chalk has repeatedly occurred during the course of tubercular disease of the lungs. This phenomenon, although stated by Louis to be so rare in France that he had never seen an example of it, is in England of sufficient frequency to make its correct estimation as a means of prognosis a matter of some consequence. Arguing perhaps a little too rapidly from the fact, that chalk is the result of degenerated and absorbed tubercle, it has been assumed that the evidence afforded by its expectoration must be to the effect that the disease is arrested, and under course of cure. The opinion as to its meaning generally entertained at this hospital is, we believe, somewhat different. It is thought, that while undoubtedly the conversion of tubercle into chalk is a proof that successful resistance on the part of the constitution to the advance of the disease has occurred, yet the dislodgment of the concretion from its nidus indicates a relapse, being effected by a renewed process of tubercular softening in the adjacent tissues. Let us now see what light can be thrown on the question by the following cases:—

Case 1.—Thomas P. Sidders, aged 32, a traveller in the country, and residing at Ashford, Kent, was admitted under the care of Dr. Bennett, on September 22, 1853. He was of fair complexion, a florid, stout, and very healthy-looking man, but had become anxious as to the condition of his chest from having repeatedly suffered from hæmoptysis. He stated that until his present ailment he had never been ill, or considered himself in the least delicate. He had lived in comfortable circumstances, and followed a healthy avocation. Of his brothers and sisters, seven were living in good health; none had died, but an eighth had more than once spit blood. His parents were robust people, but two of his maternal aunts had died of phthisis, each about the age of twenty-five. The history of his illness was, that fifteen months ago, during a return voyage from America in which he was exposed to very hot weather, he had, after a severe fit of coughing, brought up a lump of chalk about the size of a bean, and with it a small quantity of blood. During the succeeding six months, his cough was habitual, the blood frequently showed itself, and on the whole about twelve calculi were brought up. Subsequently, the cough and hæmoptysis continuing, he lost flesh slightly, and became liable to dyspnœa on exertion. Dr. Bennett examined his chest very carefully in all parts, but could at first detect no evidence of disease, excepting that, beneath the right clavicle, the breath sounds were more bronchial than natural. On a second occasion, however, a little crepitant rhonchus was heard in the same locality. It was noted that the ends of the fingers were somewhat clubbed; the pulse was of moderate power, and very little accelerated; the patient made great complaint of feeling weak.

This man remained under observation for about a month, during which time he lost his cough, and much improved in strength; hæmoptysis to a small amount several times occurred, but no chalk was brought up. The treatment consisted in the exhibition of bark, with mineral acids, and small doses of opiates for the relief of cough. He was discharged in order to proceed, by Dr. Bennett's advice, to Australia, where it was hoped he might probably get rid of his complaint.

It appeared quite certain, in the above instance, for the patient was intelligent and reliable, that the very first indication of pulmonary mischief had been the expectoration of chalk. The case bears, therefore, very importantly on the question as to the possible cure of phthisis. The original tubercular deposit from

which the twelve concretions resulted must have been attended with almost no constitutional disease, since the patient all the while believed himself in robust health, and never suffered from cough. If, then, tubercle may exist to such a considerable extent unsuspected, and undergo absorption, why may not the same method of cure occasionally result in cases in which, although the local changes are not more advanced, yet the general symptoms are such as to bring the patient under medical care?

Case 2.—Joseph Hyams, aged 24, of fair complexion, was admitted, under the care of Dr. Birkett, in May, 1853. He had been ill with the symptoms of phthisis—cough, loss of flesh, and occasional hæmoptysis—for about eighteen months, and had been progressively, but slowly, getting worse. Two months previously he had commenced spitting up chalk, and had since expectorated numerous fragments. There were stethoscopic signs of consolidation and of small vomicæ in the apex of each lung; but the disease was most advanced in the right. The patient was of healthy family, none of whom had ever been phthisical; and he had himself enjoyed robust health until the occurrence of his present symptoms. This case is still under treatment; and from a long course of cod-liver oil much benefit has been derived. The man has resumed his employment, and it is to be hoped that at any rate a temporary cure may result. The occasional expectoration of chalk, as also of small quantities of blood, still continues.

Case 3.—Annie Settrington, aged 26, a dressmaker, living at Ilford, in Essex, was admitted under the care of Dr. Bennett, March 17, 1853. From childhood she had been considered delicate; but until within the last two years had not suffered from cough. Her father died "of decline," aged 59, a brother aged 20, and a sister aged 17. Her mother and six other brothers and sisters are still living, none of whom enjoy robust health. Her illness had commenced by a short cough, which, after continuing for about eight months, was attended frequently with the expectoration of small masses of chalk. During the whole last sixteen months, the latter symptom has persisted, and there has also often been a little blood spit up. The chalk has sometimes been in hard concretions, and at others of the consistence of moist mortar. She is still in attendance, and great improvement has resulted in her general health under the use of ol. morrhuæ with tonics. Her complexion is now florid, she is moderately stout, and would not be recognised, without examination, as a consumptive patient. There are, however, still evidences of the existence of small tuberculous cavities in the upper portions of both lungs.

Case 4.—John Darke, a tall, thin, and very pale man, aged 36, a clerk, has now been in attendance as an out-patient, under the care of Dr. Birkett, for nearly a year. His first deviation from good health dates about three years ago, when he contracted a cough, which has never since left him. Two years ago he began to spit blood in small quantities, with every now and then a little piece of chalk. He states that he has frequently suffered from violent and continued fits of coughing, which have ended in the expectoration of rugged and hard little concretions. On some occasions the liability to such attacks has been protracted over several days, and at length ended in the same event. Altogether he thinks that he must have brought up as much chalk as would fill a dessert spoon. Ever since he was admitted there have been the physical signs present indicative of tuberculous disorganisation of both apices, and in spite of the continued use of the oil and tonics, he has lost ground both as regards general health and the local disease. The spitting up of chalk (in very hard fragments) still continues to recur, and has on several occasions been attended with profuse hæmoptysis.

These four cases have one feature in common,—a characteristic which the presence of the symptom under discussion would have quite led us to expect—they are all examples of chronic phthisis. In all the disease has been much protracted, and in the first three there has been evidenced a considerable degree of constitutional resistance to the disease, and of tendency to cure. So far, however, from the expectoration of chalk having been in any instance the terminal symptom, it has in them all occurred among the earliest, and there has been evidence of a subsequent increase of local disorganisation. Concluding, then, as we must, that the dislodgment of chalk from the lungs is proof generally not only of past tuberculosis, but also of an existing relapse, an interesting question arises as to what becomes of the concretions in those cases in which the recovery is permanent and no relapse occurs. Is it absorbed altogether? does it keep up irritation as a foreign body? or does it lie innocuous in the cicatrised tissues? From the hardness and dryness which the coughed-up masses often possess, it is very difficult to suppose it possible that they could have been ever absorbed. Most pathologists agree, that it is very common to find in the lungs of aged people scattered portions of calcareous matter. Dr. Rogée even asserts, that in his experience it has occurred in 51 per cent. It may therefore be assumed as extremely probable, that no special irritation is caused by their presence, and that they may remain without symptoms for indefinite periods.

In reply to the question, as to whether chalky expectoration is invariably indicative of pulmonary phthisis, it must be admitted, that it may arise from tubercle of the bronchial glands, though, probably, it does so with extreme rarity. The degeneration of cancer of the lung is also another possible cause. In the *Medical Times and Gazette* for March 26, p. 319, the reader will find recorded a case in which cancer of the lung had been attended by extensive calcareous deposit; it was not, however, known, that any portions had been expectorated.

It is, perhaps, probable, that the absorption of tubercle so completely, as to leave nothing but dry chalk, is a process requiring a long period of time. Lobstein states, that chalk has been found in the lungs of infants newly born, and in whom, consequently, the change must have been effected considerably within the space of nine months. We have never seen a case in which the expectoration of such matters occurred under the age of puberty.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

LEEDS GENERAL INFIRMARY.

CASE OF EXCISION OF THE PROXIMAL PHALANX OF THE THUMB.

[Under the care of Mr. T. P. TEALE.]

April 15, 1853.—George Brooke, aged 15 years, admitted on account of disease of the left thumb. He is a tall, thin, youth, of light complexion. His family healthy. He does not show any marks of scrofula. While engaged in his business as a cooper, six months ago, he felt pain in the thumb, which he attributed to the part being pressed upon by the wood which he held in the left hand. The pain at first was intermittent, but afterwards continued; the thumb became much swollen, and he was obliged to leave off work seven days after he first felt the pain.

22nd.—There is considerable swelling around the proximal phalanx.

May 11.—An abscess has formed on the palmar side of the phalanx, which has been opened by the bistoury. The bone was found to be bare.

After this time, two other abscesses formed, which were also opened. The discharge was copious, the thumb much thickened, the ligaments uniting it to its metacarpal bone by probing the whole proximal phalanx was found to be carious and destroyed, but the terminal phalanx appeared healthy.

August 25.—Mr. Teale proposed to remove the diseased phalanx, and to leave the terminal one. For this purpose, he made an incision, rather more extensive than the phalanx, along its radial border. The ligaments and capsule connecting it with the terminal phalanx were next cautiously divided; the shaft of the bone was then separated from the surrounding soft parts; and, lastly, it was detached from the metacarpal bone. The thumb was dressed with wet lint, and the patient confined to bed. The case proceeded well, without any unfavourable occurrence.

September 21.—The wound is healed, the end of the thumb is preserved, and the entire thumb has much of its natural aspect, being a little shorter and thicker than its opposite fellow. The thumb has free motion through the medium of the metacarpal bone, and forms an excellent opponent to all the fingers.

December 5.—Since the last note, the boy has been regularly at work. There does not appear to have been any attempt at the production of a new bone, as the place of the excised phalanx is occupied by a firm ligamentous structure only. The terminal phalanx has free motion on the metacarpal bone, and the amount of shortening is exactly five-eighths of an inch.

The disease in this case was caries, and not necrosis; and at the time of the operation what remained of periosteum being adherent, was removed with the bone. The latter circumstance accounts for there having been no reproduction of an osseous shaft. The success of the operation with so unhopeful a form of disease is the more satisfactory. In some cases of diseased metacarpal or phalangeal bones, a genuine necrosis of the shaft takes place, and a thin shell of new bone is formed by the periosteum. The success of an operation is of course much more probable in such a condition than in one of caries. On Wednesday last, Dec. 7, we saw Mr. Simon remove from a man in St. Thomas's Hospital the whole metacarpal bone of the right thumb. The necrosis was quite recent, but the periosteum had entirely sepa-

rated from the bone; and Mr. Simon stated that he could feel in it, in parts, distinct plates of new deposit. We shall watch the result of the case with interest.

MR. MACLAUGLIN'S CASE OF A CHILD BORN WITHOUT LIMBS.

By the courtesy of Mr. Maclauglin, of Preston Lodge, Clapham, under whose professional care the little patient was born, we have been allowed an opportunity of examining the specimen of congenital abnormity (unique?) whose full-length portrait is given below. It is the first living child of a chimney-sweeper's wife, aged about 32, and is now rather more than six weeks old, thriving, and promising to do well. It was born after a short labour, in which no unusual circumstance occurred; the placenta was much softened, but the cord was natural in length and thickness, and nothing was observed in the decidua throwing any light on the cause of the deformities

As may be seen, the four extremities are, with the exception of short stumps of arms, entirely wanting. The head and trunk, with the spine, pelvis, and genitals, are, as far as can be ascertained, perfectly normal in construction. Marking the parts where the thighs have been removed, there is, in each case, a small nipple-like fold of skin, which is crossed by obscure lines, as of cicatrix; but there is not the least trace of a rudimentary member. It is doubtful whether any portion of the femur remain ornot, but, if it do, it cannot be more than the articular head and neck, and from these the overlying skin is perfectly loose. In each upper extremity, however, the bone is well formed, and of natural size, to the point where it abruptly terminates, and is adherent to the skin, in which latter are several very distinct lines of cicatrix. They are, in fact, perfect stumps and, from the power of elevation possessed by the child, appear to be just long enough to secure the attachment of the deltoid muscles, a point which is of great importance, since, should they develope *pari passu* with the infant's growth, it is not impossible but that some mechanical contrivance may be adapted to them at a future time.

From the condition of the truncated extremities, as above described, it is quite evident that the deficiencies have been produced by a series of intra-uterine amputations, and not by arrest of development. It becomes, then, an interesting question, as to how these amputations were effected. The circumstance, that no remains of the wanting members were distinguished among the decidua, only proves that they occurred at a very early period of fœtal life,—a fact also made certain by the soundly-healed condition of the stumps. The proved occasional causes of these accidents are, 1st, constrictions of the limbs by bands of false membrane, or by twisting of the umbilical cord and, 2nd, compound fractures—the latter extremely rare, and probably only efficient towards the latest periods of utero-gestation. Several cases are on record, in which children have been born with an extremity tightly constricted by a band of false membrane, and among them a very interesting one by Mr. Smith, of Bristol, in which the band was attached to the placenta, and the limb was so nearly cut off, that it sloughed soon after birth. From the smoothness, softness, and well-lubricated condition of the funis, as well as from the fact of its carrying a supply of blood necessary to the life of the fœtus, it is difficult to suppose it capable of being twisted sufficiently tightly to arrest nutrition in a limb without also interfering with its own function. Ninon, Fourtnal, Buchanan, Schwabe, and Montgomery, have, however, all related cases in which it was found so twisted that the soft parts of the limb involved had been much indented. As the explanation of the present case, it may, notwithstanding, safely be rejected, since that, by any possibility, it should get so twisted as to effect four separate amputations, and yet carry on its own circulation, is past comprehension. On the other hand, the supposition of the constriction having been due to bands of organised lymph is not at all incompatible with the multiplicity of the lesions, since an inflammation of the fœtal integument or membranes, ending in effusion of lymph, might be easily supposed to have affected several parts at once. A case, indeed, has been published by Dr. Oldham (Guy's Hospital Reports, No XII. April, 1841,) in which a dead fœtus was found completely invested by a coating of reddish-brown lymph, and its limbs rigid and deformed. (a) Supposing that, in the above case, a transitory attack of adhesive inflammation had affected the fœtus at an early period, it is quite comprehensible, considering the great comparative size of the head and trunk, and their superior developmental power, that they might successfully resist a constricting force to which the extremities would yield. We will here mention briefly, on account of its interesting connexion with the subject in hand, a case which we saw in St. Bartholomew's Hospital during the summer of 1850, under the care of Mr. Stanley.

The appended woodcut will explain the condition of things better than verbal description. There was a constriction of the lower part of the right thigh, which in front extended quite down to the bone, but behind allowed the vessels, nerve, and tendons to pass intact. The patient was a healthy boy, aged two years and a-half. He had talipes varus of both feet, and deformed fingers on each hand. Two of the latter were bulbous at their ends, and had evidently been constricted. The lower part of the leg was well developed, and the boy could walk upon it, though only awkwardly, as he could not bend the knee or raise the extremity much forwards. It was not known that any state of the cord, etc., was observed at the time of birth explanatory of the constriction of the thigh; and as to those on the fingers, it is quite impossible that a funis could constrict so small and tapering a body as a fœtal finger. We should incline, therefore, to refer this case also to the influence of bands of false membrane; and it is instructive as an example of an incomplete amputation.

Medical Times & Gazette.

SATURDAY, DECEMBER 10, 1853.

QUACKERY WITHIN THE RANKS.

The following extracts from a circular which has been sent to us, recommending to the public the use of an empirical and secret preparation for the treatment of ulcers, cannot be read without surprise :—

"I was induced by this case to pay particular attention to the effect of Dr. Pattison's remedy in many other cases then under treatment by him. These cases were of cancer, lupus, and ulcer. All, except one, where the disease was so far advanced that Dr. Pattison declined interference, were benefiting by the treatment. Many of the cases of cancer were desperate cases, and such as no surgeon would have further interfered with. Some of the cases of lupus had been under treatment by leading surgeons for years, and one case of ulcer at least would have been regarded as a case for amputation in any hospital. I had no hesitation in expressing to Dr. Pattison my conviction that his remedy possesses more power over diseased tissue than any other with which I am acquainted.

"Dr. Pattison's practice having so much increased that he is desirous of associating himself with some one who will co-operate with him, he has requested me to join him in partnership, to which I have consented; and Dr. Pattison has now disclosed to me the nature of his remedy. The many testimonials that I possess from the most eminent men in the Profession, prove my title and competency to form and express an opinion of a new remedy. I might, as proof

(a) It is much to be desired, that all who have opportunities for doing so would examine carefully fœtuses expelled in the early months of pregnancy, with a view to ascertain whether inflammations of the fœtal integument, such as that described by Dr. Oldham, are at all common. It may be noted, in connexion with this subject, that the mother of the infant, whose case is given above, had twice before miscarried.

of this, have published those testimonials here, but as they were not given to me with that view, I think I would do wrong in so using them; but being entitled and competent to form an opinion, *I confidently recommend this new remedy*, in cases of cancer, lupus, or ulcer, as safer and more effectual than any other treatment, including operations by the knife.

"It will perhaps be said, that the remedy used by Dr. Pattison and myself being secret, our conduct in so using it is unprofessional. I understand the feeling which prompts this objection, I sympathise with it, and, in the present instance, was at first disposed to share in it, but on inquiry I ascertained that on Dr. Pattison's coming to this country from America in October last, he made a proposal that he should be allowed to treat some of the cases in the Royal Infirmary of Glasgow, and that on the acknowledgment of his cures when made, he would disclose the nature of his remedy; in reply, he was informed by Professor Laurie, that he would not countenance quackery. In November last he made a similar offer to the Middlesex Hospital, and at the same time volunteered to disclose the nature of his remedy beforehand to Sir Benjamin Brodie or Mr. Lawrence. This liberal proposal was rejected. Dr. Pattison, hurt at this illiberality, now declines making his preparation public, and, considering his straightforward proposal of a trial of it to two of our large public hospitals, and his frank and manly offer previously, to confide its nature to Sir B. Brodie, Mr. Lawrence, or Professor Laurie, I concur in his feeling that the onus of its being kept a secret does not rest with himself, but with those who refused a fair and open trial of a new and important remedy, offered and guaranteed to them by a gentleman who had been himself a teacher and an hospital surgeon.

"Patients desirous of information or advice, can obtain it on application, personally or by letter, to me, either at my present address, or at 31, Grosvenor-street, where with Dr. Pattison, I will attend daily (Sundays excepted) from eleven to one o'clock forenoon.

"Archibald William Cockburn,
M.D. F.R.C.S. Edin. etc.

"1, St. Mary Abbot's-terrace, Kensington,
August, 1853."

If this circular had emanated from an avowed quack, we should not have noticed it, because our doing so would, perhaps, have given to the nostrum in question the notoriety which all honest men would desire to obviate; but, as it comes from one who signs himself a member of our Profession, we are compelled to break the silence which otherwise we should have strictly observed.

Archibald William Cockburn styles himself a Doctor of Medicine, but does not inform us at what University he graduated; as he also tells us that he is a Fellow of the Royal College of Surgeons of Edinburgh, it may be surmised that he has gained the elements of his medical education in the Metropolis of the North. Indeed, we have been informed that he was a favourite pupil of Liston at the Edinburgh Infirmary, and that he is a son of Lord Cockburn, one of the most esteemed judges of the Scottish Bench.

Of the success with which Dr. Archibald William Cockburn has already pursued his medical career, we have only the evidence of the learned Doctor himself; but, judging from this statement, his competence to form an opinion on the merits of a quack medicine has been guaranteed by the highest authorities. "The many testimonials that I possess," says he, "from the most eminent men in the Profession, prove my title and competency to form and express an opinion of a new remedy. I might, as proof of this, have published these testimonials here; *but, as they were not given to me with that view,*" he modestly and diffidently continues, "I think I would do wrong in so using them." Much as we admire the Doctor's modesty, however, we wish that these testimonials had been allowed to see the light, and we should then have been enabled to inform the world of the value of the authorities on which he so confidently relies. But the Doctor drops the modest vein in the next sentence, and comes out at once in the true character of Sir Oracle. "Being entitled and competent to form an opinion, *I confidently recommend this new remedy*" (the italics are his own) "in cases of cancer, lupus, or ulcer, as safer and more effectual than any other treatment, including operations by the knife."

As to the person with whom Dr. Cockburn has thought proper to associate himself, and whose practice is increasing so much that he stands in need of co-operation, we shall say nothing, because, as far as we know, he is altogether out of the pale of the Profession.

The benevolent object of this worthy pair may be perceived by the concluding paragraph of this precious circular, in which the public are informed that the Doctor will be ready to cure sores by his quack medicine every morning (except Sunday) from eleven to one o'clock.

Further comment on this disgraceful alliance is unnecessary; and, having given his circular the publicity which he evidently covets, we leave Dr. Archibald William Cockburn to his own conscience, to the notice of the University, whatever it may be, from which he has obtained his degree, to the *surveillance* of the Royal College of Surgeons of Edinburgh, and to the opinion of the Profession at large; but we cannot do so without again drawing attention to the supineness of the Legislature in allowing any one who chooses to style himself "Dr.," to practise medicine and surgery without previous inquiry into his right to the privilege. As Mr. Guthrie quaintly observed in a lecture we published in October, "No man may try to kill a partridge in this country without a licence; why should he be allowed to kill a man any more than a bird?"

DUBLIN HOSPITAL GRANTS: WESTMORELAND LOCK HOSPITAL, DUBLIN.

Among the most senseless forms of heartless slang now so much in vogue with Government officials, we know of none that is used with more specious effect to gloss over the pitiful parsimony of Treasury economy than the appeal to "principle involved." Thus, while the most overwhelmingly convincing proofs are almost daily brought forward by the leading corporate, commercial, and professional authorities of the Irish metropolis, of the irremediable evils to which the sick-poor of that city are exposed by the continued annual reduction of the grants on which they have been so long mainly dependent for Medical relief, the Lords of the Treasury meet the strongest remonstrances of the Irish Executive, of the Irish Medical Profession, and of Irish Boards of Guardians, and other influential bodies, with the pitiful evasion, that a continuance of the grants is contrary to "principle." "Contrary to principle!" we should be glad to know *what* principle, or shadow of a principle is involved; we know of no immutable principle or set of principles which presides over the foundation and endowment of hospitals in the various cities of England or the Continent. The munificence or piety of a prince, or a prelate, has, in one place, left an hospital as the noblest memorial of his name; elsewhere, the duty of providing accommodation for the sick and the maimed, has devolved on the State; and when, as in these degenerate days, but little is to be anticipated from private charity and munificence, to what source should the community look for the supply of those great public wants, if not to the State and its Government. Comprehensive hygienic measures, the due provision for the sick and the maimed, and such-like great

public interests, come as naturally within the province of the Government of a civilised state as armies, navies, and all that adds to the pomp and circumstance of a nation.

Let us, therefore, have no more of "principle" in this question of the Dublin hospital grants,—let us reduce things to their plainest and most unsophisticated modes of expression, and we shall then see how this Government, that deals in grants of princely thousands for the decoration of Royal palaces and Royal stables, thinks it "expedient," with its system of beggarly economy in regard to the support of great public wants, to withdraw the grants from the Irish hospitals. While the sums thus saved are as nothing in the public accounts, the grants constituted the main support of the Irish hospitals, which have been greatly embarrassed, and much diminished in efficiency by the reductions already effected in their incomes. Hear the petition of the Board of Guardians of the South Dublin Union, recently presented to the Lord Lieutenant.

"By experience we have found that the general closing of the Dublin hospitals, on account of the yearly diminution of Government support, has caused, in proportion, the Dublin workhouses to become the refuge of those who formerly applied to those hospitals for medical treatment; and thus, after a short time, will these institutions become monster hospitals, relying for support upon the over-taxed citizens of Dublin and its vicinity. Against the impolicy of such legislation we have over and over again protested; but we now appeal to your Excellency respecting the Lock Hospital in particular.

"The moral depravement of the unfortunate persons who must resort to such an Institution for medical treatment is too notorious to require explanation, and the dreadful risk of such characters mixing with the poor but virtuous female inmates of our workhouse is a subject direful in its consequences.

"Already nearly one hundred beds are occupied in the South Dublin Union Workhouse with this class of diseases alone; and we have only too much reason to fear, that when such patients are discharged from hospital they will sow the seeds of vice and immorality before they leave the Institution."

On more than one occasion we have already called attention to the case of this Lock Hospital. If any one Institution rather than another requires the support of an enlightened Government, it is a venereal hospital. Mistaken pietism, or an honest, though ill-directed zeal against the vices whose baneful consequences such an institution is established to alleviate, stays the otherwise liberal hand when an appeal is made to the public for contributions to the Lock Hospital. If one hospital above all others has a right to exemption from the economising "principles" of the Treasury, that one is surely the Lock Hospital.

So strongly, however, have the decisions of the Treasury been taken against the continuance of the grants, that the most earnest recommendations of the Irish Executive have been entirely ignored, and the Lord-Lieutenant has felt himself compelled to decline any further interference on the subject. In this state of things we see one course, and one only, plainly offering itself to the choice of our Irish brethren, viz., an appeal to the House of Commons, and a demand for a renewed inquiry. The recommendation of a former Committee, based on partial investigation and imperfect evidence, is used as the pretext for the withdrawal of the grants; and, till this be formally rescinded, it is worse than useless to appeal by petition to irresponsible officials. The whole question is one of such vital importance to the general as well as professional interests of Dublin, that it is fairly entitled to a re-hearing, which, if properly and vigorously urged, we have no hesitation in saying, would be granted. To the Irish Poor-law Guardians, therefore, we would say, Bring the entire subject anew before the House of Commons; establish a joint Committee of all the bodies, commercial and professional, interested in the maintenance and well-being of the Irish hospitals; secure the services of a couple of active paid agents here in London; bring the subject into the House through your Metropolitan Members; and, if the cause be vigorously worked, we promise you success.

MR. SIMON'S REPORT.

THE extracts we have published under the head of "Cholera Reports" from Mr. Simon's very able report to the City Commissioners of Sewers are worthy of attentive perusal. The whole document is so good, that we regret our inability to publish it entire. It is most gratifying to see a report drawn up by a Medical man, which contrasts so favourably with the discreditable circulars from the Board of Health. It affords convincing proof, if proof were wanting, that Medical men may be found who are able to direct the sanitary administration of the country in a far more able manner than the unsuccessful blundering lawyers at Whitehall.

A Report such as that from which these extracts are taken, not only reflects credit on Mr. Simon, but on the profession of which he is a member.

THE CHOLERA.

THE following is a copy of another of Dr. Macloughlin's letters to the Registrar-General:—

"Sir,—In your Weekly of the 5th November, is reported a case of cholera without any premonitory symptoms, which occurred at Brixton, Denmark-hill, on the 30th October.

"I have been to Denmark-hill, and I have seen the gentleman at whose house the case occurred, and I have also seen the Medical attendant.

"The gentleman informed me, that his friend appeared in perfect health and spirits the day before; that on getting out of bed at about six in the morning he had a very copious evacuation; that at about eight he had another; that he appeared at the breakfast-table at about half-past eight, looking so ill, that the family sent him to bed; that he took, on going to bed, some anti-cholera medicines, and had a third and fourth evacuation; that between nine and ten the cramps came on, when the Medical attendant was sent for, and on his arrival, two hours after, he administered some medicines, which appeared to be of great use, and gave hopes of a favourable termination; but in about two hours after, the patient began to sink rapidly.

"The Medical gentleman confirmed the above, but he had not inquired whether his patient had had a diarrhœa previous to six in the morning. He had dined at the same table with him, and as he appeared in perfect health, he did not deem it necessary to inquire.

"We must never be thrown off our guard by the apparent health of the individual previous to the attack for which he claims our assistance. It is an every-day occurrence, that persons are labouring under a painless diarrhœa, which gives them no uneasiness, and which too often they themselves do not notice, and they appear to their friends and relatives to be in perfect health up to the moment they are seized with cramp, vomiting, etc.

"In your Weekly, November 12, 1853, now before me, is a case in point, which took place at No. 17, Chapel-place, Cavendish-square, on the 10th inst. That man appeared perfectly well, even to his wife and to his friends who had passed the evening with him, yet that man informed me a few hours before his death, when I was called to see him, that he had a painless diarrhœa for nearly three weeks previous to being attacked with spasms, but he did not feel weak.

"But the question is, was the case at Denmark-hill a case of cholera without a premonitory symptom?—Certainly not; three hours at least elapsed from the first liquid evacuation to the

attack of cramps; and it was wrong, therefore, to call this a case of cholera without a premonitory symptom.

"I am, &c.

"Dr. Macloughlin, M.D., Member of the Legion of Honour of France.

"34, Bruton-street, Berkeley-square, London, November 17, 1853."

EXTRACTS FROM MR. SIMON'S REPORT.

CITY SANITARY INSPECTION.

"With respect to this important work of sanitary inspection, what I now propose is no new proceeding within the City. More or less since the date of my appointment—but I hope with gradual increase of completeness and efficiency—weekly visitations on a considerable scale have been made, under my direction, by your four inspectors of nuisances. Acting under your authority, and guided by what information I could obtain on the existence of endemic disease in your several districts, I have furnished the inspectors every week with a variable list of the houses ranging probably from 50 to 150 at a time, for their visitation and inquiry. The information which I have directed them to seek has referred of course to the various details of sanitary condition, to questions of lodgment, ventilation, cleanliness, drainage, water supply, dust removal, paving of yard and cellars, existence of nuisances, and the like; and I have constructed tabular forms for their use which admit of this information being recorded and reviewed in the readiest manner week by week. Before each meeting of your Court, I have had the habit of going through every particular of these somewhat considerable details. I have sorted out of them those very numerous cases in which your lawful powers could be usefully exerted; when I have deemed it necessary, I have myself made visits of verification or inquiry; and have finally laid before you, in the form which is familiar to your weekly meetings, such recommendations as the week's survey has shown necessary, for enforcing works of local improvement under the powers of your Acts of Parliament. I find, that within the last twelve months, there have been made 3147 visitations of this nature, the result of which are recorded in your office; and, founded on the result of these inspections, there have been issued 983 orders for the abatement of causes of disease.

"I am very far from considering that these arrangements have been perfect. Circumstances beyond my control have prevented me from constructing as complete an organisation as I could wish; and the fact that your inspectors are very largely employed in other duties has, perhaps, occasionally given some hurry and imperfection to their share of the work. Still, such as it is, this system has been the means of considerable advantage; and I am glad to be able to claim for your hon. Court the distinction of being first in the Metropolis to have established an arrangement for the systematic sanitary visitation of the dwellings of the poor. In relation to this subject, I beg to inform your hon. Court, that your inspectors have discharged the duties which you authorised me to impose on them with much zeal, intelligence, and industry.

"During the last few weeks it has become obvious to your hon. Court, that the duties of this department of your service have grown to such dimensions as to necessitate some increase of your staff, and acting on this opinion, mainly with a view to render more complete your sanitary supervision of the city, you have just appointed two additional inspectors of nuisances. In making this appointment you have determined not to restrict any two or three inspectors exclusively to the business of house inspection, but to allot the joint duties, sanitary and surveying, equally among their number, parting the area of the city into six instead of four inspectors' districts, so that each inspector shall give a certain proportion of time to the duties which he has to fulfil under the surveyor's direction, and another certain proportion to those in which he will be engaged under the direction of the officer of health. It is only some experience of this arrangement that can decide whether it will be the most effectual for your purpose; but in the meantime, I have studied so to dispose the industry of your increased staff, under the arrangement you have ordered, as to obtain the most systematic and efficient discharge of those duties which you have desired me to superintend.

"Reckoning that each inspector, if he fulfilled no other duty, could report on the condition of about 50 houses per diem, I presume that henceforth, in each of your five more important districts, from 100 to 120 houses can be visited weekly by the inspector, without encroaching on the time required for his other duties.

"The general plan on which I would propose that this force should be disposed, is the following:—First, as heretofore, the weekly list would contain all places needing investigation, on the ground of such deaths and illness as are usually associated with preventible causes, in order that any sanitary defects may at once be remedied; secondly, in each week there would fall due a certain number of sanitary works, (relating to house drainage, water supply, and the like,) for which you would have previously issued orders, requiring them to be completed within a stated time; and on the satisfactory execution of these it will be the inspector's duty to examine and certify; thirdly, in each district I would have a certain rota of visitation, according to the badness of the spot and its known liability to fall into filthy and unwholesome conditions, requiring one set of houses to be seen weekly, another set fortnightly, another monthly, another quarterly, and so on—a rota varying from time to time with the changing circumstances of each locality; and out of this rota each week would supply a stated number of cases for inquiry, to which I should occasionally add certain of those establishments in which offensive occupations are pursued. Thus, in the large number of weekly visits which I suppose the inspector to make, there would be a certain proportion of that more elaborate kind which involves an examination of the entire house; another proportion, made for the sole purpose of seeing that previous orders have been executed; another proportion, repeated at fixed intervals, simply to ascertain that houses once cleansed and repaired are not relapsing into filth, nor their works becoming inefficient."

MEDICAL ORGANIZATION IN INFECTED DISTRICTS.

"During the acute prevalence of the epidemic in any particular locality, it becomes of great importance to bring the uneducated classes of society, as far as possible, under systematic medical care; in the absence of which they are likely to neglect all premonitions of the disease, and thus to incur much unnecessary danger. To fulfil this object, as regards the poor, express provision has been made by the law; and it might be well for other classes, under similar exposure to attack, to consider how far they could arrange for their households a similar plan of protection. Under any Order in Council, which brings into action the extraordinary powers of the Nuisances Prevention Law, the General Board of Health acquires authority to enjoin on Boards of Guardians throughout the country, that they provide for 'persons afflicted by or threatened with' the disease such medical aid as may be required; and the actual working of this has been, that on all occasions of epidemic cholera prevailing in particular localities, the General Board of Health has called on the Local Boards of Guardians to establish systematic house-to-house visitation for discovering and treating among the poor all premonitory symptoms of the disease.

"In the too probable event of its becoming necessary next year to establish this system of medical organisation in parts of the Metropolis, I have no reason to doubt that a requisition to that effect will be addressed to the guardians of the City poor; and, in this anticipation, I think it desirable to bring, in conclusion, one more point under notice of your hon. Court. During the former invasion, the guardians within the City of London resisted the requirements of the General Board of Health, and the first fourteen weeks of the epidemic consequently passed without the establishment of any visitational system for arresting its progress. In the fifteenth week, however, the Corporation of the City undertook the unperformed duty not legally devolving on them, and requested me to make arrangements for the purpose of its execution. With the assistance of the several Medical officers of the City Unions, I immediately organised the requisite staff; and, from that moment to the close of the epidemic, there continued under my superintendence a systematic visitation of the poor, with beneficial, though tardy and imperfect results.

"Recalling these incidents to the recollection of your hon. Court, I would beg to observe, that no similar endeavour can fully succeed, except as a system, well considered beforehand, and adjusted to the various circumstances which may require its application. Uncertainties of responsibility and conflicts of jurisdiction would inevitably occasion a large sacrifice of life; and, therefore, before the time when cholera is likely to become epidemic, it should be definitively settled who is to undertake this organisation. Your Commission can have no jurisdiction in the matter; and the interference of the Corporation would be only at its own option. The legal responsibility rests solely with the boards of guardians; and it seems to me indispensable that, before the time for action arrives, the Corporation should determine its intentions, in order that the boards of guardians, if again called upon to organise arrangements of the kind in question, may know distinctly, either that the Corporation has relieved them of their task, or that there rests on them the undivided obligation of providing for the crisis."

LONDON DRAINAGE.

"In this respect I cannot refrain from saying that the giant error of London is its present system of drainage. Probably, in

considerable parts of the Metropolitan area, house-drainage is extensively absent; probably, in considerable parts, the sewers, from the nature of their construction, are very doubtful advantages to the districts they traverse; but the evil before all others to which I attach importance in relation to the present subject, is that habitual empoisonment of soil and air which is inseparable from our tidal drainage. From this influence, I doubt not, a large proportion of the Metropolis has derived its liability to cholera. A moment's reflection is sufficient to show the immense distribution of putrefactive dampness which belongs to this vicious system. There is implied in it that the entire excrementation of the Metropolis (with the exception of such as, not less poisonously, lies pent beneath houses) shall sooner or later be mingled in the stream of the river, to be rolled backward and forward among the population; that at low water, for many hours, this material shall be trickling over broad belts of spongy bank, which then dry their contaminated mud in the sunshine, exhaling fetor and poison; that at high water, for many hours, it shall be retained(a) or driven back within all low-level sewers and house-drains, soaking far and wide into the soil, or forming putrid sediments along miles of underground brickwork, as on a deeper pavement. Sewers, which under better circumstances should be benefactions and appliances for health in their several districts, are thus rendered inevitable sources of evil. During a large proportion of their time they are occupied in retaining or re-distributing that which it is their office to remove. They furnish chambers for an immense fæcal evaporation; at every breeze which strikes against their open mouths, at every tide which encroaches on their inward space, their gases are breathed into the upper air, wherever outlets exist, into houses, footpaths, and carriage-ways.

"To some individual householder, dwelling at a high level, all concern in the subject may seem to terminate with the defluxion of his own sewage. So that his own pipes remain clear, little cares he for the ultimate outfall of his nuisance. Perhaps, if he knew better, he would care more. His gift returns to him with increase. Down in the valley, whither his refuse runs, converge innumerable kindred contributions. From city and suburb, from an area of 100 square miles, covered by 250,000 houses, with their unprecedented throng of metropolitan life, there pour into that single channel every conceivable excrement, outscouring, garbage and refuse, from man and beast, street and slum, shamble and factory, market and hospital. From the polluted bosom of the river steam up, incessantly, though unseen, the vapours of retributive poison; densest and most destructive, no doubt, along the sodden banks and stinking sewers of lowest level, but spreading over miles of land, sometimes rolled high by wind, sometimes blended low with mist, and threatening even to their margin that curls over distant fields; for, not alone in Rotherhithe or Newington—not alone along the Effra or the Fleet—are traced the evils of this great miasm. The deepest shadows of the cloud lie here, but its outskirts darken the distance. A fever, hardly to be accounted for, an infantile sickness of undue malignity, a doctor's injunction for change of air, may at times suggest to the dweller in our healthiest suburbs, that, while draining his refuse to the Thames, he receives for requital some partial workings of the gigantic poison-bed which he has contributed to maintain."

[We shall continue these extracts next week.]

THE METROPOLIS.

Cholera is very much diminished, and will probably, as in the previous epidemic, nearly disappear for a time. Only 28 deaths from cholera were registered last week, 7 of which occurred in the West Districts, 4 in the North, 5 in the East, and 12 in the South districts.

THE PROVINCES.

Newcastle.—Viscount Palmerston has intimated to the inhabitants of Newcastle, that an inquiry into the causes of the late mortality in that town will be entered upon by a Commission. The *Newcastle Journal* says, "that the apathy of the authorities since the departure of the cholera seems even to be deeper than that which invited its approach, and that there are apprehensions of collusion of the Corporation Sanitary Committee with the Water Company to leave the public at the mercy of the latter, which the inquiry will come opportunely in aid of the efforts of the public to prevent."

(a) I am informed, that in the large districts on the south side of the river, this retention of sewage is prolonged for two-thirds of every tide—18 hours out of every 24.

IRELAND.

The *Cork Examiner* of December 1 says, the cholera has appeared in the north, south, and middle districts of the city. In each instance it has attacked persons of the humbler class,—those who are the least able to resist its attack; and what renders this fact of greater importance is, that the places in which fatal cases have occurred are among those which are the most populous, and that the dwellings of the persons attacked are not only densely crowded, but generally filthy in the extreme. To give an idea of the absolute necessity for the prompt removal of patients of a poor class, we may mention that respectable physicians informed us, that the miserable rooms in which two afflicted persons lay were literally crowded by people of both sexes, attracted either by sympathy or curiosity. At any rate, there were from twelve to twenty persons in each filthy apartment, breathing its infected air, and witnessing the depressing spectacle of intense suffering, the result of a mysterious and terrible disease. Dublin, so far, continues wholly free from the disease. Diarrhœa, however, is still prevalent; and, worse still, fever of the worst type is raging to a considerable extent.

The packet-ship Constellation had arrived at New York from Liverpool, with the loss of 100 passengers from cholera. The total number of passengers on board this ship was 916.

The Hibernia, also from Liverpool, lost 33 out of 380 passengers.

CHOLERA ABROAD.

We have seen private letters from medical men at Paris and Havre, stating that the cholera is very prevalent in both places, but that the Journals are not allowed by Government to make the facts known.

REVIEWS.

The Microscope, in its Special Application to Vegetable Anatomy and Physiology. By Dr. Hermann Schacht. Translated by Frederick Currey, Esq., M.A. Pp. 131. London. 1853.

This little volume forms one of Mr. Highley's Library series of works upon science and art. It contains, in the first place, a description of the microscope, and the whole of the succeeding part is occupied by the microscopic anatomy of plants, and by the description of the methods employed to display the structures to the greatest advantage. It is the composition not merely of a mechanical observer, but of an accomplished botanist; and, in the description of the parts as they are prepared for examination, and in the systematic manner in which the subjects are introduced, the reader has an abstract of our present knowledge of structural and physiological botany. The transparency and simplicity of vegetable structures render the task a difficult one of fixing upon points of sufficient diversity and sufficient distinctness to form the basis of a scientific classification; but, difficult as it is, the vegetable world gives us the starting point for the study of living organisms, and the student who would make himself acquainted with the functions of the human body must study all the links in the chain of vital beings, beginning with the plant-cell. We can recommend this book as being well written, well translated, and got up in a very creditable manner.

Etudes Critiques sur la Surdi-Mutité. Par M. E. Hubert-Valleroux. Pp. 69. Paris. 1853.

Critical Studies on Deaf Dumbness.

This is an Essay on Deaf-Dumbness, viewed in a medical aspect, and is a reprint from the *Archives Générales de Médecine.* The author regards this affliction as generally acquired after birth, and not so often congenital as was formerly supposed. He therefore considers that it is in many cases amenable to treatment; but, at the same time, he deprecates the use of specifics, or the rash operative proceedings of some authors. His chief conclusions are, that the organic lesions which are the causes of dumbness occupy exclusively the auditory structures, and not the vocal organs; that these organic lesions are of various kinds, and proceed from different causes; and their treatment ought to be founded upon the established laws of diagnosis and therapeutics.

The Human Hair, Popularly and Physiologically Considered, with Special Reference to its Preservation, Improvement, and Adornment, and the Various Modes of its Decoration in all Countries. By ALEXANDER ROWLAND. Pp. 214. London. 1853.

THE whole world is acquainted with Rowland's Macassar Oil and Rowland's Kalydor; and the Melacomia, the Odonto, the Euplysia, the Aqua d'Oro, and other euphonious cosmetics, indicate the zeal of the same distinguished discoverer of specifics for the ornament of the outer man. The appearance of Mr. Rowland in the field of authorship is a startling fact, and although we have no desire to lend our pages to puffing off bear's-grease and tooth-powder, we are bound to say that his book is well got up, contains no offensive matter, and is illustrated by some curious engravings.

A Few Sober Words of Table-Talk about Table Spirits and the Rev. N. S. Godfrey's Incantations. By JOHN PRICHARD, F.R.C.S. Second Edition. Pp. 20. Leamington. 1853.

MR. PRICHARD takes too much pains to prove the folly and impiety of the Rev. Mr. Godfrey's speculations upon the diabolical origin of table-turning; but his own explanation of the supposed phenomena is equal in absurdity, although wanting the impiety, to the lucubrations of the reverend table-mover. Mr. Prichard's reference to the electrical origin of the movements merely proves that he is unacquainted with the science of electricity, and his flippant contradiction of Professor Faraday's well-known explanation, will not add to his reputation for modesty or good sense.

A Manual of Domestic Medicine; for the use of Clergymen's Wives, all Benevolent Visiters of the Poor, and for Emigrants. By A DOCTOR'S DAUGHTER. Pp. 156. London. 1853.

BOOKS like those written by a Doctor's Daughter are not in general to our taste, nor do we admire clergyman's wives the more for dabbling in physic; but we are willing to admit that, in some country districts, the assistance of a medical practitioner cannot always be obtained, and that a little correct knowledge of medical matters may do good, or prevent mischief in the interval which may elapse before appropriate aid can be procured. The present work contains a great mass of useful information, and the authoress appears to be a person of good sense and kind feeling.

A Manual of Obstetrics. By THOMAS F. COCK, M.D. Physician to the New York Lying-in Asylum. Pp. 250.

THIS work makes no pretensions to originality, but is avowedly a compilation from other authors. It consists of a series of short notes, such as might be used by a teacher instructing his pupils, or by a pupil taking down in writing the instructions of his teacher. It appears to be well adapted for the purpose for which it was designed, but it can bear no comparison with the excellent treatises on midwifery which abound in our own and in Continental languages.

Annual Statistical Report of the Belfast Union Hospital for the Treatment of Contagious Diseases. By SEATON REID, M.D., Physician to the Hospital. Pp. 11. Belfast. 1848.

THIS little pamphlet contains a brief Report of the contagious diseases, including small-pox, dysentery, and erysipelas, received into the Belfast Hospital during the years 1847 and 1848. It also gives the history of the first unequivocal case of Asiatic cholera which occurred in Ireland, the patient being a man who came from a part of Edinburgh where the disease had been prevailing for several weeks.

MADRAS MEDICAL COLLEGE.—From the last Report of this excellent Institution it appears that upwards of 150 military and civil medical students had entered for instruction. The anatomical session commenced on the 1st of October, and was brought to a close about the middle of February, during which period 79 subjects had been received, of which number 75 were dissected, 2 were given to the surgical department, and 2 were found unfit for use. The total expenses of the Medical College from May, 1851, to April, 1852, amounted to 6,714*l*. The Report, from which the above extracts are taken, is very interesting, and highly creditable to all engaged in the establishment of the College.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ESSAY UPON INJECTIONS OF THE PERCHLORIDE OF IRON, AS APPLIED TO THE TREATMENT OF ANEURISMS.

By M. MALGAIGNE.

[Read at the Academy of Medicine, November 8, 1853.]

THE author remarks, that experience has not responded to the favourable anticipations at first entertained respecting the treatment of aneurisms by the injection of perchloride of iron, as recommended by the late Dr. Pravaz. To him, undoubtedly, is due the merit of having first introduced this practice into surgery; although Monteggia suggested a similar idea, and Leroy d'Etiolles has spoken of the "injection of coagulating fluids" in similar cases. It was on the 10th of January of the present year, that M. Lallemand made this new method public by a letter read before the Academy of Sciences. In the carotid of a sheep, the injection of four drops of a concentrated solution of the perchloride of iron converted in four minutes the blood, contained in a length of four to five centim. (two to three inches) into a solid clot; the amount of blood so coagulated being estimated about a spoonful. A portion of the carotid of a horse, about eight centim. in length (three and a-quarter inches), estimated to contain five coffee-spoonsful of blood, received eight to ten drops of the perchloride of iron with the same result. Finally, Pravaz estimated that two drops sufficed for the coagulation of a coffeespoonful of blood; and that as regards the manual part of the operation, the only condition required was to exert pressure for four to five minutes below the aneurismal sac.

Almost immediately these experiments were repeated at Alfort by MM. Giraldès and Debout. M. Giraldès having intercepted by compression 11 centim. (about 4½ inches) of the carotid of an ass, injected 6 drops of the perchloride, but coagulation did not ensue. He then repeated the injection with 11 drops. This time the coagulation was effected, but the artery became hard, and lost its elasticity. An injection of 15 drops removed at once both the coagulation of the blood and the hardening of the walls of the vessel. M. Debout witnessed this change in the arterial walls with anxiety: the more so because, in one case, the artery became thin and distended, so as to present, 48 hours afterwards, a marked varicose dilatation. Moreover, he showed that the practice was not quite free from danger to the general health. M. Leblanc, who kept for some time two of the horses in which injections had been performed, noticed that they suffered from fever; and in one of the animals, killed on the 29th day, the presence of pus in the artery was confirmed. Pravaz became interested with these results, which put in peril the future of his discovery. He related the particulars of the autopsy of the sheep upon which he had performed the experiment, and which he killed two months and a half afterwards. The carotid was obliterated for above three inches; the clot, almost entirely absorbed, equalled a millet-seed in length. How, then, happened these bad results at Alfort? Without explaining himself very clearly, Pravaz insisted upon the necessity of employing only just so much of the perchloride as is necessary for the coagulation of the blood, its quantity being estimated by the size of the tumour. He added, that the approximative limits cannot be decidedly passed without the production of symptoms resembling those of intoxication, and without the re-solution of the clot. He admitted, that an excessive injection could excite an acute inflammation of the sac, to be followed by ulceration and the expulsion of the clot. The essential part of the operation consisted in so managing that there should be slow resorption of the foreign matter introduced into the tumour. He said, that in the case of an aneurism the size of a pigeon's egg, he would not inject more than four or five drops of the perchloride, except that he would repeat the operation, should the pulsations of the tumour not cease after a certain time. It must be confessed, that the experiments at Alfort and at other places, have been conducted at variance with the rules laid down by the discoverer himself, and that, therefore, objections may be raised against them. But let us add, that a first attempt, tried without any rule and with an

operative proceeding, very imperfect, did not yield in any point other than a most successful result; a fact which would seem to show that the precautions recommended by Pravaz were by no means necessary.

On 4th Feb., M. Raoult Deslongchamps treated an aneurism of the infra-orbital artery, the size of a pigeon's egg, with the perchloride. In truth, this aneurism presented many peculiarities. It is not common to meet with an aneurism of such a size in an artery almost capillary. There was no abnormal bruit; and pressure sufficed to empty it completely; the pulsations alone gave indications of its being aneurismal. (Query, a case of aneurism by anastomosis.—*Ed. Med. Times.*) M. Raoult made an oblique puncture with a narrow bistoury, when some drops of blood escaped in a flowing stream. A syringe was inserted, and some drops of the perchloride, quantity unknown, were injected. The syringe was removed, but the pulsations of the tumour were not arrested.

The following day about ten or twelve drops were injected, but the amount was guessed, *not measured.* A stylet was inserted to break down any adhesions. An aneurism which can be emptied by compression, and which, consequently, contains only fluid blood, which may be punctured by a bistoury, and traversed by a stylet without pouring forth blood to any extent, is not certainly an ordinary aneurism. The pulsation seemed to be arrested, but on the day when M. Pravaz was dwelling upon the success in this case in a communication read before the Society, M. Raoult announced that a new tumour had appeared in the same region, with pulsation as in the other, and that he did not hesitate to pronounce its character erectile. Still, singularly enough, he persisted that the original tumour was aneurismal. But Pravaz announced the approaching publication of a new case to show (in his own words) that it is impossible to pass the approximate limits fixed for the injection without the production of a symptom of intoxication, and the re-solution of the clot. What was this new case? M. Niepce related one to the Academy of Sciences, April 25, which we will repeat as in the "*Comptes Rendus.*"

Case.—"The tumour occupied the popliteal artery. Five minutes after the injection of the perchloride of iron, the tumour appeared very hard. Pressure was removed from the crural artery; and it was remarked that the pulsations in the interior of the sac had ceased. Upon removing the canula, not a drop of blood escaped.

"The following day, and for some days afterwards, there was acute inflammation of the parts about the seat of operation. On the eleventh day, fluctuation was detected upon the internal aspect of the tumour; a small puncture gave issue to 10 grammes (two drachms and a-half) of sero-purulent fluid, after which the inflammatory symptoms subsided. On the 20th day, the aneurismal tumour was reduced to the size of a nut. Here, then, was a case in which the cure was effected as rapidly as by the ligature." But, observes Malgaigne, where do we find notice of the symptoms of intoxication of which the conscientious Pravaz spoke? What was the size of the tumour? what the quantity of injection, and the method of operating?

On May 9, M. Lallemand related an observation from M. Serre, at Alais, followed also by cure; but here, too, the *résumé* is too short and concise to be valuable. The case was one of varicose aneurism of the bend of the elbow.

Case.—"The clot promptly formed under the influence of the injection; the pulsations in the tumour ceased, and did not return when the pressure was removed from the brachial artery; pulsations after a time returned in the radial and the ulnar arteries. Acute inflammation ensued in the walls of the sac. A puncture made into the fluctuating point gave issue to a small quantity of sero-purulent fluid. Afterwards an eschar separated from the part without hæmorrhage, and a rapid cure resulted."

In these two cases, then, the injection seems to have produced a radical cure of real aneurisms. But the allusions to the acute inflammation and suppuration of the sac, etc., show that even these cures were not obtained without danger. M. Lallemand affirms, that at least three times as much of the perchloride as was necessary was injected, and that such excess was prejudicial in tending to re-dissolve the clot. We have no documents to appreciate the excess of the dose employed; but, on the other hand, experience seems little favourable to the opinion expressed by M. Lallemand, and entertained by M. Pravaz. Look at the cases of M. Raoult: two injections for a tumour the size of an egg, and yet the clot held.

In the two other cases, was it the clot which was dissolved? M. Niepce found it, on the twentieth day, the size of a nut, in spite of the suppuration; and M. Serre observed the clot to become hard promptly, and then to suppress for some time persistently, the pulsations of the radial and the ulnar arteries. But there is a fact of great importance—one which may explain M. Lallemand's severe judgment—namely, that the cure, in the second case at least, was purchased more dearly than is generally supposed. In a recent article in the Journal of Montpellier, it is reported, that M. Serre related his own case in the theatre of the Hôtel Dieu St. Eloi. It was not only an acute inflammation which had alarmed the surgeon, but inflammatory disorders extremely grave, such, in short, as had nearly cost the patient his limb.

Next, a most disastrous case (for the patient died when under the author's care, from the results of the operation) excited in surgeons new cause for alarm. A mason, aged 25, had a pulsating tumour the size of a filbert at the bend of the elbow, most probably in consequence of a wound of the artery received in bleeding. One of the author's old pupils injected with the perchloride, using the graduated syringe of Pravaz, charged with equal parts of the perchloride and water. The trocar reached the interior of the tumour without difficulty; a jet of blood was the proof. The syringe was immediately adjusted, and the operator turned the screw piston five half-turns, each turn projecting one drop. The tumour still beat; nine additional half-turns were then performed, propelling five drops more. In a moment most severe pain was experienced all along the arm; the tumour ceased to pulsate; ten seconds afterwards, pulsations ceased in the radial artery; the hand became cold, and of violet colour. The following day there was a limited gangrene of the thumb. The patient was then put under the author's care. Forty-eight hours after the operation the whole forearm was mortified. Amputation was performed, the patient having assented as late as the eleventh day, the forearm then showing partial separation of the dead from the living parts, but, after temporary amelioration, the man died.

Why has not such a case stopped the practice of injection altogether? The answer is, gangrene may ensue from the application of the ligature; the quantity of the perchloride may have been too great; there may not have been sufficient care in compressing the artery both above and below. It has even been suggested, that the solution of the perchloride may have been indifferent in quality; and, although the unfortunate operator was satisfied with the properties of the fluid used by himself, the only proper preparation can be procured from M. Dubuisson, of Lyons, who possesses the secret of M. Pravaz. The first objections are reasonable; the last is met by the fact, that bad results have ensued even when M. Dubuisson's fluid was employed.

[To be continued.]

GENERAL CORRESPONDENCE.

SALINE TREATMENT OF CHOLERA.

[To the Editor of the Medical Times and Gazette.]

Sir,—I regret that you should have determined that my former letter, in answer to Dr. J. S. Reid, of Belfast, (of Nov. 12,) on the saline treatment of cholera, was too long for your pages. I shall now attempt the most condensed reply I can make to that gentleman's statements. His letter contains a tabulated account of seventeen cases of cholera, of which thirteen were fatal—treated, as he alleges, on Dr. Stevens's saline plan.

I emphatically deny that any one of his cases was treated on the plan promulgated by its author; for, ever since he has published his theory, he has strongly inveighed against opium and stimulants in the treatment of the Indian pestilence, misnamed cholera.(a) How, then, can Dr. Reid state, that he "felt bound to give it a fair trial," when he gave opium and stimulants? Seven cases of collapse comprise his first group—all died; the second group of five were not collapsed, nevertheless all perished; and, in the third table, of five slighter cases, four recovered. Now, from my

(a) A flow of bile.

own practice, and from the larger experience of others, I wonder not that only four recovered, but that the opium and stimulants had not killed them all. Moreover, Dr. Reid states, that in four cases he saw muscular action (the life of the flesh) continue some time after death; "in one, for an hour and a-half." Surely, such a physiological fact ought to have awakened the reasoning powers of Dr. Reid, who should have concluded that, in truth, the vital spark had not flown, but was only obscured by the asphyxiated heart, and therefore the worst plan he could have adopted was to give opium, which can, equally with the poison of cholera, suspend the heart's action. It is truly lamentable to peruse the physiology of the nervous system, as taught by modern authors. Do we marvel that 300 methods of curing cholera should be put forth by as many medical men, while such want of knowledge prevails in the Profession on the true motor powers of life? Will not common sense conclude that there can be but one method, instead of 300, of combating the Asiatic pestilence successfully?

When the Profession shall cease to believe that inert matter can act on vital functions, and shall know that no medicines, excepting they be powerful solvents or escharotics, can act on dead or living structure, then physiologists will see a glimmering of the true, rational principles of the practice of physic.

I deeply lament that Dr. Reid should, by his want of information on the saline method of Stevens's treatment, have misled many of your readers by his letter, and should also have been the means of prejudicing the only philosophical plan of cure for the "cholera Indica." I am, &c.

EDWARD ASTBURY TURLEY, M.D.

Ivy-house, Worcester, Dec. 4, 1853.

REPORTED DEATH OF DR. KRAMER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I should thank you for inserting in your valuable Journal that "the decease of Dr. Kramer, reported in the Journals" (see *Medical Times and Gazette*, November 19, p. 539), has not yet happened. I never felt more vigorous and healthy than at this very moment. I am, &c.

Berlin, November 30, 1853. W. KRAMER, M.D.

[We sincerely congratulate Dr. Kramer.—ED.]

THE MEDICAL EXAMINATION OF LIVES FOR ASSURANCE.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will you do me the favour to insert the following table of questions in your Journal?

The Directors of a London Life Assurance Company having desired me to revise the examination papers hitherto employed by them for the reports of their medical referees, I have advised them to adopt the following form, and to employ the same in all cases, whether it is to be filled up by the Company's own examiner in London, by a provincial medical referee, or by the ordinary medical attendant upon their assurer; simply directing, that when the life intends to appear before the London examiner, the questions printed in *italics* should be left for him to fill up. The advantages of this uniformity in the reports will, I think, be self-evident to those interested in life-office practice. I have, also, particularly advised, and this appears to me to be of great importance, that the duty of estimating the value of the life should in all cases devolve upon the London Medical examiner of the Company—that it should never be entrusted to any other person. This will account for the minute detail introduced into my proposed examination; for to carry out such a plan effectually, the reports obtained from the provincial referee, or from the assurer's general attendant, should consist of a systematic collection of facts, connected with the family and personal history of the life, of those, also, which require examinations inconvenient at a public office, and where the assurer does not intend to appear before the London examiner, the results of a complete personal examination must be included; thus presenting the medical officer who has to value the life with the data necessary to a correct estimate.

There are many of the questions to which I am anxious to direct more particular attention, and which require some further explanation on my part, but knowing well how you are pressed for space, I am fearful of occupying too much, and feel that I must be contented, at present, if you will submit the proposed examination to the opinions of those who are interested and experienced in the examination of lives for assurance. I am, &c.

London, Nov. 23, 1853. HORACE DOBELL.

THE DIRECTORS ARE CONVINCED THAT THE VALUE OF A MEDICAL REPORT WHOLLY DEPENDS UPON ITS BEING ACCURATE AND COMPLETE; WHEN SUCH IS THE CASE, THEREFORE, THEY WILL HAVE MUCH PLEASURE IN REMITTING A FEE.

Name?

1. If rejected by any other office? When?
2. If assured in any other office? At what additional premium?
3. Situation of dwelling?
4. Occupation or profession?
5. Age next birthday?
   - *a* The degree of greyness of the hair, and its natural colour?
   - *b* *If an arcus round the cornea?*(a) If slight or well-marked?
6. General appearance?
   - *a* Configuration?
   - *b* Height? *c* Weight? If increasing or decreasing?
   - *d* Which parent generally considered to be resembled in face?
   - *e* " " " " " figure?
7. If fulness of habit?
8. Habits? *a* Present? If temperate? If active?
   b Past? If temperate? If active?
9. Father? *a* If alive, age? Health?
   b If dead, at what age? (b)Cause of death?
10. Mother? *a* If alive, age? Health?
    b If dead, at what age? Cause of death?
11. Brothers? *a* Living, ages? Health?
    b Dead, at what ages? Causes of death?
12. Sisters? *a* Living, ages? Health?
    b Dead, at what age? Causes of death?
13. Have any and what relatives died of—
    - *a* Consumption?
    - *b* Insanity?
    - *c* Apoplexy?
    - *d* Disease of the brain?
    - *e* Disease of the heart, or vessels?
    - *d* Disease of the stomach, or liver?
    - *e* Cancer or tumour? (Of what kind?)

14. Are any and what relatives, living or dead, suffering now, or have they suffered, from—
    - *a* Consumption?
    - *b* Insanity?
    - *c* Apoplexy?
    - *d* Disease of the brain?
    - *c* Disease of the heart, or vessels?
    - *d* Severe disease of the stomach, or liver?
    - *e* Cancer or tumour? (Of what kind?)
    - *f* Gout?
    - *g* Rheumatism?

15. If the subject of this report has had any illness of importance? When?
16. What? *a* If rheumatism or rheumatic fever?
    b If gout?
    c If a fit, of what character?
    d If insanity?
    e If any head affection, what?
    f If bronchitis?
    g If any chest affection, what?
    h If spitting of blood?
17. If subject to *a* Fainting?
    b Headache (at what part of the head?)
    c Giddiness?
    d Singing in the ears?
    e Dyspepsia?
18. *Condition of the sight?*
19. *Condition of the hearing?*
20. If the intestinal functions are regular and healthy?
21. If piles?
22. If fistula or stricture?
23. If hernia? (Is a truss constantly worn?)
24. If any suspicion of diseased kidneys or bladder?
25. If stricture?
26. If the urine is coagulated by heat and nitric acid?

(a) The true arcus is separated from the sclerotica by a slight zone of more transparent cornea.

(b) It is desirable that the medical examiner should explain to his patient, that any indefinite statement as to the cause of death of near relatives is liable to be construed by the Directors into a tacit acknowledgment of death from some cause unfavourable to assurance; and that, when death is said to have occurred in childbirth, some further particulars of the remote and immediate causes of death must always be given.

27. If a careful palpation of the abdomen discovers any tumour? What?

28. *Pulse?* *a Intermittent or regular?* *b Weak or forcible?* *c Frequent or not?*

29. *Heart's action?* *a Intermittent or regular?* *b Weak or forcible?* *c Frequent or not?*

30. *If anything unhealthy in the character of the heart's—*
a Sounds, examined by the stethoscope?
b Impulse?
c Position?

31. *If any signs of impeded circulation in the chest?—*
a Cough or expectoration?
b Shortness of breathing?
c Spitting of blood?
d Fulness of the veins of the neck and face?

32. *The general development of the chest.*
a Subclavian regions?

33. *If any inequality or insufficiency in the expansion of the two sides of the chest during inspiration?*

34. *If anything unhealthy in the percussion and stethoscopic sounds of the chest?*
a If the regions of the upper lobes of the lungs are equally and sufficiently resonant on percussion?
b If the expiratory sound is unnaturally prolonged in the upper lobe of either lung, or anything else unhealthy in the stethoscopic sounds?
c If rhonchus or sibilus is audible about any and what portions of the chest?

If a female, in addition to the above:—

35. If the careful palpation of the abdomen discovered any ovarian disease?

36. Uterine functions at present? In general?

If married?—

37. Number of children?

38. Any miscarriages, or other peculiarities occurring during gestation?

I, , declare that the foregoing report was made by me after a careful examination of the patient, during which the chest was auscultated and percussed, the abdomen examined by palpation, and the urine analysed.

Signature.
Date.

POISONING BY ARSENICAL OINTMENT.

[To the Editor of the Medical Times and Gazette.]

SIR,—I was called on the evening of the 26th July, 1853, to see a man of the name of Bird, a joiner by trade, whom I found in the greatest agony. He stated, that he had not slept the whole of the preceding night, and that he feared his reason would go, his sufferings were so great. On inquiry, I ascertained that he had purchased some arsenic, which he had mixed with soft soap for the purpose of killing bugs, and finding pediculi upon his scrotum and pubes, had rubbed the mixture well into those parts, as well as into both axillæ. In twelve hours time he began to feel a stiffness of the neck, with slight difficulty in swallowing; the cuticle of the scrotum peeled off entirely, leaving the cutis vera exposed, inflamed and bleeding; both testes were enlarged, and could not be touched; he complained of great thirst and headache, but the symptom which distressed him most was, an indescribable sensation as if the hair was standing on end, and being pulled up by the roots. The stomach was irritable with vomiting, and pain was experienced on pressing the epigastrium. He had been purged twice freely, and said that he felt as if his bowels were on fire. Attributing the symptoms to absorption of the poison, I gave him demulcent drinks freely, made of mucilage, with eggs beaten up, applied a mustard cataplasm to the pit of the stomach, and gave the sixth of a grain of muriate of morphia every half-hour to relieve the pain. I also applied to the scrotum and pubes a lotion composed of liquor plumbi with tincture of opium, having previously washed the parts carefully with warm water. This treatment was followed up by emollient applications and poultices, but it was fully a fortnight before all the symptoms disappeared, and then with a considerable degree of debility left.—I am, &c.

THOMAS R. MICHELL, M.D., F.R.C.S.I.

Duke-street, Liverpool, December 3rd, 1853.

NOTE.—The questions printed in italics need only be filled up when the life is not about to appear personally before the London examiner.

SALINE INJECTIONS IN CHOLERA.

[To the Editor of the Medical Times and Gazette.]

SIR,—Feeling very anxious that the injection of saline fluids into the blood in cholera cases should not be conducted as heretofore, but that the fluids used should be such as will not endanger the intregity of the blood corpuscles, I shall feel obliged if you will allow me this opportunity of alluding to the subject. Some remarks recently published by me have been referred to by one of your correspondents (Dr. Marcet), and the conclusion drawn, that the injection of a saline fluid of specific gravity 1029 into the blood, is not advisable, but that the use of a fluid of specific gravity 1004 appears desirable. My solution is said to be too strong. Having considered the subject in all its bearings, and certainly not having overlooked the facts related by your Correspondent, I am desirous of again urging upon those who may be inclined to adopt this plan of treatment, to use the solution of the specific gravity I have recommended. It preserves the integrity of the blood corpuscles; it will, like all solutions, become diffused through the mass of blood, if gradually injected; and it is highly probable that but a small quantity will be required to produce the requisite vitalising effects. The injection of a saline solution of 1004 specific gravity, is dangerous even to the blood corpuscles of healthy blood, and must be far more so to those circulating in cholera, inasmuch as their contents are of a higher specific gravity, and the endosmodic current, induced through the membranes of the corpuscles by so light a fluid, will be sudden and violent, and can scarcely fail to destroy them in the same manner that distilled water destroys the corpuscles in health. The facts upon which I ventured to propose the use of the solution I recommend were many of them elicited by long study of that most important subject, the physical structure of the blood; and though we are all liable to error, and I may be utterly wrong in their application, still I feel sufficiently convinced I am right to repeat my recommendation. I am, &c. G. OWEN REES.

10, Cork-street, Burlington-gardens, December 6, 1853.

ADVERTISING FOR GRATUITOUS MEDICAL SERVICES.

[To the Editor of the Medical Times and Gazette.]

SIR,—While waiting the other morning at a patient's house, I picked up the *Midland Counties Herald*, and the first thing my eye dropped on was the advertisement enclosed:—

"TO MEDICAL PRACTITIONERS.

"Notice is hereby given, that the Council of the Borough of Birmingham are prepared to receive communications from gentlemen of the Medical Profession, being duly-qualified Medical practitioners, who may be desirous to fill the office of Medical Sanitary Inspector for the borough, vacant by the resignation of Dr. Russell.

"The office is honorary, and information respecting the duties which are involved may be obtained of the Town Clerk, or of the Inspector of Nuisances.

"Applications must be directed to the Borough Inspection Committee, under cover to the Town Clerk, on or before Tuesday the 13th of December next.—By order,

"W. MORGAN, Town Clerk.

"Town Clerk's Office, Waterloo-street, Birmingham,
November 16, 1853."

That a powerful and wealthy Corporation should be so far lost to all sense of what is due to themselves as to ask for important, onerous, and dangerous duties from a medical man gratuitously, is not to be wondered at; but the fact implied by the advertisement, viz., that Medical men can be found willing so to degrade themselves and their profession in the eyes of the public as to hawk their time and talents gratuitously, and so disparage the value of them, is, I think, to every right-minded Medical man, a source of shame and indignation. At the present time particularly, when "Local Boards of Health" are being established throughout the country, and officers of health are being appointed and paid for their services,—when in London and Liverpool the said officers are receiving 500*l.* per annum (well-earned) for their services,—is it not monstrous that in Birmingham, the Midland Metropolis, such an example of professional degeneration should be presented? As the men of Birmingham have always been foremost in asserting their political rights, so I trust that the Medical men of the place will show that they are not lost to all sense of self-respect and professional *esprit*, and that among their ranks not one will be found to offer himself as an unpaid servant of wealthy merchants and manufacturers. Lawyers, surveyors, surgeons, inspectors, and collectors, are all remunerated for their services, and I am at a loss to know on what principle medical services should be valued at nought,

and Medical men made the objects of the contempt and derision of boards and of the public.

It must not from this be inferred that I would dissuade medical men from offering their services to the poor in public charities gratuitously. The cases are totally different; in the one case, benevolent individuals give their money, and the Profession their time, with honour to both parties, and advantage to the poor, and the poor only; in the other it is a question of rates, in which, not the poor, but the affluent, are principally concerned; and it will take an acute reasoner to convince me that any Medical man is better able to give, say 100*l.* worth of services, for the benefit of hundreds of wealthy merchants, than that hundreds of wealthy merchants are able to contribute, say 100*l.*, for his services.

I am, &c.

A Worcestershire Surgeon.

MEDICAL CHARITIES ACT (IRELAND).

[To the Editor of the Medical Times and Gazette.]

Sir,—I beg to bring under your notice the enclosed orders of the Poor-law Commissioners in reference to the appearance of cholera in any dispensary district, by which you will see, that the hapless dispensary surgeon is liable to be called on at any hour of the day or night to attend, without fee or remuneration, any one (no matter how wealthy) who has, or fancies he has, that disease. True, they tell you that they provide for its treatment as an extraordinary visitation, and that the guardians will afterwards pay you; but what pay can we expect to get from guardians who consider 50*l.* (in some cases 30*l.*) a year ample remuneration for a dispensary surgeon, or from Commissioners who refuse (even since their assurance to the Deputation last June) to recommend any increase to so paltry a pittance.

To the private practitioner, many of whose wealthy patients will doubtless avail themselves of the gratuitous services of the dispensary surgeon, this order must be very injurious; but to the dispensary surgeon himself it is literally ruinous.

Were you to occupy a small portion of your valuable space in exposing from time to time the working of this arbitrary enactment, and were you to offer your advice as to the steps we ought to take to save ourselves from the process of demolition we are at present undergoing, you would confer a lasting benefit on the Profession. I am, &c. A Dispensary Surgeon.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

Tuesday, December 6, 1853.

Dr. Babington, the President, in the Chair.

Dr. Bristowe reported the result of the examination of the

OVARIAN CYST

exhibited by Mr. Part at the last meeting of the Society. There was no appearance of a malignant character; the tumour showed a nucleated fibrous structure, with abundant oil-globules, also a few cells, probably epithelial, and traces of inflammatory deposits. Dr. Bristowe mentioned, that from hospital reports it appeared that dilatation of the pelves of the kidneys was a common coincident with ovarian dropsy.

Dr. Ramsbotham remarked, that as ovarian dropsy was considered one of the opprobria of medical science, it might interest the Society to hear that Dr. Simpson, of Edinburgh, had lately treated several cases of this disease successfully by means of injection with tincture of iodine. The cyst is first evacuated, and then the tincture is injected as for hydrocele. No bad effects had been observed, and, in some cases, a cure had been effected.

Mr. Prescott Hewitt said, that this was by no means a new practice; it had long been in use on the Continent, where almost every serous membrane had been injected with tincture of iodine.

Mr. Fergusson had lately had a lady under his care, who had been treated in this manner for ovarian dropsy in Paris; and he understood from her and her husband that this was a common practice in that city.

Dr. Crisp observed, that this was not always unattended with danger. A physician to one of the Parisian hospitals had brought on an attack of fatal peritonitis in one of his patients by this treatment.

Dr. Habershon showed a portion of

INTESTINE FROM A CHOLERA PATIENT.

The whole intestine was soft and doughy, the epithelium seemed to be almost wanting. Peyer's glands were more distinct, enlarged, and containing nucleated cells; the solitary glands were also enlarged.

Mr. Mitchell Henry mentioned other cases in which these appearances of Peyer's glands had been observed. The nucleated cells had been seen in cholera patients, but he did not think that they were peculiar to these cases.

Dr. Peacock had not observed these appearances commonly in those bodies he examined during the epidemic of 1849.

Mr. Shaw exhibited a case of

RUPTURE OF THE BOWEL FROM A BLOW ON A TRUSS WORN FOR REDUCIBLE HERNIA.

The patient was a cabinet-maker, aged 40 years, and he had worn a truss for many years on account of a hernia, which, however, seldom came down, and was always easily reduced. He fell forwards against a table he was moving, and it struck against the truss, the hernia not being down at the time, so far as he knew. The blow produced great pain and he fainted, but on recovering was able to walk for some distance. Peritonitis came on, and the patient died. On examination, the mouth of the hernial sac was found freely open. There were marks of peritonitis more acute in the neighbourhood of the hernial sac, and a portion of bowel was found perforated, but there was no appearance of it having been within the sac at the time of the blow.

Mr. Shaw also showed a portion of the penis of a man who had had the remainder of the organ amputated four years previously, on account of cancer. At the time of the operation some of the glands of the groin were in an enlarged state, and had remained latent for some years, but at length showed symptoms of malignancy and ulcerated, leading to the death of the patient. It would be observed that the orifice of the urethra was not contracted. Contraction of the urethra was a great source of trouble after amputation of the penis.

Mr. Fergusson could fully corroborate the truth of this last statement, but believed that much depended on the method of operation. Formerly it was the custom to amputate the penis by a single sweep of the knife, and the wound was left to heal as it could; but it has been found better to slit up the urethra for a little way, and keep the orifice open by connecting the mucous membrane with the skin by means of sutures.

Mr. Shillito exhibited some examples of

DISEASED BOWEL.

In the first case there had been inflammation of the bowels and adhesions among them. There was a perforation of the colon, and a portion of hardened fæcal matter was found impacted in the opening. The pain had been referred entirely to the umbilical region. The other case was one of double invagination of the colon and rectum. During life, the bowel had several times been protruded to the extent of some inches, and had remained so for some time before it was reduced. Constipation had apparently been the cause of the protrusions. The bowel was found so far closed as only to allow the passage of a probe; nevertheless there had been a very fair evacuation from the bowels a short time before death.

Mr. William Adams mentioned cases in which a foreign body, as a fruit-seed or a hair, had served as a nucleus around which fæcal matter had collected, leading eventually to a perforation; and inquired whether anything of the kind had been observed in the former of Mr. Shillito's cases.

Mr. Shillito said that the concretion was formed entirely of hardened fæcal matter, and did not appear to have had any such nucleus.

Mr. Prescott Hewett mentioned other cases in which peritonitis had been brought on by hardened fæcal matter in the appendix cocci without any discoverable nucleus.

Mr. Henry Lee had found a pin serving as a foundation for a collection of fæcal matter in a patient who had died of peritonitis in the Lock Hospital. The vermiform appendix was ulcerated and swollen, and the point of the pin had made its way through the coats of the intestine, apparently in a gradual manner. The symptoms had become more marked after the use of mercury, on account of syphilis.

Mr. Hutchinson exhibited an

ANEURISM OF THE ARCH OF THE AORTA FROM A CHILD FOUR YEARS OLD.

This was remarkable chiefly on account of the age of the patient. He had died of acute pericarditis, and, on examination, an aneurism was found hanging from the transverse part of the arch of the

aorta, about the size of two chesnuts. As there was no other disease of the arterial system, and as the arterial coats were more affected on the outside than in the interior of the artery, Mr. Hutchinson thought that this was an instance of an aneurism formed by an abscess of a gland opening into the aorta. There were tuberculous deposits in the lung. Mr. Hutchinson also showed the lungs of a child who had been affected with pleurisy with extensive effusion, some time before death. The left lung was collapsed and carnified; the right was dilated so as to fill the whole remaining part of the chest. The immediate cause of death was apparently an enlarged gland preventing the entrance of air into the more useful lung.

Mr. Hutchinson also exhibited the portrait of a child born without extremities, a fuller account of which will be found in another part of this Journal.

Dr. Crisp thought that the name aneurism was not properly applied to such cases as the one first mentioned by Mr. Hutchinson; that they were merely slits in an artery, with effusion of blood. No case of true aneurism was on record at so early an age; some of the coats of the artery were always wanting in these cases.

Mr. Hutchinson observed, that a distinction had always been made between true and false aneurism, and that this might be called a false aneurism.

Mr. Partridge said, that cases had occurred, even at this age, where all the coats of the artery might be traced and dissected out in the aneurism.

Dr. Crisp had examined many such supposed cases, and had always found some one or more of the coats wanting.

Dr. Peacock had examined the tumour, and thought the name of aneurism fairly applied. He agreed with Mr. Hutchinson's idea of its probable mode of formation.

Mr. Roberts exhibited (for Dr. Bence Jones)

A TUMOUR FROM THE BRAIN.

The man from whom it was taken had not been able to walk when a child until he was three years of age, after which time, however, he became stronger, and grew up apparently a healthy man. A short time ago, when lifting a child, he suddenly felt, as he said, something "give way in his head." After this, symptoms of compression of the brain came gradually on, followed by insensibility and death. On examination a tumour was found adherent to the falx cerebelli. It was a question whether this tumour was congenital or not. Mr. Quekett had examined the tumour, and found it composed of two layers apparently formed at different periods; the latest malignant in its characters. It was probable that the other part of the tumour was congenital, which would account for the inability of the patient to walk as soon as most children. As the skull expanded the tumour found more room, and did not interfere with the functions of the brain until a subsequent diseased action was set up in the part.

Mr. Spencer Wells exhibited

A MALIGNANT GROWTH FROM THE DORSUM OF THE ILIUM.

The patient was an apparently healthy man, 24 years of age. Mr. Wells saw him first in May, when he complained of pain and swelling over the left hip, which he said he had felt more or less since the previous October, and had been aggravated by a blow in April. The swelling was then scarcely to be detected, and, with the pain, disappeared for a time under the use of fomentations. On the 27th of June, Mr. Wells saw the patient again, in consultation with Dr. Davidson, of Kensington, and other practitioners. There was then a tumour over the dorsum of the ilium, about the size of an orange. The skin over it was perfectly healthy and moveable, but the tumour itself was so firmly fixed at the base that it was clearly either attached to, or closely bound down upon, the bone. The pain at night was very considerable, and the general health had been greatly impaired. A puncture was made to determine if it could be a deep-seated collection of pus in connexion with carious bone, but some blood and serum alone escaped, and the conclusion arrived at was, that the tumour was malignant, and that any delay in its removal would diminish the probability of a successful result; but the patient at first objected, and Mr. Wells did not remove the tumour until the 22nd of July. It was firmly attached to the bone, and portions of diseased bone came away with the tumour. So much blood oozed from the exposed bone that it was necessary to apply pressure to check it, and defer the attempt to remove all the diseased bone. On a subsequent examination, the disease was found to implicate so much of the ilium, that it was thought better simply to keep the wound as clean as possible, and support the patient by eggs, wine, beef-tea, etc. Profuse fetid discharge, with typhoid fever, came on, and the patient died on the 23rd of August.

Mr. Wells regretted that he was unable to show the bone, but stated that a circular portion, three inches in diameter, had been completely destroyed, leaving a large perforation. The tumour was of a very malignant character. It had been examined microscopically by Mr. Quekett, who said that it consisted almost entirely of cells, without connecting tissue, in an envelope of fibrous tissue.

Dr. Garrod showed

SOME SUGAR FROM THE URINE OF A PATIENT WITH CONGESTED LUNGS.

The patient, a little before death, had taken some arrowroot. The urine passed shortly after this was high-coloured and turbid. On examination with the usual potash, copper, and fermentation tests, after decolorisation of the urine, sugar was found in considerable quantity. This was an interesting case, as illustrating one of the modes of the formation of sugar in the urine—viz., from the imperfect assimilation of food, on account of the defective performance of respiration.

Dr. Thompson asked Dr. Garrod whether it was common to find sugar in the urine of those who are in a dying state.

Dr. Garrod said that he had not had many opportunities of ascertaining this point, for patients do not often digest food so short a time before death.

EPIDEMIOLOGICAL SOCIETY.

MONDAY, DEC. 5, 1853.

Dr. BABINGTON, President, in the chair.

A paper was read by Dr. M'William, entitled—

THE INDIAN PLAGUE AND THE BLACK DEATH.

BY AUGUST HIRSCH, M.D., of Dantzic (Prussia.)

The author commenced by stating, that in the whole history of epidemics, there are few epochs more interesting than that of the fourth decennium of our century; for then, within the compass of a few years, we find many of the most important diseases spread epidemically over the globe. These were preceded by agues, which prevailed at the close of the third decennium, and by the influenzas of the years 1831-33. Cholera, which in 1823 had stopped short on reaching the frontier of Europe, overspread with the force of a torrent the Russian empire, and in 1831 entered Germany, where, in the southern parts of the kingdom, it was soon followed by typhoid fever and dysentery. At the same period "sweat fever" appeared in France and Italy, and, for the first time, "typhus cerebralis" was propagated epidemically. In North America cholera, typhus, and yellow fever, raged. Turkey, Western Asia, Egypt, and the greater part of North Africa, were ravaged by typhoid fever and Oriental plague; and it was just at that period that a disease of a new and most malignant character broke out in the north-west part of Hindostan. Research among the archives of the Medical Board, however, made it evident that the same disease prevailed some years before in those regions; but the attention given to it had subsided soon after the epidemic ceased. The author considers the disease in question to have been a very decided plague, specifically modified; and that, in order to distinguish it from the Oriental plague, it may justly be denominated the "Indian Plague." The first historical report of the outbreak of the Indian plague dates from the year 1815, in the provinces of Kutch and Guzerat, which in the previous year had suffered from terrible famine. Neither the origin nor the course of the epidemic could be distinctly traced, but there is no doubt that the disease already, in May, 1815, had spread over some parts of Kutch, and the district of Wagoor, that it raged in these territories until the following year, and made great havoc among the inhabitants. At the same time the epidemic appeared in Kattywar, whence it spread to Scinde, and in November it reached Hyderabad, where from 60 to 70 persons daily fell victims to the plague. The epidemic entered the north-eastern district of Guzerat in the beginning of 1817, and abated in the fall of the year. With the rainy season of 1819 it burst forth with new vigour, and overspreading the territory which had suffered during the previous year, reached the northern part of Guzerat, and in the east the Zillah of Ahmedabad. With the close of 1821 the epidemic everywhere disappeared; and but for the remark of Dr. Rankine, that the plague had been observed in 1823 in the mountainous territory of Kamoon, we have no information of its re-appearance until 1836, when it broke out with great malignity in a country far removed from that above-mentioned. It was then that the disease for the first time attracted general attention, and gave rise to scientific inquiries, and the adoption of sanitary measures. The Radjpootana States were the

scene of the ravages of this epidemic; and as the first Report of the disease came from Pali in the province of Marwar, it has obtained the name of the Pali plague, although it is anything but certain that the epidemic originated in that place, for it also raged at the same time (July, 1836) in other districts of that province. After having traversed the greater part of Marwar, the disease passed the chain of hills separating the eastern borders of this province from Meiwar, overspread that country, and afterwards the district of Adjmer. Early in 1837, when the epidemic in Marwar had nearly ceased, it appeared in Misserabad, and declined with the rainy season. At the close of 1837, it again invaded Marwar, especially the town of Pali, and continued till the spring of the following year. Since that time, up to 1850, there is no further report of the prevalence of the malady. It was in this year that a fresh outburst occurred at Ghurevhal and Kamorn, in the Himalayan territory. Dr. Hirsch gives a very minute and graphic description of the mode of invasion, and of the general symptoms of the disease. The disease, although a bubonic plague, was distinguishable from the Oriental plague by an attendant pulmonary affection, with hæmoptoë. The mortality was dreadful; the supposition that it was from 75 to 80 per cent. of those attacked being by no means exaggerated. In the town of Pali alone, in a population of 20,000 inhabitants, 4,000 persons fell a sacrifice to the plague in the period of seven months. The disease did not appear to be contagious, nor was it at all influenced by season. In the concluding portion of the paper, which indicated much learning, labour, and deep research into the writings of ancient as well as modern authorities, the author adduced strong evidence as to the identity of the Indian plague with the black death of the fourteenth century,—that terrible epidemic which fills one of the darkest pages in the history of mankind.

Dr. Snow said, that our inattention to the affairs of our Indian empire was illustrated by the fact, that the only paper that had been read before any of our Societies on this subject was by a German. Dr. Snow had seen an account of a form of the plague which had been seen in India, by Mr. Rennie, who visited that part of the country where it prevailed. From this account, Dr. Snow considered it a form of the plague of the Levant, though Mr. Rennie thought it different, as not being contagious; but he had not seen the true plague, and had formed an extravagant notion of its contagious character. Mr. Rennie made a distinction between *contagion* and *infection*, and considered the Indian plague very infectious, and recommended the burning of the houses where it had appeared. It first appeared at the north-west corner of the Himalayah range; but, as we know nothing of the diseases to the north of this range, it is impossible to say whether it had been brought from some other place. Dr. Snow reminded the Society, that, in a paper read some time ago, he had come to the conclusion, from the similarity between the course and localities of the two diseases, that they were propagated in the same manner, probably by the swallowing of infectious matter with the food; and he mentioned, that the natives of India believe that the infection may be conveyed from place to place in provisions, as in a pot of *ghee*.

Dr. James Bird had not actually seen the disease, but after a careful examination and comparison of the various accounts to be found in the reports of the Bombay and Calcutta Medical and Physical Societies, and from information derived from other sources, he was satisfied that this Indian disease is a form of sporadic plague, propagated by pulmonary imbibition in the high-walled, crowded towns of India, and not communicated like the ordinary epidemic plague of the Levant, which required malarious influences for its propagation. Dr. Bird had seen cases of plague occurring sporadically in Upper Egypt, when the disease was not epidemic; the natives did not consider this form of the disease infectious, they handled the dead and sick with impunity, and confidently asserted that it would not spread.

Dr. Camps regretted the absence of the author of this interesting communication, and expressed an opinion, that as we learned more of the records of the Hindoos, we might find, if not a medical history of the disease, at least some account of its former ravages. Dr. Camps drew attention to the fact mentioned by Dr. Hirsch, that if the disease could find an outlet by means of a bubo that he might do well, but if not, that the poison was sure to prove fatal.

Dr. M'William wished to ask Dr. Bird whether attention had been drawn to the conditions under which the disease spread in India. In Egypt the plague was annihilated both by high and low temperatures, and only spread when the heat was moderate. Did a similar law prevail in India?

Dr. Milroy wished to make a few remarks before the question was answered. He considered that this paper clearly showed that true plague of the Levant had appeared in India, and that *spontaneously*; for its appearance in an inland instead of a maritime district seemed to exclude the possibility of its having been conveyed from the Levant. It was very important to bear this fact in mind, as it shows that this and similar diseases may develop themselves in different countries spontaneously. The fact of the occurrence or absence of hœmoptysis was not a sufficient ground for a distinction between the two diseases. It arises from the same cause as the black vomit of yellow fever, viz., congestion of the capillaries, in the one case of the stomach, in the other of the lungs. Nor is the absence or presence of infection any ground for a distinction. Plague was not nearly so contagious as is generally supposed, and the sporadic cases could easily be explained by the crowded and filthy houses in which the natives live. Attention should be drawn to the simultaneous appearance of plague, cholera, typhus, etc., in different parts. Probably, at certain times, a malarious influence spreads over the whole globe, and causes different forms of disease in different parts of the world.

Dr. Bird, in answer to Dr. M'William, observed, that in Egypt the plague disappeared after St. John's day, when the weather became dryer; but he was not aware that any similar law was known to hold in India. He concurred with Dr. Milroy in thinking these different epidemics essentially the same, and varying only in the circumstances in which they occur.

Dr. Snow observed, that the plague was most prevalent at Gourlah when the temperature was moderate—between 60° and 70° Fahr.; but that cases were also known in cold and in hot weather, as was also the case, but rarely, in Egypt.

A vote of thanks to the author for his elaborate and interesting paper was passed by acclamation; and a paper was announced for the next meeting of the Society on the "Prevalence and Mortality of Cholera in our Indian Army," by Mr. Finch.

MEDICAL SOCIETY OF LONDON.

DECEMBER 3, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

EXOSTOSIS OF THE SKULL IN EPILEPSY.

DR. GIBB presented to the notice of the Fellows a small exostosis of the parietal bone of a woman who had died in the hospital at Montreal from delirium tremens and epilepsy. He stated, that the patient was then 40 years of age, but had had epileptic fits from the period of puberty. Little was known of her history. During the four days in which she remained in the hospital, the tremulousness was intense, and the epileptic fits recurred three times a-day. The *post-mortem* examination showed but a slight adhesion between the exostosis and the dura mater, and the latter membrane was entire and non-vascular.

Mr. Adams conjectured that the bony growth proceeded from the dura mater, and not from the bone.

Mr. Streeter illustrated the case by reference to a preparation in St. Thomas's Hospital, in which the surgeon had used the trephine, and chanced to remove the bony growth.

Dr. Camps was of opinion that the relation of the exostosis to the epilepsy was merely that of a coincidence.

Mr. Milton read a paper

ON THE PATHOLOGY AND TREATMENT OF SWELLED TESTICLE.

He had found no proof that either neuralgia, tubercle, or carcinoma, were caused by orchitis. He had only seen the common proceeds of inflammation so caused. These, however, were serious enough, and he leaned to the opinion, that neglected orchitis very often impairs the functions of the testicle. A long time after a so-called cure, he had found the epididymis hard and diseased; and, after death, examinations of the testicle, where a similar hardness could be felt through the scrotum, showed induration and contraction of the vas deferens. Mr. Holmes Coote had also found this tube contracted, and its walls softened. Impotence without wasting might arise from the inflammation having affected the nerves of the testicle. Mr. Milton examined the various plans of treatment; but, first of all, suggested preventive treatment by means of the salts of potass, and graduated injections. In upwards of six hundred cases of gonorrhœa treated thus, three only had been attacked, and in them it had not had a fair trial. He thought antiphlogistic treatment useless. Its advocates admitted that it often failed, that relapses occurred, etc. He preferred ½-grain doses of morphia, with acetate of ammonia, and blistering on the second or third day. He applied hot water to the scrotum, and allowed nutritious diet and stimulants in moderation.

The discussion which followed the reading of the paper was restricted to the treatment of the disease.

Mr. Sturt referred to the case of one of his patients, in which the depletory and the tonic plans of treatment had been equally successful. He had treated the inflammation of one testis with leeches, fomentation, cold lotions, opium, and salivation, and the other with quinine, iron, and cold lotions. He informed the meeting, that, as he understood, a freezing mixture was employed for that purpose at King's College Hospital, and was inclined to attach value to it.

Mr. De Méric was of opinion, that, in treating orchitis, we ought to be guided by those principles which are known to govern the treatment of inflammation in general. On this ground, he objected, on the one hand, to the treatment by narcotics, since it would allow the disease to run on to effusion and destruction of the functions of the testis; and, on the other, to the injections of nitrate of silver, since so powerful a stimulant could only add to the disease.

Mr. Hancock advocated the opiate plan of treatment in ordinary cases of orchitis, believing that it did not tend to effusion; but, in orchitis with rheumatic gonorrhœa, he had found the greatest benefit from the exhibition of lemon-juice. He objected to the use of leeches, and stated, that he never bled, even in pleuritis caused by fractured ribs.

Mr. Dendy was of opinion that the exhibition of narcotics or sedatives would be ineffectual in acute cases, while it might relieve exalted nervous sensibility of the organ.

Mr. Weedon Cooke commended the exhibition of 5j. doses of tincture of hyoscyamus, as employed by Mr. Gay at the Royal Free Hospital. He (Mr. Cooke) was also accustomed to use depletion, and even to open the veins of the scrotum in acute cases.

Mr. Acton coincided in many of the author's views, but believed that the improved mode of treating gonorrhœa had almost driven orchitis from private practice. In acute cases, he always employed bleeding, rest, and compression with adhesive plaster. He also approved of large doses of opium in preference to hyoscyamus, but did not commend the use of mercury. He should object to the application of blisters to the scrotum, but had not seen any evil results follow in those cases in which that organ had been accidentally blistered. He eulogised the application of blisters to the penis or perinæum, in gonorrhœa, as recommended by Mr. Milton, in his published works, and preferred a solution of cantharides in chloroform, which, being pencilled over the part, left a thin coating of cantharides, and produced a good blister in a few hours. In advocating the use of opium, he did not believe that it induced effusion, and he denied the statement, that induration of the epididymis necessarily led to the destruction of the functions of the testis.

Dr. Gibb recommended the external application of 1 grain of the biniodide of mercury in 10 grains of lard, as adopted at Montreal, and the internal administration of potassii iodidum and tinct. hyoscyami.

Mr. Ross had employed active treatment in acute cases of orchitis produced by cold or a blow; opium, in large doses, in gonorrhœal cases; and approved of the use of lemon-juice, or similar remedies, in those connected with rheumatism.

Mr. Milton, in reply, impressed upon the Fellows the importance of so completely curing the disease that no thickening of the epididymis should remain. It was with this object that he had used blisters so largely and perseveringly. He believed that an indurated epididymis is frequently a cause of sterility.

The paper to be read at the third special physiological meeting of the Society on Monday next, December 12, is by Dr. Snow, "On the *Modus Operandi* of Narcotico-irritants."

WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON.

December 2, 1853.

Dr. Simpson, Vice-President, in the Chair.

Dr. Baines read a paper

SCROFULOUS INFLAMMATION OF THE EYE.

In his concluding remarks upon the treatment of such cases, Dr. Baines dwelt upon the necessity of remembering the nature of the disease, and that, as these inflammatory conditions of the eye occurred in debilitated and weakened states of the system, the vigour of the body must be kept up by the ordinary hygienic means, while as a medicine he was strongly disposed to advocate the use of the bichloride of mercury, in small doses, a remedy which was capable of producing the full alterative effects of mercury in the system, and of inducing a healthy action, without giving rise to any of those distressing results which render the administration of other forms of this mineral so objectionable in scrofula. To obtain the full value of this drug, however, it was necessary that its use should be extended over a considerable period of time. It possessed the advantage, also, of being capable of administration in combination with iron if thought advisable, as well as with quinine and other forms of bark. Referring to that form of the disease which chiefly affected the conjunctiva, Dr. Barnes thought that aperients, occasional leechings, salines, and alkalies, followed, if necessary, by bark and quinine, were more likely to be successful than if treated by the bichloride, which he considered would more properly be reserved until the acute stages had passed away. The same view of the efficacy of this remedy in strumous affections of the ear, appears to have been taken by Mr. Wilde, of Dublin, who extols its use. Several cases bearing upon the above treatment were related, in all of which decided signs of scrofula were present in the system, and in which the bichloride was successful in ordinary doses. In one of these cases the inflammation had involved the sclerotic coat and the iris, the latter being dull, inactive, and contracted. Under the continued use of this preparation, recovery took place after all other treatment had been unavailing. The author had not found iodine and its preparations particularly applicable in such cases.

At the close of the meeting, the Society was adjourned to Friday, the 20th January, 1854.

MEDICAL NEWS.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 2nd inst.:—

Brady, George Stewardson, Gateshead.
Brierley, Thomas Booth, Tattonhall, Cheshire.
Cattell, William, Weston-under-Lizard, Stafford.
Greenhow, Henry Martineau, Hon. East India Company's Service, Bengal.
Juler, Henry Cundell, Norwich.
Naters, William Edward, Sandyford, Newcastle-on-Tyne.
Orton, John, Foleshill, near Coventry.
Silvester, Henry Robert.
Smith, Rowland, Boxted, Suffolk.
Stephens, Joseph, Probus, Cornwall.
Thompson, Henry, Dublin.

Licentiates in Midwifery.—The following gentlemen, having undergone the necessary examinations, were admitted licentiates in midwifery of the Royal College of Surgeons of England, at the meeting of the Board of Examiners on the 7th inst.:—

Cockell, Frederick Edgar, Dalston; diploma of membership dated Nov. 18, 1853.
Evans, William, Ystradyfotwg; March 11, 1853.
Harris, Samuel, Horbling, Lincolnshire; Nov. 26, 1851.
Lane, James Cliefe, Grosmont, Hereford; Jan. 18, 1850.
MacGreal, Jeremiah Henry, Bolscott, Oxon; May 3, 1844.
Ringer, Theobald, Clifton; July 20, 1849.
Stabb, William Wilking, Ilfracombe; Dec. 12, 1851.
Stephens, Joseph, Probus, Cornwall; Dec. 2, 1853.
Tucker, Silvanus, Bridport; Jan. 14, 1853.
Waller, Edmund, Chesterfield; July 11, 1853.
Waterhouse, John Hodgson, Sheffield; Nov. 4, 1853.
Woodman, William Robert, Exeter; July 23, 1851.

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 1, 1853:—

Adams, Charles Slater, Wednesbury, Staffordshire.
Ludlow, William Henry, Leir, Leicestershire.
Roberts, William, Mynyddy-Gof, Anglesea.

APPOINTMENTS.

Naval.—Surgeon John F. Charlton, M.D. (1845), recently serving in the Phœnix screw steam-sloop, to the Boscawen, 70, at Chatham, fitting as flagship for the West Indies station. Surgeons: William M'Leod, M.D. (1853), to the Racehorse, 14, sloop, at Devonport; Alexander Muirhead, M.D. (1838), from the St. Jean d'Acre, 101, screw steamship, to the Victory, 101, flagship at Portsmouth. Assistant-Surgeons: Christopher K. Ord, M.D. (1847), recently serving in the Archer screw steamsloop, paid off at Woolwich last week to the Boscawen; George H. Ryan (1852), from the Leopard, 18, paddle-wheel steam-frigate, to the Agamemnon, 91, screw steamship, for service on the Mediterranean station; William T. Wilson (1846), to the Princess Royal, 90, at Portsmouth. Acting Assistant-Surgeons: Terence H. Wall (1853), to the Leopard, vice Wilson; Thomas Coghlan

(1853), to the Royal George; David Campbell (1853), to the Racehorse; C. D. M'Carthy (1853) and John Hudson (1853), to the Victory flagship at Portsmouth; Surgeon Walter Lawrence (1852) to the Buzzard, 6, paddlewheel steam-sloop, North America and West India station.

MILITARY.—13th Foot: Surgeon Thomas D'Arcy, M.D., from the 30th Foot, to be Surgeon, vice Dowse, who exchanges. 30th Foot: Surgeon Richard Robert Dowse, from the 13th Foot, to be Surgeon, vice D'Arcy, who exchanges. 54th Foot: William Mitchell Firth, gent., to be Assistant-Surgeon, vice Moorhead, appointed to the Staff. 56th Foot: Assistant-Staff Surgeon Francis Walters Knox, to be Assistant-Surgeon, vice Lawson, deceased. Hospital Staff: Assistant Surgeon Thomas Moorhead, M.D., from the 54th Foot, to be Assistant-Surgeon to the Forces, vice Knox, appointed to the 56th Foot.

DEATHS.

FOOKES.—Dec. 1, in Cambridge-street, Hyde-park, Robert Fookes, Esq., of Stalybridge, Dorset, aged 52. The immediate cause of his death was an epileptic attack, but his illness commenced several months before, with fever, brought on by the fatigues of the previous winter. He had had, during a period of thirty years, a very extensive and laborious practice, for which he was in every respect,—physically, morally, and intellectually,—well qualified. He was a man of great vigour and energy, scrupulously honourable in all the affairs of life, and open-hearted and generous in the extreme; and those qualities were brightened by a truly Christian spirit which adorned his whole life. No wonder, therefore, that such a man was beloved and respected! Rich and poor alike sought him in their troubles; and he rarely failed, either as the skilful practitioner or the sympathising friend, to alleviate their distresses. No man ever more thoroughly endeared himself to all around him, for he was never weary of doing good; and it may be safely predicted that all classes will long venerate his memory, as their physician, their benefactor, and their friend!

WATKINS.—On the 2nd of December, at 23, Clare-street, Clare-market, David Watkins, Esq., surgeon, aged 38, deeply regretted by those who have experienced his professional kindness and skill, and as much so by those who were aware of his social qualities. Mr. Watkins was a surgeon possessed more of practical skill than of theoretical knowledge, an excellent operator, a good judge of diagnosis and prognosis, and well acquainted with the treatment of disease. It will be long, indeed, ere his loss can be replaced in the neighbourhood where he practised. His friends can never feel that that loss can be replaced. He ever exhibited a most kind and obliging disposition and an honest heart: in fact, he was universally beloved. His father was a Dissenting clergyman in Carmarthenshire; but, having a brother in the Medical Profession, his attention was early directed to it, and he became a student at the Borough Hospitals, where his name will long be remembered, as, from his assiduity and earnest application to his studies, he soon acquired and retained the goodwill and friendship of his teachers. It was the same throughout his life. It was impossible to know, and not to be attached to him. Originally of a most robust frame, the ravages of disease were of late years clearly marked. For a long while past he suffered fearfully from rheumatic gout, generally affecting the extremities, and thus undermining the strength, but occasionally invading the chest. During 1848-49, he held a public appointment as one of those specially appointed to repel the epidemic then prevalent. In his neighbourhood it was very severe and fatal, and the exhausting labours he had to perform nearly terminated his existence. They resulted in a very severe illness, from which he escaped with difficulty. Subsequently to this attack, from which he never fully recovered, he suffered from bronchial mischief and emphysema; these degenerated into pulmonic phthisis; and on the 2nd of this month he expired, partly from exhaustion, and partly from suffocation, from the rupture of a large blood-vessel in the lungs. His friends must ever deeply regret his early decease.

ROYAL INSTITUTION.—At the general meeting held on Monday, J. Collis, Esq., Benj. Gray, Esq., John Ferguson, M.D., and T. Spencer Wells, Esq., F.R.C.S., were elected members. The Secretary announced, that Professor Faraday would deliver a course of lectures in the Christmas vacation on Voltaic Electricity, and that courses of lectures by Professor Tyndall, Wharton Jones, and Miller would be given before Easter. It was also announced, that the Friday evening meetings would commence on the 20th January, 1854, with a discourse by Professor Faraday on Electric Induction. Professor Tyndall, W. R. Grove, Esq., Professor Owen, Drs. Conolly and Bence Jones, are expected to give discourses on the succeeding Friday evenings.

UNIVERSITY COLLEGE.—At a meeting of the Council, on Saturday last, the Longridge Prize of 40*l.*, for general proficiency in medicine and surgery, was awarded to Mr. F. W. Sayer, of Newport, Isle of Wight.

MEDICAL BENEVOLENT COLLEGE.—We are requested to state, that the announcement of the amount collected in St. Michael's Church, Pimlico, on the 20th ult. (73*l.*), in aid of the funds of the College, was inadvertently omitted in the list of contributions advertised last week.

SCIENTIFIC SOCIETIES OF THE METROPOLIS.—A Deputation on the subject of the juxtaposition of the Scientific Societies of the Metropolis had an interview with the Earl of Aberdeen yesterday, at his official residence in Downing-street. The Deputation consisted of Colonel Sabine, V.P.C., Treasurer R.S.; Mr. Thomas Bell President Linnæan Society; Mr. Thomas Graham, V.P. Chemical Society; Sir Robert H. Inglis, F.R.S; and Mr. W. R. Grove, F.R.S.

NAVAL MEDICAL OFFICERS.—As an illustration of the great interest taken in the welfare of the Medical Officers of Her Majesty's navy by Medical men generally, we may mention that petitions, numerously signed (in addition to those mentioned in our leading article of Saturday last), have just been sent up for presentation from the following important places:—Portsmouth, Hull, Wolverhampton, Burton-on-Trent, Edinburgh, etc. Our friends in Ireland have now come forward in this good cause, as petitions from Carrickfergus, Waterford, Co. Tyrone; Newry, Dublin, Donaghadee, Managhan, etc., will testify. Every Medical man in Guernsey has signed and forwarded a petition to Mr. Stone, of Royal-hill, Greenwich, who has now about thirty for presentation in the ensuing session.

TESTIMONIAL.—A meeting has been held at Witney, Oxon, of some friends of the late Edward Augustine Batt, Esq. (M.R.C.S. 1824), at which a public subscription was started for the purpose of erecting in the parish church a suitable monument to his memory, "as a lasting testimony of gratitude for his long and eminent professional services to themselves, their families, and the poor, and a memorial of their personal esteem and regard."

THE MONUMENT TO THE LATE DR. MOIR was inaugurated at Musselburgh on Friday, Dec. 2.

GREAT MORTALITY had occurred in the packet-ships arriving at New York since last advices. On board the ships William Tapscott, American Union, Emma Fields, Centurion, and Calhoun; hence the deaths had been 62, 80, 13, 42, and 54, respectively; the Corinthian, from Havre, 41 deaths; the Statesman, from Antwerp, 25; the Delaware, from Bremen, 15; and the Gottenburg, from Hamburg, 27 deaths.

JAMAICA.—The public health, according to the last advices, was more satisfactory. The yellow fever had disappeared entirely.

YELLOW FEVER has again appeared at Natchez (U.S.), with fatal effect.

UNQUALIFIED PHARMACEUTISTS. — THE QUEEN *v.* THE REGISTRAR OF THE PHARMACEUTICAL SOCIETY OF LONDON.—Sir F. Kelly moved for a rule, calling upon the Registrar of the Pharmaceutical Society of London to show cause why a *mandamus* should not issue, commanding him to remove the names of certain parties from the register of the Society. The object of the application was, to try the right of certain persons to have their names on the register. In order to obviate the evils which had arisen from ignorant and unqualified persons practising as chemists and druggists, the Pharmaceutical Society was established in the year 1842. This Society, in the following year, obtained a Charter of Incorporation, by which the qualifications of members were defined; and, subsequently, in the year 1852, an Act of Parliament was passed, which confirmed the Charter. The question now intended to be raised was, whether any persons were entitled to be on the Register of the Society, except: first, those who were members at the time when the Act passed; and, secondly, those who afterwards underwent an examination, and obtained a certificate of qualification.—Lord Campbell expressed a doubt whether the Court could grant a *mandamus* to remove these names. The Court had refused a *mandamus* to take off a seal of a Corporation.—Sir F. Kelly said, the Act of Parliament was imperative in requiring the Registrar to "make out and maintain a complete register of persons being members of the said Society; but it appeared that as many as 650 persons had been improperly entered without having obtained a certificate of qualification.—Lord Campbell said, it was quite clear the learned counsel could not have a rule in the terms prayed; but he might take one in the terms of the Act of Parliament, commanding the party to make and maintain a complete register.—Sir F. Kelly said, it was considered a great evil that these unqualified persons should be on the register, and very unjust, also, to those members who had undergone the examination.—Rule *nisi* granted in the terms of the Act.

HYDROPHOBIA AND QUACKERY.—At an inquest held lately at Merthyr, on a boy named Richards who had been bitten by a mad dog, it appeared that the father took the deceased to one Rees Jones, an engineer, who administered blue-stone powder and milk, as a "certain cure." On his examination, Jones said: "I gave David Richards a powder that I believed to be a cure for the bite of a mad-dog—the stone is called 'llith faen.' It has been in my possession fourteen years. Had it from Mr. David Saunders, Baptist minister, at Merthyr. I have administered it to thirty-six

people." The journals add in this engineer's justification, "that *he never makes a charge, and is an honest man.*" Mr. Probart, surgeon to the Plymouth Ironworks:—"I was called in to see Evan Richards, and found on going that his father had taken him to Rees Jones to take some remedy for the bite of a mad dog. I intended to cut out a portion of the flesh, and apply caustic, as this is the only means of curing, and is generally successful if done immediately. The boy was brought to me at the surgery next morning; it was then too late to cut." Verdict: "Died from hydrophobia."

ARTIFICIAL FECUNDATION.—At the fish manufactory (so called) at Huninguen, there are now 200,000 eggs of the Rhine salmon and of the trout of the Swiss lakes, duly fecundated; and at the College de France, Paris, there are 100,000 of the same description also fecundated.

MORTALITY NOTABILIA.—The rate of mortality in the Metropolis continues to advance, and, in the week that ended on Saturday, the number of deaths rose to 1414. In five weeks that have elapsed since the 29th of October the numbers have been 1112, 1192, 1162, 1339, and 1414. Concurrent with these weekly numbers there has been an almost constant fall in the mean temperature, which has been as follows: 48·9°, 45·7°, 38·5°, 36·7°, and 40·0°. In the ten weeks corresponding to last week of the years 1843-52 the average number of deaths was 1200, which, if raised in proportion to increase of population, becomes 1320. The excess in the present return above the calculated amount is near 100. From phthisis there died 175 persons; from bronchitis, 178; from pneumonia, 143. Fatal cases of these diseases have become more numerous, and the two former exhibit a mortality considerably above the average. The high price of fuel at this time renders the poor less able to contend with the cold weather, besides abridging their means of obtaining bread, which is also dear, as well as the other necessaries of life.

DEATHS *in the Metropolis for the week ending Saturday, December* 3, 1853.

CAUSES OF DEATH.	DEC. 3. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	620	481	306	1414	12002
SPECIFIED CAUSES	619	481	306	1409	11944
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	222	65	13	301	2632
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	4	28	14	46	498
3. Tubercular Diseases	62	154	6	222	1798
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	56	30	45	131	1321
5. Diseases of the Heart and Blood-vessels	2	39	18	59	467
6. Diseases of the Lungs and of the other Organs of Respiration ...	179	95	104	379	2792
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	18	35	18	71	642
8. Diseases of the Kidneys, etc. ...	1	11	5	17	107
9. Childbirth, Diseases of the Uterus	...	6	2	8	101
10. Rheumatism Diseases of the Bones, Joints, etc.	2	5	1	8	86
11. Diseases of the Skin, Cellular Tissue, etc.	...	1	...	1	18
12. Malformations	3	...	...	3	26
13. Premature Birth and Debility ...	38	4	...	42	253
14. Atrophy	17	...	7	24	174
15. Age	...	...	70	70	657
16. Sudden	3	2	...	5	72
17. Violence, Privation, Cold, and Intemperance	12	6	3	22	300
CAUSES NOT SPECIFIED	1	...	...	5	53

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Advertisements should reach the office by two o'clock on Thursday, at the latest, but earlier, if possible, accompanied by a Post-office order, (payable to Mr. James Lucas, at the Post-office, 1, Coventry-street,) or postage-stamps for the amount, and directed to 46, Princes-street, Soho, London.

The Proprietors of the *Medical Times and Gazette* believe that its circulation exceeds that of any other British Journal among members of the Profession. They can *prove*, that statements made of larger circulation by another Journal are not correct: they have no desire to increase their list of Subscribers by adding thereto cigar-makers, grocers, and pickle dealers.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am sorry to be compelled to trouble you again to confirm an assertion of mine in relation to a case of cholera without premonitory symptoms (given in your Number of the 26th inst.), in relation to which Dr. Macloughlin writes, "Mr. Turner informs me that he did not inquire whether the patient had had evacuations more frequently than usual for a few days *or few hours previous* to the attack of spasms." As I am most desirous the worthy member of the Legion of Honour of France should not be excluded from the legion of accurate as well as scientific inquirers after truth, I beg to assure him again, this patient had no premonitory diarrhœa, at least for two days prior to the attack. "But," asks the Doctor, "what was her usual habit? was she a regular once a week, twice a week, or daily ———? for if her habit was once a week, and her necessity of late had been twice, then your case falls to the ground." I certainly, then, did not find out or inquire her habit, but my first question was directed to the previous state of her bowels, and I was struck with her reply, to the effect, that there had been no previous diarrhœa, and, on my own part, I had not seen any evidence of indisposition of the kind during the two days I was almost constantly with her.

I should hardly (except as a depressing agent) regard the action of rhubarb or rhubarb and salt as a premonitory symptom to cholera (*Vide* the Doctor's reports); if so, I fear many of us in practice have been guilty of opening the doors to the enemy.

I beg again to apologise for thus troubling you; but, as it is desirable that all scientific inquiries should be carefully handled by scientific men, I judged it well to put the Doctor right upon my statements.

I am, &c. J. W. TURNER.

31, Lower Phillimore-place, Kensington, Dec. 5, 1853.

Dr. Hofmann's indisposition since his return from Germany has been the cause of irregularity in the publication of his valuable Lectures. But, as each Lecture is on some detached subject, and is complete in itself, the delay is less to be regretted.

Dr. E. Smith's letter shall appear next week, if possible.

Dr. Bryan, Melbourne.—The "Lancet" is still in existence, and is supposed to circulate to some extent.

The Illustrations of *Drs. Burrows and Kirkes* are unavoidably postponed until next week.

Several letters and communications are in type.

G. H., Northampton.—Notice of such institutions gives the notoriety desired. It is better to leave them to the neglect they deserve.

[To the Editor of the Medical Times and Gazette.]

SIR,—I was much surprised to see a letter in your last Number reflecting upon the character of Dr. Habershon in receiving a testimonial from the patients at the City Dispensary.

Never was censure less deserved. Those who know Dr. Habershon must be well aware, that no man in the Profession would be less guilty of an impropriety of conduct than he.

Here is a man who not only gives to the poor the benefit of his professional attainments, but devotes his spare hours and his Sundays to their moral welfare; and they, from a natural outburst of gratitude, subscribe their pence to show their acknowledgment of their kind feelings towards him; when lo! your anonymous correspondent comes by and snarls. The respect shown by the poor to their medical attendant would be a pleasing sight to any other man than your correspondent, who, if he be not actuated by motives of jealousy, must be one of those misanthropic individuals, who, disappointed themselves, are ever ready to pick a quarrel with their neighbours, and deserve as much our pity as our scorn.

I refrain from saying more, as I do not wish to write an encomium on Dr. Habershon; but simply to shield him from an attack both unjust and unkind, and which I am sure he would never himself resent.

I need scarcely add, that I wrote this note quite unknown to Dr. Habershon, and, enclosing my card, I am, etc. S. W.

December 7, 1853.

Samuel Knaggs, Esq., Huddersfield, and *Wm. Moss, Esq., Tunbridge Wells.* —We never publish letters which are sent to other journals.

"The Book" at Westminster Hospital. — The "Field" newspaper says, that, at a late inquest at the above Hospital, in consequence of insufficient light or obliviousness on the part of the Coroner's official, the foreman of the jury was duly sworn, not on the Pentateuch, not on the Gospels, not on the Koran, but on—The Half-Yearly Abstract of the Medical Sciences!

Mr. J. J. Johnstone.—There can be no doubt of the power of a magistrate to call for any necessary evidence. But when a medical witness is examined at a police court, or before a bench of magistrates, he obtains no fee for his evidence there, and is remunerated only at the criminal court where the trial of the prisoner takes place. The medical witness on such occasions should obtain from the committing magistrate or justices a certificate of his claim to be paid at the trial, and present it at the office of the clerk of the arraigns, or other place where the fees of witnesses for attending the criminal court are paid.

COMMUNICATIONS have been received from—

Dr. WARLOMONT, Brussels; Mr. HUMPHREY, Mr. MARRIOTT; R. W. S. LUTWIDGE, Esq.; Dr. KRAMER, Berlin; Dr. BRYAN, Melbourne, Australia; W. D. TAPP, Esq., Dorchester; SECRETARY OF UNIVERSAL ELECTRIC TELEGRAPH COMPANY; C. J. GIBB, Esq.; CHARLES BROWN, Esq.; R. QUAIN, Esq.; Dr. MACEWAN; GEORGE GIBSON, Esq.; Messrs. DAY AND SON; Mr MANSFORD; W. E. C. NOURSE, Esq.; HON. SECT OF THE WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON; W. H. BORHAM, Esq.; Dr. MICHELL; Dr. COGSWELL; Dr. E. SMITH; Dr. WILKS; Dr. O. EVANS; Dr. JOHN MACEWAN, jun.; G. HARDAY, Esq.; Mr. ATKINSON; Dr. CHADWICK; J. J. JOHNSTONE, Esq.; Dr. TURLEY, Worcester, etc., etc.

ORIGINAL LECTURES.

CROONIAN LECTURES, 1853,

DELIVERED AT

The Royal College of Physicians.

By THOMAS MAYO, M.D., F.R.S.

ON

MEDICAL TESTIMONY AND EVIDENCE IN CASES OF LUNACY.

Lecture II.

Destructive Orgasm or Tendency considered in its relation to Insanity.—This Plea, how extended to it through the hypothesis of Moral Insanity, to the identification of Vice with Mental Disease.—Opinions and Cases of Pinel, Prichard, and Esquirol Estimated.—Practical tendency of Men to fall in with *their* views in dealing with the Homicidal Orgasm Results from absence of Secondary Punishments for *some* delinquencies of the Insane.—Illustrative Cases.

INSANITY.

I have discussed the subject of insanity in its relation to medical proof under its essential element, delirium, as indicated by inconsecutive, incoherent trains of thought, and by certain delusions, over which the patient has no control, or no such control as should prevent their influencing his conduct. I have now to consider a peculiar state under which the leading and important subject for judicial consideration is an orgasm, or intense and sometimes sudden desire which leads the sufferer to perform some criminal act; this orgasm, not always susceptible of being construed into delirium, as not being obviously attended either by a morbid delusion, or by a state of inconsecutive thought. In regard to this condition of the case a question instantly arises, whether, in the absence of direct, it may admit of constructive, proof of delirium, that is, of a morbid state of the intellect; or must be removed into the category of brutal vice.

Certainly there are cases of the above orgasm, in which it seems to suggest to its victim an objective false perception, leading him to some criminal act, to which all his feelings and moral sentiments are opposed. A mother hears continually, or at intervals, a voice commanding her to cut her infant's throat; or the agent is preceded by a ball of fire, leading him to the person whom he imagines he must murder. In such cases as these, false perceptions being clearly made out, the medical witness has no difficulty in affirming the presence of insanity. But there exist many cases in which a motiveless and sudden act of murder is performed or contemplated, for which Medical writers and witnesses in courts of justice have endeavoured to find a place in the category of insanity at some expense of logic, and at a great expense of public good. They have endeavoured to make the act prove its own insane character in the absence of any delusion either contained in *it*, or else where existing in the man's character. I believe that the knot which they thus cut might, in many cases, be untied; that is to say, that a more profound analysis of the patient's history, in cases in which the crime is at variance with his normal character, would detect a specific insane delusion or a continuously morbid state of the imagination, under which everything presents itself in shades and hues different to those which it impresses upon all other minds. This will the more be admitted, if the admirable tests recorded by Dr. Esquirol, in his remarks on homicidal monomania, are applied in the inquiry. But a more summary procedure is adopted by Dr. Prichard, who has largely treated this kind of case, and whose terms, "instinctive insanity," and "moral insanity," convey the hypothesis on which he would deal with the difficulty. Under the first of these two expressive terms, Dr. Prichard conveys a new modification of nosology. He presumes that there exist two species of insanity: one being that which I have hitherto considered as an inclusive state, in which moral perversion is blended with intellectual perversion; the other being a state in which the moral perversion exists alone, being of such kind and degree as to justify its being considered abnormal, in the same sense as that in which insanity is abnormal, when the intellect participates. Now, to this hypothesis I object on two grounds. First, that it unnecessarily breaks down an accredited distinction, which assigns an intellectual lesion as a characteristic to the disease termed insanity. I say unnecessarily, because it does not suggest that there is no such state as the insanity, characterised by delirium; but determines that the word which formerly expressed that state shall be loosened in its signification, so as to contain, as species, two states: one, the very malady to which its meaning had been formerly confined; the other, a group of symptoms formerly contemplated in a very different light. Changes of name thus instituted in matters purely speculative are merely productive of obscurity, or, at the most, of the supposition that knowledge has been increased, when only words are altered. But where great practical consequences become associated with them, these changes assume a very mischievous character; and this contains my second ground of objection, namely, that the change contemplated by Dr. Prichard tends to include in a class which has been emphatically pronounced morbid, in a sense which supposes the persons embodied in that class to be either wholly or partially irresponsible, certain other persons, whose only claim to be considered morbid lies either in eccentricity and atrocity of vice, or in their combining with a low moral condition the peculiarities of the hysterical diathesis. These, in the first points of view, are as responsible as any other delinquents, in the latter being mainly and, on the whole, a responsible class.

For, with respect to the first point—viz., eccentricity and atrocity of vice—I may observe, that the theory of either moral or impulsive insanity is liable, for anything that Dr. Prichard has suggested, to occasion the sudden outbreaks of the brutal character—a character under rapid development at present in the lower orders of the country, to find refuge under this plea. Such was the application of it which, some years ago, protected the Honourable Mr. Tuchet from the penal consequences of a great crime. That gentleman put to death by a pistol-shot the marker of a shooting gallery. The act was sudden, and there was no apparent motive; but it was not performed under any semblance of delirium. Mr. Tuchet was eccentric, and he was *blasé*. He fancied that he desired to be hanged; at the gallows he would probably have thought differently; and he was reckless and brutal enough to give himself a chance of this fate at the expense of the life of a fellow-creature. I have noticed him since in the criminal department of Bedlam, insouciant and indifferent enough, but certainly not insane in any sense of the word that would not entirely disintegrate its meaning; neither, when we proceed to consider the sense which the law intends to give to the expression of the certificate,—"unsoundness," shall we find this epithet at all more appropriate to Mr. Tuchet's case, which was simply one of brutal recklessness. With respect to the misapplication of the plea of insanity to hysteria, such was the case of a nurserymaid placed in Bethlem Hospital in 1846. A trifling disappointment relative to an article of dress had produced in her a wayward state of mind. She laboured at the time under diminished catamenia. An object to which she was generally much attached came in her way, namely, the infant whom she nursed; and she destroyed it, as a fanciful child breaks in its moodiness a favourite doll. No fact more nearly approaching to delirium than the above was stated in exculpation or excuse at the trial. But Dr. Prichard's work on the different forms of insanity, in relation to jurisprudence, was published in 1842; and, by 1846, juries had learned to convert the uncontrolled influences of temper into what he terms instinctive insanity. As an instance of this class of cases, in which the judicial authorities came rightly to a very different conclusion, I will quote to you the

following one from Sir Woodbine Parish's last work on Buenos Ayres. Having spoken of a certain wind occasional in that climate, which in some persons produces peculiar irritability and ill-humour, almost amounting to a disorder of their moral faculties, he proceeds as follows:—"Some years ago, Juan Antonio Garcia, aged between thirty-five and forty, was executed for murder at Buenos Ayres. He was a person of some education, and rather remarkable for the civility and amenity of his manners; his countenance open, his disposition generous. When this *vento niorte*—this peculiar north wind—set in, he appeared to lose all command over himself; and such became his irritability, that during its continuance he was engaged in continual quarrels and acts of violence. Before his execution, he admitted that it was the third man he had killed, besides being engaged in various fights with knives. When he arose from bed in the morning, he told Sir Woodbine's informant he was always aware at once of its accursed influence upon him; a dull headache first, then a feeling of impatience at everything about him. If he went abroad, his headache generally became worse; a heavy weight seemed to hang over his temples. He saw objects, as it were, through a cloud, and was hardly conscious where he went. He was fond of play; and if, in such a mood, a gambling-house was in his way, he seldom resisted the temptation; once there, a turn of ill-luck would so irritate him, that he would probably insult some one of the by-standers; if he met with any one disposed to resent his abuse, they seldom parted without bloodshed." The relations of Garcia corroborated this account, and added, that no sooner had the cause of the excitement passed away, than he would deplore and endeavour to repair the effects of his infirmity. "The medical man," says Sir Woodbine, "who gave me this account attended him in his last moments, and expressed great anxiety to save his life, under the impression that he was hardly to be accounted a reasonable being." But, he adds, to have admitted that plea would have led to the necessity of confining half the population of the city when this wind sets in. I quite agree with the conclusion which this remark implies, as to the fate of Garcia. He was himself aware of the murderous instinct to which he was liable, and of its exciting causes. Surely, when such knowledge is in the possession of the delinquent, he must be made responsible for the non-avoidance of exciting causes.

M. Georget gives a case, which may be usefully contrasted with the above as to its claims on the plea of insanity. Hypolite Mendic, a non-commissioned officer in the French service, had gradually become morose, capricious, and brutal in his conduct, so as to excite the disgust of all his companions. This ends in disobedience of orders, and such violence towards his commanding officer as to render him liable, on trial, to the sentence of death. The trial proceeds with the customary anxiety of the medical witnesses to make out a plea of insanity, and the tendency of the court, observable, indeed, in all M. Georget's reports, to give the criminal the benefit of the most careful inquiry into extenuating circumstances, and at the same time to protect the public against that plea, when overstrained. The symptoms of this case wanted the acuteness of character which alone tended to palliate the crimes of Garcia; but, in the course of Mendic's trial, one weighty fact was made out—namely, that before his outbreaks he was subject to an epileptiform seizure, out of which he emerged into the wayward state above noticed. This might fairly justify an hypothesis of delirium, as present at those paroxysms. If judgment was overpowered in Garcia, it was suspended in Mendic. There are shades of distinction in the amount of man's presumed responsibility to society, which should be indicated by corresponding shades of punishment when offences come; but in all cases consciousness is presupposed as a condition of responsibleness; so that a disease affecting consciousness renders the agent, so far forth, unfit in kind as well as in degree, to become an object of punishment.

Such are the principles of distinction, through which humanity and justice dictate, that the diseases of the mind should be relieved from certain penalties of the law. Let us consider how this is effected under the hypothesis of Dr. Prichard, in regard to moral or instinctive insanity, the latter of these terms being, in fact, a sub-species of the former; and first, I will ask, what is the form and meaning of this term moral insanity? or, to put this idea in another form, what insanity is not moral? I have myself pointed out, in the elements of the pathology of the human mind, that the earliest indications of approaching insanity are moral. The same idea has since been largely treated by Dr. Forbes Winslow, in his work, on the "Incubation of Insanity;" and at every period of its actual presence, the powers of self-control are interfered with, the affections suppressed or altered, the passions excited or perverted. But the admission of this truth affords no ground for a distinction that shall exclude or assume the absence of intellectual perversion from any state which claims the title of insanity. And this involves no mere war of words with those who, like Dr. Prichard, profess to treat the subject of insanity in relation to jurisprudence, and therefore so far as criminal law is concerned to punishment, under the universally admitted hypothesis that insanity tends to exculpate the criminal. Let us, indeed, see how this hypothesis can be carried out in its appropriate cases, insanity being also supposed to be compatible with the absence of intellectual perversion. In describing the character of the infamous Lord Wharton, Dr. Swift somewhere expresses himself as follows:—"I have had the honour of much conversation with His Lordship, and I am thoroughly convinced, how indifferent he is to applause, and how insensible to reproach; which is not a humour put on to serve a turn, or meet a countenance, but the mere unaffected bent of his nature. He is without the sense of shame or glory, as some men are without the sense of smelling, and therefore a good name is to him no more than a precious ointment is to these." Now, we have here a case, which may, if any, claim the privileges of moral insanity, if this be granted to Dr. Prichard; for it is even more than *perversion;* it is, according to Dr. Swift, the *absence* of the moral sense. But there was neither inconsecutiveness of thought, nor delusion observable in Lord Wharton. The following case has common points with the above extract from Swift, Mr. A—— was born in a respectable station, and is possessed of a good fortune, of as much at least as he has allowed to remain of a good fortune. He has a wife and children, and as many friends as his conviviality attracts, in spite of the hardness of his character. He has always been profusely extravagant, for his passions and appetites have compelled him to squander money, which he would probably have hoarded, if his selfishness had taken that turn. His temper is at once stern and violent, and all who know him expect that the dispositions of his will must prove him, to the last moment of his life, utterly unjust. If he had sufficient courage he would rob and murder, for his cupidity and vindictiveness are under no moral check; but he is naturally timid, and owes to this circumstance his avoidance of those acts which the law might construe into crimes. Such is Mr. A——, and such, or as nearly such, as the distinctive points which separate all individuals will allow, is his neighbour Mr. G——. But there happens to exist a peculiarity in the latter, which has materially altered the course of his life, and its results upon others. Mr. G—— was observed to talk much to himself. This excited attention, and, on further inquiry, it was found that he was habitually under the influence of false perceptions, and believed himself solicited by certain voices audible to him alone, to perform acts, whether vicious or not, of a most incongruous character. Mr. G—— was accordingly recognised as insane, and placed under restraint, while neither Lord Wharton nor Mr. A——, nor, I might add, the homicide Lord Ferrars, would be viewed as amenable to coercive measures, on the ground of their peculiarities of character; nor would a claim to irresponsibility be admitted in their favour. Now, I would ask, if insanity confers some irresponsibility, how, on the occurrence of criminal acts, are these four persons to be dealt with, except through the application of the intellectual criterion. All have, in a degree, the moral phenomena of insanity. Yet, if all are allowed to escape unpunished under delinquencies, on the plea that they are insane, in three of these cases, those principles of criminal justice must be violated by which both nature and reason instruct us that vice must be antagonised. If all four are punished, the best sympathies of our nature are violated to an extent which would not be borne by judges, advocates, or juries, in not admitting one of them, Mr. G——, to that amount of irresponsibility which certain intellectual lesions, as discovered in him, are presumed in justice to afford. This single case equally requires the application of the intellectual criterion to enable us, when no delinquency has yet been committed by him, to protect him by coercion

or surveillance against himself. But if this latter benefit were extended to the other three cases, it would naturally be deemed both by them and by law an interference with their liberty of action. They would not bear to be told that they are morally insane. They have a right to do what they like, unaffected, at least, by statutes de lunaticis; and the public have a right to demand that they should be hanged if they commit murder.

The tendency of the above reasoning is to point out that no abnormal state of mind confers irresponsibility (an attribute which the inventors of the term "moral insanity" conceive it to possess), unless such abnormal state of mind involve intellectual as well as moral perversion.

A few years ago, a middle aged woman, cook to a family in Harley-street, found herself in the disagreable position of having an illegitimate child, previously out at nurse, thrown upon her hands, being left, indeed, at the house where she was residing. Her measures were soon taken, though the emergency was unexpected. The other servants being at that hour of the day, one o'clock, at the lower part of the house, she took the little boy up to her bed-room, strangled him, packed up and corded the body in a box, and sent it to a sister in Nottinghamshire. During the remainder of this day of murder, she was in her ordinary quiet state, and read her Bible a good deal. This was nearly all the evidence that was substantiated at the trial, besides her own free confession of the deed. She was acquitted on the ground of an insane impulse existing at the time of the murder, a plea which never would have suggested itself, or been entertained, but for that mischievous neglect of the intellectual criterion, for which we are indebted to the hypothesis of moral and instinctive or impulsive insanity. In truth, the impunity derived from this plea is singularly inappropriate, as it generally accrues to that very class against which society possesses no protection except through their fear of punishment—namely, the unprincipled. Nor, I believe, are they slow in recognising and availing themselves of their privilege. In one marked case, it was proved to the satisfaction of the late Dr. Warburton and myself, that a gentleman at his asylum, whose insanity had been certified mainly on moral grounds,—that is to say, with no sufficient intellectual lesion,—was deliberately availing himself of its shelter from a criminal indictment. And we found reason to believe, that he had before similarly availed himself through a similar certificate of another asylum; the object on the former occasion being to avoid a charge of incendiarism, on this latter occasion of indecent exposure of his person.

Meanwhile, authors of eminence in mental pathology have expressed themselves strongly in favour of constituting a species of insanity that shall be exclusively ethical; and it is fit that I should examine the grounds of their opinions through a consideration of the facts which they advance. The more so, as I may thereby best be enabled to explain my own meaning. I have adverted to Dr. Prichard: now, I understand him and M. Pinel, the principal advocates of these views, by their expressions, "*Manie sans délire, manie sans lésion de l'entendement*," moral insanity, — to signify a state in which there is no morbid delusion of the senses or the understanding, no incoherency or inconsecutiveness of thought, and yet which shall, as a form of insanity, entitle the persons thus affected to claim the privileges of irresponsibility, as a class, and not exceptionally. The opinions on this subject entertained by Dr. Esquirol in his remarks on what he terms reasoning insanity I shall presently consider. M. Pinel, the oldest of these writers, puts the question' "Can mania exist without lesion of the understanding?"—to which state he uses "*manie sans délire*" as a synonymous expression. He replies to himself in the affirmative, and illustrates his opinion by three instances. The first has so important a bearing on my subject, that I must give it nearly in full:—"An only son of a weak and indulgent mother was encouraged in the gratification of every passion and caprice of which an untutored and violent temper was susceptible. The impetuosity of his temper increased with his years; every instance of opposition or resistance roused him to acts of fury. He assaulted his adversary with the audacity of a savage, sought to rule by force, and was constantly embroiled in disputes and quarrels. If a dog, a horse, or any other animal, offended him, he instantly put it to death. If ever he went to a *fête* or any public meeting, he was sure to excite tumults, and generally left the scene with a bloody nose. This wayward youth, meanwhile, when unmoved by passion, possessed a perfectly sound judgment. When he came of age, he succeeded to the possession of an extensive domain. He proved himself perfectly competent to the management of his estate, as well as to the discharge of his relative duties, and he even distinguished himself by acts of benevolence. Wounds, lawsuits, and pecuniary compensations, were, however, still the consequences of his unhappy propensity to quarrel. But an act of notoriety put an end to his career of violence. Enraged at a woman who had used offensive language to him, he threw her into a well; prosecution took place, and, on the evidence of several witnesses to his furious deportment, he was condemned to perpetual imprisonment in the Bicêtre."

Now, if I wished to escape out of a difficult controversy through a glaring example obtained from the avowal of an adversary in my favour, I should do so at this point in relation to M. Pinel. If this is mania or insanity, what is brutal recklessness? The next instance is the case of a man subject to periodical accessions of homicidal fury, in direct opposition to his ordinary feelings and sentiments. Here is, no doubt, moral disturbance; but where, and in what state, is the principle which, in the sane mind, co-ordinates and directs the passions and affections? Even assisted as they are by his natural feelings and sentiments, which are in the direction of right, this man's reason and understanding are powerless. Pinel would say, they are overborne by moral insanity. Which is most probable,—that this solution explains the case, or that the reason and understanding are themselves implicated in the abnormal state? I do not object to Pinel's explanation as false, but merely as partial and exclusive. The case itself may have been one of true insanity involving delirium,—a supposition made more probable by its intermittent course.

Pinel's third case of *manie sans délire* is the well-known one of the maniac liberated by the revolutionary mob at Paris, and signalising his delivery by snatching a sabre and cutting down some of his liberators. This patient was found by his liberators in a lucid interval. No account is given by Pinel of the character of his madness during its paroxysmal state, except in the simple fact, that he became excited by the cries and violence of his deliverers. Whatever psychological interest the case may possess, it has no reference to the point which it is adduced to illustrate,—viz., insanity without lesion of the understanding.

The moral insanity of Dr. Prichard is described by him (a) as "the form of mental derangement which consists in a morbid perversion of the feelings, affections, and active powers, without any illusion or erroneous state impressed on the understanding; it sometimes co-exists with an unimpaired state of the intellectual faculties." Having praised M. Pinel's first case (here alluded to) he proceeds to give a series of illustrations of his own doctrine, under the following title:—"Cases exemplifying the Description of Moral Insanity, and that of Monomania, (*i. e.*, partial derangement of the intellect,) or illustrating the Relation of these two Forms of Disease, and the transition from one to the other." Now, with respect to these cases, I must observe, that the transition, to use Dr. Prichard's phrase, exists in all; or, as *I* should venture to phrase the idea thus expressed by him, in all of them there is intellectual derangement as distinctly marked as is the moral derangement, with one condition, which seems to belong to insanity, that its moral phenomena come first into notice. In fact, the supposition which forms the basis of Dr. Prichard's discovery, that moral insanity "sometimes co-exists with an unimpaired state of the intellectual faculties," is not realised in one of his cases. Let us look at them more closely. In the first case (No. 1), a gentleman, after various traits of eccentricity, but without delirium—in other words, after the premonitory moral symptoms which ordinarily precede the intellectual lesion—adopts an ungrounded belief that his wife's affections are alienated from him—a notional morbid delusion—and drowns himself in a canal behind his house. No. 2 has laboured for some years, Dr. Prichard says, under moral insanity. But it is also admitted that he hears and believes in the reality of voices in different parts of his house, where they have no existence. He labours, therefore, under objective false perceptions, and may be claimed by those who

(a) Prichard "On Insanity, and other Diseases affecting the Mind," p. 12, etc.

affirm that delusion or incoherency is required to complete the idea of insanity. Case 4 is that of a farmer, who, being desirous of surveying an estate belonging to a gentleman in the neighbourhood, with a view to purchase, selects for this purpose the middle of a dark night, and insists upon being accompanied by the reluctant steward, with a lantern. Is there no intellectual lesion here? Of his fifth case, Dr. Prichard admits that it is doubtful whether it be one of moral insanity or of intellectual derangement. He ought to say of the latter as well as the former kind. In this case of dubious intellectual soundness, the patient made it his practice to open the window at certain hours of the night, and to cry out exactly twelve times; also to go every day after dinner into the middle of the quadrangle, and throw up his hat into the air a precise number of times, vociferating after each throw. When any person, whom he knew to be a physician, came near him, he would recoil with horror, and exclaim, "If you were to feel my pulse you would be lord paramount over me for the rest of my life." But Dr. Prichard, in his desire to have a form of insanity in which the intellect shall not have undergone perversion, lets into his catalogue of cases one of which I will venture to affirm, that it never would be called insanity at all except under an erroneous or cloudy hypothesis. (Case 9.) This singular victim of so-called insanity is described by Dr. Prichard as quick in perception, active in body, persevering, knowing the value of property, possessing good judgment, and an acute calculator; and, as to his moral phase, possessing a strong sense of duty, and of the most regular habits. He only distrusts his own abilities to an unusual extent. His right, then, to be considered insane in any sense of the word is questionable; and the vagueness introduced into the subject by comprehending him in that expression, is imputable to that loosening of the definite sense of words, which I am endeavouring to prevent.

The course of M. Esquirol's inquiries has led him to refuse his assent to the views of Dr. Pinel and Dr. Prichard in their full extent, namely, as indicating a form of insanity in which the moral faculties are alone implicated. He cannot admit their cases into this category, without the assumption of what he calls a *délire partiel*, a perversion of reason to a limited extent; but he accepts the term *raisonnante*, as still applicable to the mind under this condition. The morbid state is a delirious episode in a being otherwise reasonable. The following abstract of a case from M. Esquirol's "*Maladies Mentales*" will help to elucidate his opinions on this subject:—Madame N., aged 23, a lady of the nervous temperament, having been subjected to some slight contrarieties, becomes excited. Being previously an attached wife and mother, she now neglects both her husband and child; neglects also the regulation of her house, in which she was previously exact; becomes impudent in her remarks, and even throws out charges against her husband in the presence of strangers. "A demon of mischief," says M. Esquirol, "seems to possess her; yet she is prompt and subtle in finding excuses, and can conduct herself so well in society as to baffle suspicions of unsoundness." Now, whatever idea M. Esquirol associates with the expression *raisonnante*, as applied to this case, viewed also by him as one of insanity, the burden of proof rests with him, that this lady was not in the course of it under delirium, involving incoherency of thought, or false perceptions, or both. Now, with respect to the right of such insanity to be called a *folie partielle*, as a state in which a portion of the understanding is perverted, a portion left sound, I must urge that, unless the human understanding can, like the moral properties which it regulates, be contemplated as divisible, these expressions involve a solecism in reasoning; and I shall, in another part, point out that this supposition is not justified by any legal opinions or decisions; on the contrary, it has received contradiction from the highest authority.

The above disquisition may appear a trifling with words; not so, when it is considered that the words involve doctrines on which formidable consequences hang, both moral and judicial. That distinction which I have been impugning must, if unfounded, be full of risk, as encouraging on inadequate grounds a supposition that the individual in question may be trusted in those points, to which the so-called partial disturbance—*folie partielle*—is presumed not to extend. Thus, in a case which M. Esquirol adduces, of homicidal monomania or partial insanity, "the patient," it is also incidentally observed, "is afraid of walking about the house, lest he should break the Crown jewels." Now, I may here remark, suppose this latter fancy had been the one first observed in him, and had been accepted as the partial delirium, or under any other of the synonymous terms used by M. Esquirol, leaving the rest of his intellect unimpugned, here the hypothesis might have cost a human life by occasioning partial confidence in the patient's sanity, and masking the homicidal orgasm. With respect to the word monomania, I may observe, that it is often used in a perfectly unobjectionable sense, not as expressing unity of delusion, but permanency and predominancy in some one delusion.

I now return to the consideration of this homicidal orgasm, which I have in some degree deserted while I have been endeavouring to unravel one sophism which too frequently places that orgasm in an illegitimate and forced alliance with the insane state. It is conformable with my object to ascertain as far as I can, with respect to that orgasm, what proof the law demands of the medical witness of its justly claiming to be considered in any given case an evidence of the presence of insanity. But before I directly enter upon this question, I must dispose of another of far more general import, as affecting, not only the results of the homicidal orgasm, but all those crimes, with their penal consequences, in exculpation of which the plea of insanity is set up. This question is as follows:—The presence of insanity being *granted*, what extent of irresponsibility is conferred according to the intention of the law of this country? This subject has been touched upon in my first lecture, in reference to the responsibility acquired by persons under a lucid interval. There is certainly a great concurrence in the expressed opinions and dicta of Judges, that insanity is not exculpatory, unless it comprehends and fulfils certain conditions in the Act. "It is for you to consider," says Mr. Justice Le Blanc, to the jury, "in a case of attempted murder, whether the prisoner, when he committed the offence with which he stands charged, was or was not capable of distinguishing right from wrong;" a vague expression, to which, as used by the learned Judge, and, I regret to add, by many other Judges, I beg leave to annex as its reasonable interpretation, the unambiguous terms of Lord Lyndhurst, in charging the jury in the case of Rex *v.* Offord. "It appeared, on the trial, that the prisoner Offord laboured under a delusive notion, that the inhabitants of the town of Hadleigh, and particularly Chisnall, the deceased, whom he murdered under that delusion, were continually issuing warrants against him for the privation of his liberty and life. Several medical witnesses deposed to their belief, that the prisoner, according to the evidence which they heard, laboured under insanity; and that he committed the act while under the influence of this disorder." Lord Lyndhurst, in summing up, told the jury, that they must be satisfied, before they acquitted the prisoner, that he did not know when he committed the act, *what its effect would be in reference to the crime of murder*. But the opinion of the collective Judges obtained after the murder of Mr. Drummond, and when the public was under a full sense of common danger, arising from the immunities of the insane, seem to remove all possible doubt from the subject.

The question and answer which obtained and embodied this opinion, are as follow:—

Q. What is the law respecting persons afflicted with insane delusions, respecting one or more particular subject or persons, as for instance, when the accused knew that he was acting contrary to law, but did the act with a view, under the influence of insane delusions, of redressing or revenging some supposed grievance or injury, or under the impression of obtaining some supposed public benefit?

A. Notwithstanding the party committed a wrong act when labouring under the idea of repressing a supposed grievance or injury, or under the impression of obtaining some public or private benefit, he was liable to punishment.

It is needless to add, that this announcement of law applies *à fortiori* to a person committing an act which he knows to be contrary to law, without any such ground of excuse as the "impression" here mentioned might seem to offer.

Such, then, is the law on the subject of criminal conduct in persons under insane delusions; but such is not the practice: witness that very case which elicited that answer of the judges, which I have just quoted from the annual Register. The adequacy of M'Naghten to comprehend the criminal nature of the homicidal act was unquestionable; yet he was acquitted on the plea of in-

sanity, without the smallest reference to the conditions on which alone it is exculpatory, though they had been distinctly set forth as not complied with in his opening speech by the Attorney-General. Chief Justice Tindal, indeed, stopped the trial of M'Naghten, on the affirmation made by numerous medical witnesses, that the defendant was insane, (that state having been detected by them through the ordinary symptoms of the disease,) but not in reference to any presumed ignorance on his part of the illegal nature of his act; and this absence of a material condition of the question the Chief Justice veiled from himself as well as from the jury, by using in his address to the jury the ambiguous expressions of knowledge of "right and wrong," not "legal and illegal," as absent in M'Naghten's mind. The miserable vagueness of the first distinction ought to occasion its disuse by the Bar.

Now what, I may ask, for the question closely concerns us as medical witnesses, what is the source of this discrepancy between law and practice, and how may it be obviated? The source of it is placed in the very nature of our criminal code, which recognises no punishment for offences committed by the insane, and forces the courts either to visit them with the same penal infliction as would apply to the same acts committed by the sane, their derangement being ignored, or to let them pass unpunished, however partially responsible they may appear. The source of it is, in fact, the absence of any secondary punishment for these cases, whereby the unwritten principles of justice, which forbid us to hang an insane delinquent, may be reconciled with the public safety, which occasionally may demand that he be punished.

Neither are the claims of the insane to this mitigation of punishment answered by the opinion sometimes entertained that monomania, when that state is predicated, may be consistent with integrity of mind on other points. The important remark of Lord Brougham in the case Waring *versus* Waring applies to this point. "If," says the learned Lord, "the being or essence, which we call mind, is unsound on one subject, providing that unsoundness is always existing on that subject, it is quite erroneous to suppose such a mind really sound on any other subject." Meanwhile, we cannot urge, that a scale of secondary punishments is involved in any insurmountable difficulties of application. Its possibility of application is proved by the fact, that it is actually carried out in France, where the attention given to this subject is infinitely meritorious. Thus, the insane, but not irresponsible infanticide, Madlle. Cornier was punished in the French Court, by confinement and hard labour for life; greatly, I confess, to the disgust of the Medical witnesses, who did not apprehend, as clearly as the Court, the extent to which the human mind is susceptible of the influence of example even in some of its most disturbed states; yet no physicians have been more successful than the French in proving, by their able management of the insane mind, that it is influenced by motives, and can be tempted or intimidated into self-restraint. On this point I may observe, that, in the absence of an appropriate punishment, the philanthropist, who conceives *all* punishment inappropriate to the insane, may find himself disappointed in certain results. Thus, in the case of John Howison, a Scotchman, one out of a sanguinary group of homicidal cases quoted by Dr. Prichard, (a) there was undoubted evidence of insane delusion. "He had," says the reporter of this case, "false perceptions; for he used to sit brushing away flies for hours together with his hand, where there were no flies, and his landlady told him so; he had struggles in the night with witches, and was in general miserably superstitious." The case was, however, atrocious; and the intractable savageness of the man was rendered more disgusting by being associated with brutal voracity in regard to food. There was no secondary punishment under our law to which he would be amenable as insane, such as was inflicted on Mademoiselle Cornier in France. He was accordingly regarded as responsible, sentenced to death, and executed. This was an exceptional case, in which the sympathies were enlisted on the side of severity; but such exceptional cases will become more frequent, if the public learn to feel, that they have no other protective punishment awarded by law than the death of the criminal, if he should happen to be a madman as well as a brute.

(a) Different Forms of Insanity in Relation to Jurisprudence.—P. 111.

ORIGINAL COMMUNICATIONS.

NAVY MEDICAL REPORTS

No. X.

TWO CASES, ONE OF EPILEPSY AND ANOTHER OF APOPLEXY, RESULTING FROM FLOGGING IN ONE OF HER MAJESTY'S SHIPS.

By JAMES DAVIDSON, M.D., Surgeon R.N.

J. T., aged 30, Royal Marine Artilleryman, thin, spare habit of body, and excitable temperament, on 14th July, 1851, underwent corporal punishment. Having received twenty-one lashes, his head was observed to droop, apparently in a faint. The punishment was immediately stayed, and time enough had just elapsed to relieve the prisoner and place him horizontally on the deck as my patient, when a most violent fit came on, assuming the epileptic character in its most exaggerated form. Although a weakly man, his muscular powers were enormous in the different contortions of the body, requiring six or seven men to hold him. There was protrusion of the tongue, accompanied with the usual frothy discharge from the mouth. This fit and the following lasted a few minutes, but occurred in rapid succession, and occupied a space of four hours. At the expiration of this time the system was left in a low and greatly weakened condition, for which he was on the sick list nearly a month. Immediately, and some time time after the punishment, the system was extremely irritable, and the patient was troubled with nervous twitches of the muscles of the mouth and neck; but on the 16th he had a regular occurrence of the fit in a milder form. During the latter portion of his time in the sick list, his state assumed the form of a low feverish condition, with remissions and exacerbations. He was, on the 11th August, discharged to day and light duties, thinking that he might in this way recover more rapidly. However, till the paying off the ship, in November, 1852, he continued weakly, requiring a watchful eye after him, and his liberty to go on shore was withdrawn by my representation, from his tendency to indulge freely in drink, which invariably placed him under my care. The last fit he had was purely sympathetic, occurring on 2nd December, confining him four days to the list, at the same time that the second case I here record was suffering from his punishment.

Remarks.—This man appeared to dread his punishment, as, while under the sentry's charge, some half hour previous, there was a continual wish to micturate. He appeared also to suffer more than usual from the lash, and from some reports his messmates had heard, I think it not unlikely that this patient was the subject of fits previously, although no doubt he had been free for a considerable time. Be that as it may, the man was never afterwards fit for the duties of a marine artilleryman.

Case 2.—B. I., aged 22, able-bodied seaman, in Dec. 2, 1851, while receiving corporal punishment, fainted, and had an involuntery discharge of urine. He had only received fourteen lashes, and on being removed to the troop deck, which removal occupied a few minutes, a violent determination to the head took place. There was violent throbbing of carotids, the head and neck were quite red and livid. The muscles of larynx and neck were in active operation; and immediately following these symptoms, violent paroxysms of muscular convulsions, throwing his body, and especially his head, about in the most violent way. These lasted two hours, with occasional abatements. Cold water was assiduously applied to the head without much effect; but on administering a grain of tartrate of antimony, which produced vomiting, the violent symptoms abated, and he gradually sank into a lethargic condition. He was not easily roused, and when roused spoke in answer to questions incoherently. In about eight hours he appeared to awake, looking stupid and drowsy, but talked rationally, and complained of great pain in his head. A smart purgative was given, and rest enjoined. He was discharged to duty on the 6th of Dec.

Remarks.—This man was short, stout, and able-bodied, of a phlegmatic temperament, and just such a case that I should have selected for bearing punishment well; but the punishment was born badly, especially for such a subject. The attack was quick and violent; but on his discharge to duty there was an end of it, and the man was fit for any service.

General Remarks.—These two cases of nervous disease, resulting from corporal punishment, are no doubt interesting, more especially from their extreme rarity, for I have neither seen nor heard of anything of a like tendency. I was induced to make inquiries while serving with a large squadron; but I could hear of no such cases from the Medical officers. Since the Hounslow flogging case, in 1846, when the man, some time after his punishment, died of thoracic inflammation, and when the jury returned a verdict upon the views and evidence of Mr. Erasmus Wilson, who deposed, that pulpy degeneration of the deep-seated muscles of the back had caused the disease which carried the patient off, and had been produced by the local injury, the Legislature has laid down restrictions as to the number of lashes which may be inflicted. I am not aware of any such case having been noticed previously or since; but for that immunity I imagine we are not indebted to the Legislature, as local injuries form but a small portion of the evil compared with injuries received through the nervous system; and that very generally when disease or death might follow such punishment, 50 lashes would do its work as effectually as 150; for I have no doubt that the first portion of a punishment inflicts the greatest shock, and is the most keenly felt; the second portion being expended on dead parts, which now only form a protection for the living parts beneath; and these two above recorded cases afford excellent examples in point, as the men's backs were literally uninjured.

Were the amount of local injury to be the scale whereby a Medical officer might feel it his duty to interfere in staying a punishment, a slight syncope, or the giving way of any of the sphincters, the duty would be very simple and very clear. The chances are, the commanding and Medical officers would act, as it were, by one impulse in stopping the punishment; but the case, when danger results, is surrounded with much obscurity, and which no discrimination, however great, in the Medical officer can anticipate, as the lash might fall apparently affecting the sufferer less than usual, but still stealthily proceeding to some nervous centre, implanting its effects there, all ready to burst out in some form or other. And even in this pulpy degeneration, if it should ever result from this kind of violence to muscle, there is no possible line of demarcation to point out how much or how little would produce such an effect; for the man White, at Hounslow, bore his punishment without a murmur. The Medical officer is thus disagreeably placed, in so far that, notwithstanding his anxiety and forethought to ward off by timely interference such serious results, they will still occasionally occur as long as corporal punishment exists; and when they do occur, I should dread the effects on the nervous system most. When any lurking organic disease exists, and it pass undetected, this punishment I have seen instantly set the disease in active operation.

I may mention one case in particular. A boy, about 15, who had tubercles in the lungs unsuspected, was flogged three times within a month. The disease came on afterwards very rapidly.

Since joining the Service some fifteen years ago, I have observed that flogging is not borne with the same fortitude now as formerly. Whether a higher intellectual condition of the men has anything to do with it, is a question of some importance. Those two cases occurring in the same ship in the same year had a strong effect upon the men; and no doubt it was viewed by them much more terribly, and perhaps it was much worse borne in consequence. These two cases practically apply to the ingenious theory of Dr. Hall, which ascribes serious epileptic and apoplectic symptoms to the sanguineous congestion of the brain and medulla spinalis caused by spasmodic pressure of certain muscles about the cervical and laryngeal regions which has been set up by distant irritations.

This trachelismus alluded to was very apparent in the second case I have just mentioned; although, as Dr. Todd has pointed out, antagonistically to this theory, a certain mal-nutrition of some parts of the encephalon causing a disturbance of their polar state, and just as a Leyden jar, when charged with electricity to a certain state of tension, gets rid of the disturbance of the equilibrium by the disruptive discharge, so, in the epileptic case, such a disturbance might have existed, and the eccentric or peripheral irritation ("the lash"), induced the epileptic paroxysm. I well remember the case of a labourer at Jersey, in 1848, who, while excavating at the public works there, was perfectly covered up for several minutes by a fall of earth, and when extracted he was apparently quite asphyxiated. He had hardly been exposed three minutes to the open air, when a violent epileptic paroxysm came on. Here, then, is a case of want of oxygenation of the blood affecting the nervous system and producing the paroxysm. I am inclined to think, however, that the apoplectic case after flogging is to be referred to the theory of Dr. M. Hall.

ILLUSTRATIONS OF CLINICAL MEDICINE AND PATHOLOGY

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(Continued from page 241, Vol. VI.)

INFLAMMATION OF THE MUSCULAR SUBSTANCE OF THE HEART.

Inflammation of the muscular texture of the heart advancing to suppuration is of such rare occurrence, and the symptoms accompanying it are so obscure, that a well-marked example of the affection, carefully watched through most of its progress, strongly suspected during life, and minutely examined after death, can scarcely fail to constitute an important contribution to the clinical illustration of disease. And it is the more necessary to bring together whatever clinical knowledge we possess on this obscure subject, when it is remembered that even so experienced a physician as Dr. Latham had seen but one case of the disease in question, and knew of only one other like it, and was therefore led to remark that it has "no customary assemblage of preceding or concomitant circumstances, *i. e.*, no clinical history to tell us when to expect it, no sure diagnosis to tell us when it is present, and, consequently, no definite indications of treatment, either for prevention or cure."(a) Out of the following case, however, and by comparing it with others of a like nature already recorded, we may be enabled to deduce some information which will probably be of use in the diagnosis of future cases of the kind.

Case 18.—Thomas Webster, aged 12, was admitted into John front Ward, under Dr. Burrows, August 4, 1851. He was a thin, delicate-looking lad, with flushed cheeks, and an excited, anxious expression; his lips were dry, and crusted over with a few sordes; skin hot and moist; pulse 120, full, with a sharpness in the beat, but compressible; tongue rather dry, clean, and red at the tip; a rough, white fur on the dorsum. He appeared confused, occasionally rambled, and talked incoherently; but, when closely questioned, gave rational answers. He complained only of pain in the right arm and leg, and said he was very thirsty. There was no visible swelling of any of the joints, and no apparent pain on pressure. The abdominal walls were rather tense, and pressure in the epigastrium appeared to cause pain. On auscultation, a short systolic murmur was heard at the apex of the heart, but no trace of pericardial friction-sound; there was some increase of the cardiac dulness on percussion. The confused, half-delirious condition of the patient prevented any history of the case being obtained; and, in the absence of his friends, the treatment had to be founded merely upon the somewhat obscure symptoms then existing. The pain complained of in the arm and leg, together with the short systolic murmur at the apex, suggested the probability of a rheumatic state of the blood, with some affection of the heart; the tenderness in the epigastrium, so frequently observed among the early symptoms of pericarditis, led to the suspicion that the pericardium might be affected, although most careful examination failed to detect any exocardial sound; and the symptoms of disordered nervous system were

(a) On Diseases of the Heart, Vol. II., p. 135.

thought to be secondary to, and sympathetic of, the cardiac affection. Accordingly, he was ordered—

Cucurb. cruent. ad ℥iv. inter scap. sinistr. et spinam dorsi. Hydr. chlorid. gr. iij. statim, hst. sennæ ℥j. post quatuor horas. Hst. ammon. acet. ℥j. c. potass. nitr. gr. v., potass. bicarb. gr. x., 4tis horis. Dieta lactis.

August 5.—The cupping produced no immediate effect; he dozed much through the afternoon, and, at night, slept quietly until about three a.m., when he became restless and delirious, and continued so up to the time of being visited. His pulse was 100, moderate volume, compressible; skin warm and dry; tongue rather dry, clean and red at the tip, furred white on the dorsum; bowels open freely; the motions as well as urine passed in bed. The tenderness in the epigastrium was increased. Several small pustules were observed, scattered over the chest and abdomen. It was with greater difficulty now that any answers could be obtained from the patient; he was taciturn and irritable, occasionally dozing a little, and then starting up frightened. He did not seem to recognise his mother, who now came to see him. From her it was ascertained that he worked at a silk-spinner's, and had enjoyed good health. On the 30th of July he first complained of pains in his limbs; but they were not severe enough to prevent him continuing at his work, which he pursued until August 2nd (two days before his admission into the hospital). On the evening of that day, on returning home from work, he complained of much pain in the left thigh and leg, and of feeling generally unwell. That night he was very restless; and next morning was unable to leave his bed, on account of the pains in his limbs. He passed another very restless night, being occasionally light-headed. Towards the morning of the 4th he became decidedly delirious, and almost unmanageable, talking, and trying to get out of bed. In that state he was brought, the same day, to the hospital.

The history thus obtained, although it still seemed to indicate the existence of some rheumatic affection previous to the onset of the cerebral symptoms, and so to justify the first diagnosis, yet, as it drew attention to the occurrence of delirium at so early a period of the disease, and showed that this symptom, together with other signs of cerebral disturbance, were evidently on the increase, seemed to render necessary the employment of some measures more immediately directed to the brain, especially as repeated auscultation failed to detect any increased evidence of cardiac mischief. Accordingly, he was ordered to lose from six to eight ounces of blood from the arm, to have his head shaved, to take two grains of calomel and one-sixth of a grain of tartarised antimony every four hours, and to continue in the use of the saline draught prescribed the day previously. Only two ounces of blood could be obtained from the vein in the arm, he was, therefore, cupped to six ounces from the temples.

These remedies seemed to tell as little as those directed to the heart, for he passed another restless, delirious night, scarcely sleeping at all, and on the morning of the 6th he was more irritable and disinclined to speak; his answers, however, when obtained, were rational, and he still complained much of thirst; his lips were dry, and covered with sordes; the tongue also dry, and thickly furred; pulse 92, soft. The small pustules noticed on the trunk the previous day were much more numerous, while several were seen scattered over the shorn scalp.

On auscultation now, a distinct pericardial friction-sound was detected between the left nipple and the sternum.

The development of this friction-sound seemed to prove the correctness of the first day's diagnosis,—viz., that the cerebral symptoms were in great measure sympathetic of inflammation of some of the tissues of the heart. This view was, therefore, again acted upon. Eight leeches were applied to the region of the heart, the calomel and antimony were continued, and fifteen minims of laudanum were ordered to be taken at bedtime, to tranquillise the nervous system, and procure sleep.

7th.—He slept very little through the night, but was quieter. This morning he is irritable and restless, and complains of pains in his limbs when he is moved; aspect much depressed and dusky; lips and teeth coated with sordes; skin cool; the pustules remain on the trunk, and are more numerous on the scalp; pulse very feeble and very frequent, about 140, but counted with difficulty; bowels open three times; the evacuations, with the urine, passed in bed. On auscultation the heart's impulse could scarcely be felt, the sounds indistinct, the action fluttering; an occasional friction-sound was heard in the situation where it was detected yesterday; the cardiac dulness was increased transversely.

He was now ordered liq. vesicatorii sterno applic.; ung. hydr. fort. ℥ss. inguin. infric. 4tis horis. Hydr. chlor. gr. ij., opii gr. ½, 4tis horis.; sp. ammon. arom., sp. æth. nit., aa ℥ss., ex haust. ammon. acet. c. camph., 4tis horis.

After the last note, he gradually got weaker, and quietly died soon after four o'clock the same afternoon.

The body was examined twenty hours after death. There was considerable emaciation; numerous small pustules were observed on the scalp, and several scattered about the chest and abdomen; the lips were dusky. The skull was natural; the membranes of the brain quite healthy; a slight excess of arachnoidal fluid, which, however, was quite clear; the brain itself was somewhat congested and soft, but otherwise natural; there was slight granulation of the interior of the cerebral ventricles. The cerebral vessels and sinuses were healthy. The sac of the pericardium contained about ℥iss. of turbid, blood-stained fluid; both the opposed surfaces were covered over by a thin layer of rough, friable lymph, while a few shreds of recent adhesion loosely united the two surfaces together. The layer of false membrane covering the heart was spread, with nearly uniform thickness, over every portion of the surface of the organ; yet the only part of the pericardium which appeared to be inflamed was that limited to the region of the left ventricle, where it was of a general deep-red colour, variegated with dark specks and blotches like ecchymoses, and also by small scattered patches of a yellowish-white colour, the latter being most abundant near the apex. When cut into, the yellowish patches just mentioned were found to consist of soft, puriform material, which dipped for some distance into the substance of the ventricle, the muscular tissue immediately around them being of a dirty-red colour, and softened almost to pulpiness. On making sections through the whole thickness of the wall of the ventricle, these deposits were found scattered through every part of it. The muscular substance generally had a dirty, reddish-brown aspect, and was very deficient in its ordinary fibrous structure, being soft and loose in texture, and very lacerable, yielding readily to the pressure of a blunt instrument, while a dirty, greyish-red fluid collected in the hollow spaces resulting from such pressure. Together with the more distinct collections of pus, numerous blotches of a deep dirty-red colour were scattered throughout the altered muscular tissue of the ventricle. In the centres of nearly all of these was either a soft yellowish or buff-coloured material, or a thin, reddish-brown pulp. Some few were hollowed out into little sacs, filled with a thin, greyish-red fluid. These various appearances gave to the cut surface of the ventricle a peculiar mottled or freckled aspect, which contrasted strikingly with the appearance presented by sections of the right ventricle, which was completely free from disease in every part, except in the septum, through nearly the whole thickness of which the alteration noticed in the left ventricle had extended. The walls of both auricles were healthy, and nothing morbid was observed on the interior of the heart, not even of the left ventricle; the valves also were quite healthy, and free from vegetations.

Portions of the inflamed muscular tissue of the left ventricle were examined microscopically. A piece taken from a part less diseased, and more distinctly fibrous than the rest, was nevertheless very soft and lacerable, and made the drop of water in which the specimen was dissected quite turbid, the turbidity being due principally to floating shreds of fibres. The majority of the fibres examined with the microscope had undergone fatty degeneration in a greater or less degree, the sarcolemma of some being filled with minute oily particles, arranged somewhat linearly, of others with irregularly-scattered granules. In the firmer portion of the specimens the fibres were less broken and shreddy, their transverse markings tolerably distinct, and the fatty granules within them few in number.

Scrapings from the soft pulpy parts presented a perfect *débris* of material, consisting of a turbid fluid, containing shreds of degenerated muscular fibre, large quantities of coarsely granular matter, particles of oil, and numerous corpuscles of pus. The yellow semifluid puriform masses consisted of little else than pus-corpuscles, well formed, but rarely distinctly nucleated. Portions of the muscular tissue of the right ventricle presented the ordinary characters of healthy muscular fibre.

There were some scattered pleural adhesions on the left side; the portion of the right pleura contiguous to the pericardium was vascular, and covered with a little soft yellowish lymph. The general tissue of the lungs was healthy, yet in both lower lobes were several hard, solid, prominent masses, varying in size from peas to almonds, presenting on section a dark red, almost black colour, exactly like ordinary masses of pulmonary apoplexy; while the circumference, and, in some, the centre, was of a pale, rusty, or buff colour. The abdominal viscera were all carefully examined, but in none was there anything particularly abnormal.

The nature of this case was thus made quite clear by the *post-mortem* examination. It was one of acute pus-depositing inflammation of the muscular substance of the left ventricle of the heart, manifesting itself by no signs directly referable to the heart, but accompanied throughout, and terminating fatally, with prominent symptoms of serious disorder of the nervous system. To make the case useful in a diagnostic point of view, it will be necessary to draw attention to the details of two closely parallel cases, which, although published already, may with advantage be here appended. The first of these is a case published by Dr. Burrows.(a) It occurred in a shop-boy, aged thirteen, of delicate constitution, who was admitted into St. Bartholomew's Hospital, under Dr. Burrows, complaining of severe pain in the right iliac fossa, groin, and thigh. There was some redness, swelling, and hardness of these parts; there was also some pain in the right upper arm, without swelling or redness. His countenance was expressive of much suffering, and he moaned frequently; the eyes were suffused, and the nostrils dilated; the external jugular veins turgid and throbbing; respirations 48; pulse 136, sharp, but compressible; skin warm, feet cold, tongue dry, with a red streak down the centre. He made no complaint of pain about the chest, but a short, systolic murmur was audible at the base of the heart. He stated, that, five days previous to his admission, he had been seized with shivering, loss of appetite, and vomiting, and that, two days afterwards, pain came in the groin and other parts. He was ordered hirudines viij., regioni iliacæ dextræ; cataplasma postea. Hydr. chlor. gr. i., ant. pot.-tart. gr. $\frac{1}{8}$, 6tis horis.

He passed a restless night, with much delirium. His manner next day was excited, and he cried out with pain in the groin and thigh; he made no complaint of pain in the chest, but the cardiac murmur remained. The same remedies were repeated.

He was again delirious and restless in the night, and next day had a very anxious aspect, moaned frequently, and was incoherent; he complained less of the former pains, but, on proceeding to examine the chest, he referred his pain to the præcordium. Percussion here aggravated the pain, and elicited extensive dulness; a harsh friction-sound was now audible all over the cardiac region; the pulse was 144, weaker; the respirations 72, laborious; the skin hot and dry, with erythema papulatum over the trunk and limbs. He was cupped from the cardiac region; frequent doses of calomel and opium, with mercurial inunctions, were ordered, and in the evening a blister was applied to the chest. These remedies afforded no relief, and he expired the following morning, having been delirious and moaning to the time of his death.

Upon examination of the body, the whole surface of the pericardium was found covered with a net-work of recent lymph; there was about an ounce and a-half of turbid serum in its sac. On the anterior surface of the left ventricle of the heart there was a white spot, about a quarter of an inch in diameter. On cutting through this, it appeared to be formed by concrete pus; the muscular tissue around was congested and soft; the muscular substance of other parts of the heart was paler than natural; the endocardium and valves were perfectly healthy. Both lungs were greatly congested, dark, and studded with masses of pulmonary apoplexy. The iliac vessels and other parts of the abdomen were natural. The brain was not examined.

The next case is the well-known and often quoted one communicated to the Medico-Chirurgical Society, many years ago, by Mr. Stanley.(b) It is abstracted so concisely by Dr. Latham,(c) that it may be told here nearly in his words. A boy, 12 years of age, was in perfect health on Saturday night, and dead on the following Wednesday afternoon at two o'clock.(a) He had, in the opinion of all who saw him, the severest inflammation of the brain. The attack was sudden, with great heat and frequency of pulse, and speedily attended with pain in the left thigh and knee. He had delirium and convulsions, and pointed to his forehead as the seat of his pain. At length he sank into a state of insensibility and died. Upon dissection, not a vestige of disease was found within the cranium, but the heart was the seat of the most intense inflammation, pervading both the pericardium and the muscular substance. Four or five ounces of turbid serum, with flakes of coagulable lymph floating in it, were found in the cavity of the pericardium, which had its internal surface covered in various situations with a thin layer of reticulated lymph. Thus far there were the evidences of acute inflammation of the pericardium at an early stage. There was no adhesion of the opposite surfaces; the lymph and the serum had been effused together, and the serum had partially washed away the lymph as it was deposited. Further, when the heart itself was divided, the muscular fibres were dark-coloured almost to blackness, loaded with blood, soft, and loose of texture, easily separated and easily torn by the fingers; and, at the cut edges of both ventricles, small quantities of dark-coloured pus were seen among the muscular fibres. The internal lining was of a deep-red colour, without any effusion of lymph. At the close of his remarks on this striking case, Mr. Stanley very justly observes, that "here we have presented to us an instance of inflammation attacking the heart, so violent as to pass immediately into suppuration, and, at the same time, so destructive, as to prove fatal in four days from its commencement, and yet, of the symptoms which arose, there was not one which appeared directly referable to the affected organ. On the contrary, from their general tendency, the attention of the practitioners was diverted from the central organ of the circulation, the actual seat of disease, to the centre of the nervous system, where there existed no organic derangement."(b) This observation will apply with almost equal exactness to each of the two cases previously narrated; there was, however, this difference, that, guided by the information furnished by Mr. Stanley's narration, attention was from the first directed to the condition of the heart, and the suspicion awakened, first by the existence of an endocardial, and then of an exocardial murmur, that the symptoms of disturbance in the nervous centres were dependent, not on organic lesion in them, but on sympathy with acute mischief in some of the textures of the heart. The value of the aid furnished by auscultation in such cases as these, surely requires a passing tribute, for it can, indeed, scarcely be over-estimated.

Although from an isolated case, such as that recorded by Mr. Stanley, no rules could be deduced for the diagnosis of the disease on other occasions, yet the occurrence of two other cases so nearly like it in the more striking symptoms, seems to show that, even with so little experience of the disease, we, nevertheless, possess several data highly favourable to the formation of a correct diagnosis. At any rate, in each of the three cases narrated in this communication, there were several points of striking resemblance. Thus, first, they all occurred in the male sex; and, we believe, there is none recorded of the same disease in females. Secondly, all the patients were boys approaching puberty, the age having been from 12 to 13 years in all three cases. Thirdly, all the cases commenced with, or were accompanied by, severe pains (supposed to be rheumatic) in the muscles of the thighs and arms, but without swelling of any of the joints. Fourthly, in two of the cases there was a papular or pustular rash, as if the blood was contaminated: perhaps, a similar eruption may have existed in the third case, although not described. Fifthly, there was the remarkable circumstance that, in all three cases, the pericardium was extensively inflamed, in addition to the carditis, but that in none was there any affection of the endocardium or the valves. There were, also, other minor features of resemblance, but from those already mentioned it would appear that, even in our present limited knowledge on the subject, "the customary assemblage of preceding and concomitant circumstances" in this disease is more uniform than might have been supposed.

(a) "Disorders of the Cerebral Circulation," p. 187. 1846.
(b) Medico-Chirurgical Transactions, Vol. VII., p. 323.
(c) Op. cit., p. 135.

(a) In Dr. Latham's account, death is stated to have occurred on the Tuesday, but, according to the original report, it did not happen until the Wednesday.
(b) Loc. cit., p. 328.

REPORT OF THE OUTBREAK OF CHOLERA IN THE BOROUGH GAOL OF NEWCASTLE-ON-TYNE.

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(Communicated to a Meeting of the Newcastle and Gateshead Pathological Society, held Dec. 8, 1853.)

The construction of the Borough Gaol at Newcastle is more remarkable for its great strength and impressive solidity than for the accommodations necessary for the treatment of many sick prisoners during the prevalence of epidemic disease within its walls. It is a remarkable fact, nevertheless, that, during a period of fourteen years, no prevailing disease has shown itself until the recent outbreak of cholera, and that the health of the prisoners has been well maintained by the great attention that has been observed to cleanliness and ventilation, as far as the nature of the buildings would permit. On a few occasions, two or three cases of continued fever have occurred, and once a sporadic but decided case of cholera took place, from which the man recovered, though his danger was extreme. During the late epidemic, the want of an infirmary was seriously felt, and but for the temporary conversion of day-rooms into hospitals for the sick males, and of a school-room into the like accommodation for females, the mortality would probably have been greatly increased. The prison was built about thirty years ago, according to the most approved principles of the time. It consists of an entrance tower, through which passes a gateway, consisting of four storeys, the lower of which is appropriated to the cooking kitchen and other offices; above are a school-room and several other apartments appropriated to the female prisoners, where they sit by day, and sleep, principally in hammocks, at night; appended to the tower are washhouses and other offices, and an airing ground for the female prisoners. The other buildings consist of a lofty central erection, appropriated to the dwelling houses of the Governor and the principal task-master; the chapel occupies the upper storey of this building. Diverging from it in radii are several (five) distinct buildings, each three storeys in height, containing sleeping cells, rooms of a somewhat larger size, called sick-rooms and day-rooms, some of considerable dimensions. The sleeping cells are fifty-two in number, about 8 feet long, 5 feet wide, and 8 feet high, comprising an area of 350 to 400 cubic feet; one prisoner sleeps in each cell. The sick-rooms are twelve in number, varying in size from 750 to 800 cubic feet. From three to five, and occasionally six prisoners occupy one of these cells at night. The day-rooms are much more capacious, and admit of good ventilation. In the tower are six rooms, containing from 1850 to 3000 cubic feet. Some of these rooms are very lofty, being about fourteen feet in height; others are about nine feet only. It has sometimes, though rarely, happened, that in this part of the building fifty females have been confined at the same time. In the early part of the late epidemic, eight sick females were confined to bed in one of these rooms containing 1850 cubic feet, and nine in another room containing 2400 cubic feet; the area of this room is about 21 feet by 12, and at one end are three narrow windows. The hammocks, when slung for the night, occupied nearly the whole space. A room so small and badly ventilated was but ill-suited for the accommodation of nine cholera patients, two or three of whom were in a state of collapse; and the early establishment of an airy hospital in the men's school-room, containing eight beds, was a great relief to this part of the establishment, and had a very salutary effect in promoting the recovery of the patients. The same remark applies to the establishment of hospitals for the male sick in the day-rooms already noticed, one of which contained six, and another four beds.

Besides the accommodations already enumerated for criminal prisoners, the debtors' ward contains twenty-two rooms, each one containing from 750 to 1000 cubic feet, all of which are well provided with the means of ventilation.

For several weeks previous to the irruption of cholera, an irritable condition of the bowels had prevailed to some extent, both among the male and female prisoners, of a dysenteric character.

Dating the first appearance of choleraic diarrhœa from the beginning of September, the prison at that time contained 144 prisoners, 4 of whom were debtors; and during the prevalence of the epidemic 92 were admitted, 14 being debtors—making in all, 236; but during the same period many were discharged, so that the actual number of prisoners at one time did not much vary.

The total number of sick with symptoms of cholera in its various stages, from September 3 to October 21, was 142, of whom 89 were males, and 53 females. One only—a female—exceeded 60 years of age, whose case was not very severe. 39 were under 20 years of age; 28 males, and 11 females. The remainder varied from 20 to 60, but most of them were in the middle period of life. The greatest number ill at one time was 45; the number of deaths was 9,—4 males and 5 females.

The commencement of the disease may be dated from September 3, when, and on the following days, a few cases of diarrhœa took place; but it was on the 8th that the more decided symptoms of cholera were first developed. On that day, 9 seizures took place; 4 of whom, 2 males and 2 females, ultimately died; one man, aged 30, in less than twelve hours. Another male, aged 26, died on the 12th, having been ill four days. One female, aged 35, died on the 14th, after six days' illness; and a second female died on the 19th, after eleven days' illness. In both these women, after convalescence appeared to be established, the stage of collapse somewhat suddenly took place, from which they could not be recovered. In one, ptyalism had been produced, followed by restored secretion of bile and urine, which has generally been followed by recovery; but, while the gums remained under the mercurial influence, collapse and death ensued. The other patient was pregnant, which might have some influence over the progress of disease; and they both were among the 9 who occupied the small room already described, the area of which did not exceed 2400 cubic feet, with very imperfect means of ventilation.

I shall not at present enter into any discussion as to the pathology or essential nature of cholera or its causes. But I shall notice a few facts in connexion with its symptoms, and speak generally and concisely of the treatment pursued. Although, in some of the early cases, cramps were much complained of, yet in many severe cases, even when complete collapse took place, they formed a much less prominent symptom than happened in former epidemics.

The notion very generally prevails, and has been much insisted on, that the stage of diarrhœa can always be successfully cured by appropriate treatment. But though this is very frequently, it is by no means invariably true. In the prison some cases of diarrhœa passed rapidly into the stage of collapse, in spite of the careful employment of remedies which in other cases often proved perfectly and rapidly successful.

My experience convinced me that the exhibition of brandy and other powerful stimulants was not useful, and in some cases was distinctly injurious, by increasing the irritation of the stomach.

From former experience of emetics I was induced never to have recourse to their use, in the late epidemic, either in the prison or elsewhere. To check vomiting and purging, to relieve pain, and to restore the secretions of the kidneys and liver, were the indications which I held in view; and, I may add, in cases of collapse, to rouse the nervous and circulatory systems. The remedies employed for these purposes were the same as those prescribed by most Medical men, modified, perhaps, by my individual experience, and the peculiar habits of my own mind.

There are few Practitioners who do not employ mercury and opium. Some give large doses of both, some small doses, some small doses of the one, combined with large doses of the other, and *vice versâ*. Much difference also prevails as to the frequency of the doses.

Whether this great variety in the doses of these two medicines of almost universal employment in cholera is dependent on different views of the indications to be answered by their exhibition, I do not pretend to determine. But having, as I imagined, these distinct objects to be accomplished,—to check vomiting and purging,—to relieve pain, or spasm, or cramps, and to restore biliary and urinary secretion, I have prescribed them in such doses as I thought most likely to answer these purposes; and having previously and frequently prescribed them, both in much larger and smaller doses respectively, I have fancied that the prescription I have employed was about the middle course, adapted to the generality of cases. I may add, that

some time ago, from a supposition that it was more acceptable to the stomach than colomel, I was led to give the preference to blue pill; and the great convenience of having a ready formula adapted to the generality of cases, has prevented my making any change in it for a considerable length of time.

This formula, which is known at the gaol by the name of "Cholera Pills," is as follows:—

℞ Pil. hydrarg. ʒi., pulv. opii gr. xii., zinzib. gr. xxiv. M. et divide in pilulas xxiv.

Of these, in adults, two are generally given at first, and one every one, two, three, or four hours, according to the nature and severity of the symptoms.

If, after taking some doses of these pills, diarrhœa should be checked, but vomiting should continue, two or three remedies have, in different cases, been found useful. Effervescing draughts, magnesia in mint-water, with or without a few drops of laudanum, and a drop or two of creosote given with an equal quantity of ol. menth. pip. on a small piece of sugar; and when, on the contrary, vomiting has been relieved, but diarrhœa has continued, I have given with marked benefit the dilute sulphuric acid with laudanum, in doses of ten drops of each, three or four times a-day.

The following is the prescription usually employed:—

℞ Aquæ ʒviii., sacch. alb. ʒiii., acid. sulph. dil., tinct. opii, aa. ʒi, tinct. aurant., tinct. calumb., aa. ʒiii. M. capt. cochl. iii. ter quaterve die.

Mustard plasters have been freely applied to the scrobiculus cordis, or abdomen, to relieve irregular pains or spasms, and have generally afforded some relief. Hot poultices and fomentations have also been found useful. It has frequently happened, that when the discharges from the bowels had become bilious, they were yet too frequent, and attended with griping and spasmodic pains. In these cases, great relief often followed anodyne injections of gruel, with thirty or forty drops of laudanum. Castor oil, with a few drops of laudanum, was often equally successful when the stomach would retain it, which was not always the case.

When, in a subsequent stage, it became necessary to excite the action of the bowels, blue pill or calomel, followed by castor oil, generally succeeded, and, occasionally, injections of gruel, salts, and castor oil, answered the purpose.

When diarrhœa had entirely ceased, and vomiting nearly or entirely so, the bowels having become inactive, and the secretion of urine entirely suppressed, I have found repeated doses of blue pill frequently successful in restoring the action of the liver and the kidneys. Five grains were given every hour or two till these indications were answered, which usually happened if the gums became affected, though this was by no means a necessary condition.

In about six cases of collapse, the brandy blister was employed. The effect of this powerful external stimulus, in rousing the patient to a certain degree of re-action, was marked and immediate; but in three cases only was it entirely successful. In one of these cases, a single application sufficed; in another case, it was applied twice before complete restoration of the circulation and animal heat commenced; and, in the third case, three applications were required, the last one being to the lumbar spine: all the others were applied to some region of the abdomen.

The method of employing the brandy blister is by placing next the skin a piece of rag dipped in brandy, which, being ignited, is allowed to burn away. This is generally effected in less than one minute. The pain is considerable, and renders it necessary to have the hands of the patient firmly held. Some vesication follows, which is best treated by being dusted with flour till it dries up and falls off, leaving the skin entire. I am disposed to think that this remedy will be found most effectual when applied to the spine.

The articles of diet most generally employed were gruel with salt, beef-tea, mutton-broth, and milk; but tea or coffee were not refused when wished for; rice and sago were also given occasionally, and in an advanced stage of convalescence, but not sooner, chops were allowed.

I have not encumbered this short Report with details of individual cases, feeling that, if I introduced them, I should merely recapitulate what must be sufficiently familiar to all who hear me; but I ought sooner to have noticed, that, in some cases of fixed abdominal pain, in the stage of re-action as well as in headaches, leeches were employed with good effect. In one case at least, perhaps the lancet might have been properly and successfully had recourse to; but it not unfrequently happens, that, in reviewing our treatment of cases, especially if unsuccessful cases, we conclude, and perhaps truly, otherwise experience would be of little value, that errors have been committed; that too much or too little has been done; and that a method of treatment, opposite, or at least in some respects different, might have been attended with greater success; so it is, that in the diagnosis, prognosis, and treatment of disease, the great truth is constantly forced upon our recollection—"*Ars longa, vita brevis.*"

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

ST. BARTHOLOMEW'S HOSPITAL.

REMOVAL OF A CYST FROM THE SCALP CONTAINING A MASS OF HAIR.

[Under the care of Mr. STANLEY.]

An interesting and extremely rare example of a hair-containing cyst beneath the scalp occurred at this hospital a few weeks ago. The patient, a woman, aged 30, was under the care of Mr. Stanley, and was brought into the operating theatre on October 7, in order to have removed what was believed to be merely a suppurated sebaceous cyst. The tumour was situated beneath the scalp, a little behind the middle of the coronal suture; it was in a state of chronic inflammation, and communicating with its interior was a small sinus, from which there was a constant discharge of pus. Intending to dissect out the thickened walls, Mr. Stanley made a free incision across the cyst, and, to his surprise, found in its interior a mass of thickly-matted hair. It was flattish in shape, about a third of an-inch in thickness, and an inch and a-half across, being composed of detached black hairs, of the stoutness of those on the scalp, and from an inch to two inches long. The walls of the cyst were so much softened by inflammation that the operation of removal was not very easily performed; with a little care, however, it was at length effected, and the parts having been supported by a moist compress, the patient was sent back to the ward, where, in the course of about a fortnight, the healing processes were completed.

Although none of the hairs were found attached to the lining membrane of the cavity which contained them, there could be little doubt but they had originally grown from it, having probably been shed during the attacks of inflammation to which it had been subjected. Examined by the microscope, they were seen to possess shrivelled bulbs. The discovery of the singular contents of the cyst, made it a matter of interest to ascertain its history, more especially as to whether it had been of congenital formation. The woman stated that it had been increasing gradually since early infancy, and was supposed by her mother to have been caused by a slight blow which she had received when aged six weeks, as it had not previously been noticed. It did not, however, attain any large size until after the first puncture into it, which was made about five months before she came under Mr. Stanley's care, and after which much inflammation ensued. With such an account, it seemed fair to assume that the tumour might have existed at the time of birth, since the date assigned as that of its discovery was very possibly not that of its origin. Mr. Lawrence and Mr. Paget, both of whom were present at the operation, united with Mr. Stanley in stating, that their experience had not furnished a similar example of cyst beneath the scalp, containing hair. They had all seen them under the eyebrows, but never on other parts of the head.

Some months ago, we saw Mr. Poland remove a very perfect example of hair-producing cyst from under the outer margin of the eyebrow of a little boy, who was a patient at the Royal Ophthalmic Hospital. The cyst had thin, tough, homogeneous walls, and contained, in addition to much hair, a quantity of sebaceous matter. After removal, it might be inverted over the end of the finger, when the hairs, which were firmly rooted, stood out in all directions. Examined by the microscope, the hairs appeared to have bulbs of nearly natural size; they were in stoutness and length exactly similar to those of the eyebrow.

It is now well known, that it is not only in the production of hair that the lining membranes of these prolifereous cysts resemble the cutaneons investment of the body. Lebert states that he has detected in them all the minute structures of ordinary skin. Although most frequently met with either in the ovaries or in the subcutaneous tissue about the eyebrows, yet these are far from their exclusive seats. They have been found occasionally in almost all the organs of the body, the bladder, and kidney, even the brain and its mem-

branes not excepted. Respecting them, in his "Lectures on Surgical Pathology," Mr. Paget has the following remark:—"It is perhaps only during the vigour of the formative forces in the fœtal or earliest extra-uterine periods of life, that cysts thus highly organised and productive are ever formed." The two cases we have alluded to above form no exceptions to this remark.

EXCISION OF A CONGENITAL TUMOUR COMPOSED OF CYSTS, SOME OF WHICH CONTAINED BLOOD.

[Under the care of Mr. STANLEY.]

Those of our readers who are interested in the subject may find in the *Medical Times and Gazette*, for August 7, 1852, page 140, a case described in which a tumour excised from the back of a little boy had presented the characters of a nævus which had ceased to be vascular. We then referred to a paper by Mr. Coote, in which the mode of transformation alluded to is well explained, and some ingenious conjectures broached in connexion with the pathology of nævus and erectile growths. The following case affords additional proof of the correctness of Mr. Coote's statements, as the tumour was removed while in course of transformation, and while several of its cysts yet contained blood.

David Morris, a healthy infant, aged fourteen months, was submitted to operation on Saturday last, December 10, on account of a tumour, the size of a large walnut, immediately beneath the skin of the inner side of the left thigh. His mother had first noticed it when he was three months old, and it was then as large as a nut. She believed that it had latterly increased with more rapidity than at first. It was a softish, doughy-feeling lump, and was attached to the skin, which latter, in one part, was a little discoloured. It differed essentially from all forms of nævus, in that it could not be in the least emptied by pressure. Mr. Stanley made a longitudinal incision over it, reflected the skin on either side, and dissected out the mass. But little bleeding occurred, and ligatures had to be applied to but few vessels. The tumour consisted of a congeries of cysts, two or three of the largest of which might, perhaps, have been capable of containing the kernel of a nut, and were full of venous blood; but by far the larger number of which ranged from the size of a pin's head to that of a pea, and contained either clear serum or sero-sanguineous fluid. The cysts were strung together by a large quantity of dense and tough fibro-cellular tissue of a white colour. The lining membranes of the cysts were smooth and polished, and in shape the cavities were often angular, their extremities ending in cords of connective tissue.

Granting that the above was an example of a nævus, the tributary vessels of which had become obliterated at a very early period of life, we must admit the case as proof that tumours in this condition are still capable of growth; nor, perhaps, if rightly considered, is it much to be wondered at that they should be so, since most organised cysts, however originated, generally possess the power of increasing the quantity of their contained secretion.

GUY'S HOSPITAL.

TUBULAR ANEURISM OF THE FEMORAL ARTERY, PRODUCED BY DISTAL OBSTRUCTION.

[Under the care of Mr. HILTON.]

THE following case is of much interest on account, not only of the rarity of the form of disease it exemplified, and of the cause by which it had been produced, but also in reference to the peculiar measures as regards treatment under which a large amount of relief was obtained.

Samuel Cattley, aged 20, a tall and healthy-looking lad, was sent up from the country to be under Mr. Hilton's care, on account of a pulsating tumour in the right thigh. He was a farm labourer, and accustomed to hard work, but did not recollect that he had ever received any injuries or strains. He stated, that about a year previously he first noticed, in the middle third of the right thigh, a beating lump. During the few months immediately subsequent to its appearance, it caused him no inconvenience, but afterwards, gradually increasing in size, it became subject to attacks of severe pain, following unusual exertion. On several occasions there had been so much pain and swelling about the part, that he had been obliged to lie in bed for a few days at a time, and apply fomentations or poultices to the thigh, under which treatment the symptoms had generally subsided, in a short time, sufficiently to permit of a return to work. At length, however, an attack of an unusually severe character, induced him to come up to town for advice, and, on April 27, 1853, he was admitted into Guy's Hospital. In the middle third of the inner and front aspect of the right thigh was a tumour, elongated in the direction of the axis of the limb, tapering gradually off at its upper boundary, and about the size of a hen's egg, but longer, and not quite so thick. It pulsated evenly and forcibly in all parts, but without there being present any bruit or thrill. In the femoral sheath, immediately below the tumour, there was much thickening and consolidation, and all the affected parts were very tender on pressure. In the course of the saphena vein were several hard and moveable masses, about the size of peas, probably phlebolithes. No pulse could be detected in the tibial arteries of the foot, and that in the tumour itself was readily arrested by firm pressure on the first part of the femoral artery. The structures in the popliteal space were in a normal condition, but it was doubtful whether the artery there situated could be felt to beat or not. The lower boundary of the consolidation and tenderness over the course of the femoral artery to which we have alluded, was where it entered Hunter's canal. There was no œdema of the leg. There being thus so much that was unusual in the character of the disease, Mr. Hilton instituted a very careful examination; and afterwards announced, as his conclusion, that there was a large tubular dilatation of the middle third of the artery, most probably caused by the obstruction it had encountered below in the mass of consolidation which surrounded its trunk. The explanation of the absence of œdema was to be sought in the supposition, that the inflammation by which the lymph had been effused, had involved only the sheath of the artery, and did not surround the vein. The cause of the formation of the phlebolithes was not very evident. Forasmuch as there was present neither warrant nor necessity for radical measures, the treatment would consist in the adoption of such means as were best calculated to effect the removal by absorption of the inflammatory consolidation. A long splint was accordingly ordered to be applied to the extremity, and a bandage to the leg, the thigh being left exposed in order to permit of the employment of poultices. A draught containing a drachm of the liquor hydrarg. bichlorid. with sarsaparilla was to be given three times daily.

May 2.—The tumour has a little decreased in size, but it is still very painful.

The bread poultices are to be substituted by those made with conium. To continue the medicines.

10th.—There has been considerable improvement, and the pain is much diminished. As a counter-irritant, over the part where the induration exists a saturated solution of nitrate of silver (3i. to 3ij.) is to be applied.

16th.—The solution occasioned vesication and severe pain, and is to be again applied. The tumour is much less in size, and its pulsation diminished in force.

24th.—The condition of things is steadily improving in all respects; some of the softer of the phlebolithes appear to be diminished in size. The medicine and the solution externally are continued.

June 20.—The tumour can now be scarcely distinguished. The tibial vessels may be felt to beat, though but feebly.

25th.—The splint has been removed, and he is allowed to walk about. He feels weak from the long confinement, but suffers no inconvenience from the thigh.

27th.—Discharged. There had been no increase of the tumour in consequence of his walking about; an abnormal degree of pulsation still existed, and also a condition of rigidity and induration of the last part of the femoral sheath; but both these symptoms were very much abated, and there was no tenderness whatever over the parts. The phlebolithes were *in statu quo*.

Mr. Hilton remarked, that he felt no doubt as to there having been a chronic inflammation of the sheath of the artery in the above case, by the constriction of which the dilatation had been caused. Whether that inflammation had been idiopathic or not was perhaps doubtful, but he was much inclined to believe that the lad must have at some former time received a blow or other injury to the part, which he had perhaps forgotten, but which had served as the starting point of the diseased actions.

It will be seen, that we have deferred the publication of the above, until some months after the patient's discharge. It seemed, indeed, desirable, considering the kind of relief which had been obtained to wait awhile, in order to see that no relapse occurred. By the kindness of Mr. Hilton, we have now before us a note which brings the report up to the present day. Mr. J. Harrison, jun., of Bocking, the surgeon under whose care the young man had previously been, writes to the effect, that the improvement in the condition of the vessel has been steadily progressive. The patient has been, since he returned home, engaged without interruption, in the most laborious kinds of farm work, and has had no attacks of pain. The dilatation has very much diminished, and the coats of the vessel have become firm and unyielding. There seems, therefore, every reason for hoping that the cure may be permanent.

THE LONDON HOSPITAL.

FRACTURE THROUGH THE PETROUS PORTION OF THE TEMPORAL BONE. — PROTRACTED DISCHARGE OF SUBARACHNOID FLUID.—RECOVERY.

[Under the care of Mr. ADAMS.]

For the particulars of the following instructive case we are ndebted to Mr. Debenham, the house-surgeon, under whose charge the patient was:—

Nicholas Hoskins, aged 29, a sailor, who had lost both the leg and arm on the left side, from an injury received some twelve years ago, walked into the hospital on the evening of Sunday, September 26th, between nine and ten o'clock, complaining that he had hurt his shoulder. On examination, it was found that the left clavicle was fractured, but while Mr. Debenham was engaged in putting on the usual figure-of-eight bandage, the man remarked, "Oh! Sir, I forgot to tell you, ever since my fall I have been bleeding from my left ear." This, of course, led to further inquiry, and he stated, that at twelve o'clock at noon he was walking on the pavement, when his wooden leg slipped, and he fell heavily on his left side. By his account, it appeared that he was rendered insensible by the blow, and was picked up by a policeman, who placed him on a door step, where he remained unconscious for two hours. Upon recovering himself at the end of this time, he found his clothes covered with blood which had flowed from his left ear; he managed to walk home, however, and got to bed, but, in the evening, finding his shoulder very painful, he thought it best to apply at the hospital.

Upon admission, blood was still draining very freely from the ear; he had little pain, however, only a sense of "heaviness" in the head, but was perfectly deaf on the injured side. During the two following days, nearly pure blood escaped from the meatus, but it became gradually lighter coloured, and was at length altogether replaced by a pale, limpid, straw-coloured fluid, which at one time flowed in such quantity, that if he lay upon the right side for half an hour, the left external ear became filled to overflowing. It gradually diminished in amount, and the last traces of it were seen on the 18th day after the accident. For the first four days after admission, the only other symptom was a dull aching pain in the head, but on the fifth it was observed that he had paralysis of the portio dura nerve, the mouth being drawn over to the right side, with inability to close the left eye. Shortly after this he was seized with acute pain in the head, which he described as "though two hammers were beating his brain," attended with high inflammatory fever. It yielded, however, to leeching and free purging, and in a few days left him altogether. Soon after the serous fluid ceased to escape, he found that he had partially recovered his hearing on the left side, and it continued to improve until completely restored, about a month after the accident.

At the time of his discharge, Oct. 20, he had lost all pain in the head, the hearing was perfect, and the only remaining symptom of the severe injury which he had sustained was paralysis of the portio dura, the functions of which nerve were but little, if at all, restored.

On his first admission, Mr. Adams ordered him to be purged, and put on low diet, with cold lotion to the head; but, on the supervention of the more urgent symptoms, on the fifth day he was leeched, and afterwards blistered behind the ear, mercury being also given in small doses until the gums were slightly touched.

ST. MARY'S HOSPITAL.

FATTY TUMOUR BENEATH THE EYEBROW, AND EXTENDING INTO THE ORBIT.—EXCISION.—RECOVERY.

[Under the care of Mr. HAYNES WALTON.]

Fatty tumours, growing either in or about the orbit, acquire importance on account both of their unsightliness, and because they are very liable to compress or displace the eyeball. They appear to be most common in this locality in early life, and are probably frequently congenital. A few weeks ago we saw one about the size of the kernel of a small hazel-nut, which had been removed from beneath the ocular conjunctiva. The patient was a little boy under the care of Mr. Dixon, at the Royal Ophthalmic Hospital. The tumour had most likely been of congenital origin; it was lobulated, enclosed in a thin capsule, and consisted of firm yellow fat.

In November, 1852, we witnessed an operation of more serious character by Mr. Simon, in St. Thomas's Hospital, for the removal of a mass of fat which had grown some depth into the upper part of the orbit. The patient was a young girl; the upper lid had been pushed out, but the eye, excepting having been turned a little down, was not much displaced. Mr. Simon made a free incision beneath the eyebrow, and exposed a large mass of beautifully clear white fat. The edges of the wound being held widely asunder, the deep attachments of the tumour were carefully divided, and the whole removed. It was about the size of a walnut. The wound healed kindly, and no ill effects remained.

A third case, the subject of which has just been discharged from St. Mary's Hospital, was of interest, not only on account of the orbital encroachments of the tumour, but from the difficulty attending its exact diagnosis. Fatty tumours, it is well known, differ much as to firmness; in some the fibro cellular septa are very delicate, and the loculi containing pure fatty material very large; in others, the ultimate lobules are so minutely subdivided (granular fat), and the proportion of fibro-cellular tissue to fat is very considerable. The latter kind are often difficult to distinguish from tumours of other classes, since they possess none of the softness and pseudo-fluctuation of fat. The knowledge of the existence of this variety of firm adipose tumours, also, frequently makes the diagnosis of those of other kinds doubtful; more especially of some forms of erectile tumour. For proof of this, we might refer to a case published in Vol. XXVI. of "Medico-Chirurgical Transactions," in which it occurred to Mr. Liston to mistake an erectile tumour in the popliteal space for one of a fatty nature. In less experienced hands than those of Mr. Stanley such an error might very easily have happened in the case of congenital cystic tumour, which we have described at a former page of this week's Journal, as also in the one to which reference is therein made.

Anne B., aged 25, applied on account of a tumour about the size of a walnut, overlying the upper border of the right orbit, elevating the eyebrow, depressing the lid, extending into the orbit, and a little protruding the eyeball. It had firm attachments, and felt dense and solid; the skin covering it could be pinched up, excepting in a few parts, where in the lines of cicatrices of former treatment it was adherent. There were several large tortuous veins over it. The disease had existed from birth, but had increased very slowly. It was quite painless, and annoyed her only by the deformity occasioned. Pressure seemed a little to reduce its volume, and when the jugulars were compressed it appeared to swell. The patient also believed, that when she was excited, it generally filled out more than usual. She had been under the care of a surgeon a few months ago, who told her it was a nævus, and treated it with setons.

Mr. Walton having determined to attempt its removal, she was taken into the operating theatre, and placed under chloroform for that purpose. While it was being administered, Mr. Walton remarked to those present, that he did not feel certain as to the exact nature of the swelling, but that he was prepared to find it an erectile growth; should it prove to be so, he intended to reflect the skin and apply a ligature to its base.

A free incision having been made over its long axis, the tumour was cautiously exposed, and proved to consist of an encapsuled mass of very dense fat. That part which lay over the frontal bone had contracted very firm adhesions, and required to be dissected away; but the lobule which extended into the orbit was not adherent, and came away by mere traction. Very active hæmorrhage took place, and several vessels required ligature.

After the operation, Mr. Walton commented on the peculiar features of the cases, and alluded to the extreme rarity with which fatty tumours are found beneath the scalp. He thought that the supposed swelling out of the tumour during anger, etc., must have been due merely to the distension of the large veins which crossed it. When pressure in a direction upwards had been made on the lump, the woman used to complain of distorted vision, an effect probably referable to the traction on the eyeball exerted by the lobe, which had passed into the orbit. The patient recovered well.

HOSPITAL FOR DISEASES OF THE SKIN.

PITYRIASIS VERSICOLOR A CONTAGIOUS DISEASE.

[Cases under the care of Mr. STARTIN.]

In a former paper we alluded to the fact, that pityriasis versicolor, the chloasma of Wilson, had been observed at this hospital to frequently manifest contagious properties. As the observation is, we believe, (although for some time familiar to Mr. Startin,) a new one in dermatology, it may be well to devote a short report to its substantiation.

Case I.—Mary Ann B., a robust young woman, applied on

account of a copious eruption over the chest and neck. Its features were well marked, but there was rather more than the usual quantity of dry branny desquamation. She stated, that she had had the spots for two years, and that they appeared about six months after marriage. She believed she had caught the disease from her husband, who had exactly similar patches over his chest. Her statement was afterwards verified by examination of the husband. Both were in excellent health, and had not in any way been inconvenienced by the disease, excepting by occasional itching. The scurf taken from the woman's breast was examined with the microscope, but nothing excepting epidermic scales discovered.

Case 2.—William Taylor, a grocer, aged 35, applied with an eruption of pityriasis versicolor, which was almost symmetrically arranged over his trunk, arms, neck, and upper parts of thighs. He had been troubled with the disease for ten years, when it began as a brown patch at the epigastrium; and he believed he had caught it from dogs, as he had been employed in a kennel where the mange prevailed. His wife (she was afterwards seen) had a patch show itself, about a year ago, between her breasts, which had since spread. Both of them had suffered much from itching, but were in excellent health.

Case 3.—Mary Ann Sinclair, aged 20, two years married, had had the eruption for three years on her chest and abdomen. She stated, that, very soon after her marriage, spots exactly like her own had appeared on her husband, first affecting the chest and pit of stomach, and that they had but very recently died away. In both itching had been an annoying symptom; in the woman there was much furfuraceous desquamation; the patches were very large, and, from their brown tinge, made her skin resemble that of a quadroon.

Case 4.—The following is one of the most conclusive:—John D. Tomlins, aged 30, a very stout and healthy footman, had been troubled with the eruption for four years; it affected the entire chest and abdomen. Two years ago he married, and, in a few weeks' time, the spots appeared on his wife's breast. He went to America with his master, and his wife returned to her own family. Out of four sisters, with all of whom she occasionally slept during her visit, an eruption of precisely the same nature appeared on three. They were all grown up and in good health. In the whole five of these patients, the eruption was attended by much itching. The man's statement, as regarded his wife, was confirmed by personal inspection, but the sisters were not seen. There did not appear, however, any reason for doubting the correctness of the account given.

Case 5.—Margaret Carter, aged 49, a widow, had suffered from the eruption on the chest and back for twenty-two years. Her eldest son, now aged 11, had had it for two years, and a younger one, who had slept with him, for one year. The boys were seen, and in all three cases the character of the disease was identical.

Case 6.—John Armstrong, aged 27, a shoemaker, in good health, had his body, back, and arms covered with patches of pityriasis, with which he had been troubled for three years. He had been three years married, and during the last year the disease had shown itself on his wife's chest in a form which precisely resembled his own.

Case 7.—James Grant, aged 30, had had the eruption for five years, and his wife for two. Both were in good health, and in each a troublesome itching sensation attended the spots, especially when in bed. The characters of the disease were examined in each patient, and were identical.

The particulars of two of the preceding cases are from notes kindly supplied to us by Mr. Tylor, the others are from our own; did it seem needful, we might easily add to the number. Although with such evidence, the question must, we think, be considered proved, that pityriaris versicolor is a disease capable of being communicated by direct contact, yet it is to be admitted that, in the large majority of its instances, probably in five-sixths, no history of such communication can be traced. This is probably accounted for, in a considerable degree, by the circumstance that the parts on which it usually appears are not those likely to frequently come in contact with the skin of others, since it rarely affects the hands, arms, or face; thus, in all the cases above given, the parties giving and receiving had slept together, and in seven out of the eleven instances were married couples. No well-marked differences have yet been observed between those cases which prove contagious and others in which, while the patient had been exposed, no such event has ensued, excepting that the former are perhaps a little more subject to itching, and more copiously desquamative than the others. The facts of contagion, and that those appear most contagious which yield the most desquamation and produce most irritation, certainly seem to afford support to the opinion of Eichstedt, that the origin of the disease is in a cryptogamic fungus (*microsporon furfur.*) The writer has, however, at Mr. Startin's suggestion carefully examined the branny scales scraped from the patches in several cases, but without as yet having been fortunate enough to discover any parasitic growth.

It may be interesting to our readers to add, that all the cases we have mentioned were cured by a more or less lengthened perseverance with prescriptions given below. For a notice of the curability of the disease by local applications only, we must refer to the *Medical Times and Gazette* for November 12, page 501, to which we may here add that Mr. Startin believes the eruption very liable to reappear, if an arsenical course be omitted in its treatment.

℞ Liq. potass. arsenitis, ♏iij.; liq. potass. ♏vi.; vini colchici, ♏v., ter die sumend.

℞ Hydrarg. bichloridi, gr. v.; hydrarg. bisulphureti, gr. iij.; creosoti, ♏iij.; acid. nitrici dil., ʒiss.; aquæ, ʒviij. Ft. lotio sæpe utend.

Medical Times & Gazette.

SATURDAY, DECEMBER 17, 1853.

THE NEW LUNACY ACTS.

We publish at page 635 a code of instructions for the guidance of Superintendents of Lunatic Asylums, Medical Practitioners, and others, issued from the Office of the Commissioners in Lunacy.

On perusing this document, we find some stringent regulations for the conduct of Medical men in signing Certificates of Lunacy in the case of private patients; but important as these directions are, they are not materially different from those issued in former years, and therefore do not require particular notice. It will be observed, that in signing his name and qualifications, the Medical attendant must specify the nature of his qualification, and the authorised body by which it has been granted. This is not a new regulation, but it is an important one, and a rigid compliance with its requisitions will be a small instalment towards an accurate registration of qualified practitioners.

There are one or two points affecting the Medical Officers of Unions, which, although not alluded to in the abstract of instructions we have just noticed, deserve a few words of comment.

In the first place, it is directed in the new enactments, that the Medical Officer in each Union shall visit, every quarter, all the lunatic paupers belonging to such Union *who are not confined in an asylum*, and for such services he shall be paid half-a-crown for each visit. Trumpery as the remuneration is which is here offered, we doubt very much whether the boon will be of any practical value at all; for, to the best of our knowledge, all the lunatic paupers in the large Unions *are* confined in asylums, or licensed houses for the insane, and the cases where, in the smaller Unions, they are not so confined are, we believe, very rare.

Another point deserving of notice is, that the Medical officers of Unions are no longer prohibited, as they lately were, from signing the Certificates of lunatic paupers, and from receiving fees for so doing. We have no doubt, however, when we consider the liberality of Poor-law Boards and of parish overseers, that as soon as it is discovered that the Union surgeons are competent to sign the certificates, they will be *required* to do so by their taskmasters, and most probably on the usual terms—namely, *for nothing;* and, as the new Act does not specify the amount of remuneration, and indeed does not allude to remuneration at all, the silence of the Legislature will be readily construed, as it usually is, to the disadvantage of our Profession.

BLACKBALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

In another column, some extracts will be found from one of the many letters we have received on this subject; and, as it excites great interest at present, we may add such observations as have been suggested since our former Article.

The Society's Charter prescribes that it shall consist of "Physicians, Surgeons, and General Practitioners." What is the interpretation of these words? Clearly, whatever it may be, the Society is bound by the usage of all former elections during twenty years, until a new interpretation is formally and openly given. Now, hitherto, Graduates of Medicine of the Scotch and Irish Universities have been elected, and in good number, without question.

But to return to the words: Is not the old interpretation the right one? For, what means General Practitioners? This title is not given by a Corporation. It is the familiar designation given in society. What is Physician? It also is to be interpreted in the same way. The words are not, "member of the College of Physicians," which might be easily written. It must be, like General Practitioner, the persons commonly known among the Public and the Profession as those who practise as Physicians with a recognised qualification. But the Doctor of Medicine of a British University is recognised throughout England as qualified for Physician to Hospitals, and for private practice as Physician. In fact, the physician's practice of the provinces is greatly in the hands of Graduates not connected with the College of Physicians. For instance, Dr. Simmonds, of Bristol, only joined the College of Physicians a month or two ago, after he had retired from his hospital appointment,—after he had been for years in the first practice in his part of the country.

Again: By the Charter, the Council is to judge of qualification of candidates. Qualification ought not to be the ground of objection by a ballot-box. The blackball is to guard against the admission of improper persons to the Society. The qualification ought to be judged of by the Council openly, and by the Society, as supreme body, openly. The blackball is a stigma, and was never intended to be used respecting qualifications. We say, never intended,—for the Council is directed, in the Charter, to judge of qualifications, and the recommendation of a candidate is to be judged of first by that body, and afterwards, after having received the sanction of the Council, it is deliberately read from the Chair by the President to the Society at large, and leave is asked and given by the Society for suspension. This process has regard to qualification.

In the late case, the recommendation-paper, containing qualifications, was read to the Council after the paragraph in the Charter respecting the proceeding had been read. Leave was tacitly given, but not without attention, and then the recommendation passed to the Society. The subject was discussed at a later meeting of the Council, and a difference of opinion was expressed; but the Council was asked by the Chairman, if any member had a motion to make; none was made, and so the matter ended. But members of the Council afterwards invited votes against a candidate—a Doctor of Medicine, a provincial Physician, well known as a highly distinguished graduate of the University of London—avowedly on the sole ground of want of qualification. They were members of the College of Physicians. They descended from the Council-room with all the authority of office. They knew that the usage of the Society had invariably been to elect members of the Profession with similar "qualifications;" with the same "qualifications;" nay, with "qualifications" of a far inferior kind;—they knew, also, that members of the Council, equal to themselves in position, alike in the Profession, in the Society, ay, and in the College of Physicians too, had expressed, in no equivocal language, the opinion that the new interpretation sought to be given to the words of the Charter was wrong. And yet these facts were withheld in the canvass for adverse votes. From members of Council, judicial fairness is expected. They carry with them in such matters much authority, but not one jot less of responsibility.

It has been asked,—"Would surgeons like a person who was not a member of a College of Surgeons to set himself down beside them in practice as a surgeon?" But this question is easily answered. There is no mode of getting any title of surgeon in this country except through a College of Surgeons. But if British Universities (as the Universities in foreign countries do, as the University of Dublin in late years has done) had been in the habit of making Doctors of Surgery as they have done Doctors of Physic;

If, also, those Doctors of Surgery had, in the country parts of England, in Scotland, and Ireland, and the Colonies, been recognised in hospitals and in private practice as Surgeons, just as the Doctors of Medicine have been recognised as Physicians;

And if the Doctors of Surgery had been elected heretofore in the Royal Medical and Chirurgical Society as Surgeons under the Charter, in the same way that Doctors of Medicine have been elected as Physicians;—if all this had been so, then no surgeon could have objected to his neighbour—a Doctor of Surgery, because he did not belong to a College of Surgeons.

If, above all, the Doctor of Surgery had received his Degree from a STATE *Board*, controlled by the Crown, through the Secretary of State, in each of its acts: controlled also by the Legislature: paid for its examinations, moreover, not by the fees of candidates, but by the Legislature,—for all this the University of London is; and if, in addition, the Doctorate of Surgery had been obtained with such an education as that University requires of its candidates, and such examinations as it imposes on them, then any surgeon would surely blush to raise objection to his neighbour on the score of (so called) qualification.

THE CHOLERA.

METROPOLIS.

Cholera rapidly declines; it reached its maximum in the first week of November, when the deaths were 102; in the five subsequent weeks they have been 98, 72, 46, 28, and (last week) 13.

LIVERPOOL, Dec. 9.—The disease, which it was hoped had entirely disappeared from this town, has broken out in a more alarming form. Up to this period it had been confined almost entirely to German emigrants, who had brought the seeds of the malady with them from their native land; but within the last few days it has broken out among the inhabitants of the town in the lower districts, and 18 deaths were yesterday reported.

SCOTLAND.—The cholera still continues to exhibit itself in several parts of the country. A fatal case has been reported at Calderbank, near Airdrie; 3 cases have occurred in Edinburgh, 1 of which has terminated fatally; while in Dundee, 19 cases and 9 deaths were reported on Monday; 20 cases and 12 deaths on Tuesday; and 9 cases and 6 deaths on Wednesday: making in all 461 cases and 247 deaths since the outbreak of the epidemic.

EXTRACTS FROM MR. SIMON'S REPORT.

LONDON PUMP-WATER.

"The subject of water in its district relations ought hardly to be passed without a word of caution as to the use of pumps within the City. I need hardly inform you, that every spring of water represents the drainage of a certain surface or thickness of soil, and that such as are the qualities of this gathering ground, such

must be the qualities of the water. You will, perhaps, remember, that, in my account of one celebrated City pump, which sucks from beneath a churchyard, I showed you 90 grains of solid matter in every gallon of its water. In virtue of that wonderful action which earth exerts on organic matter, the former contents of a coffin, here re-appearing in a spring, had undergone so complete a change as to be insusceptible of further putrefaction; the grateful coolness, so much admired in the produce of that popular pump, chiefly depending on a proportion of nitre which has arisen in the chemical transformation of human remains, and which, being dissolved in the water, gives it, I believe, some refrigerant taste and slight diuretic action. Undoubtedly, this water is an objectionable beverage in respect of its several saline ingredients; but my present object in adverting to them is rather to illustrate an anterior danger which they imply. Their presence indicates a comparative completion of the putrefactive process, effected by the uniform filtration of organic solutions through a porous soil. Let that soil have frequent fissures in its substance, or let its thickness be scanty in proportion to the organic matters to be acted on, and the water, imperfectly filtered, would run off foul and putrescent. Now, this risk, more or less, belongs to all pumps within the city of London. They draw from a ground excavated in all directions by sewers, drains, cesspools, gas-pipes, and burial-pits. The immense amount of organic matter which infiltrates the soil does undoubtedly, for the greater part, suffer oxidation, and pass into chemical repose; but in any particular case it is the merest chance whether the glass of water raised to the mouth shall be fraught only with saline results of decomposition—in itself an objectionable issue—or shall contain organic refuse in the active and infectious stage of its earlier transformations. Some recent cutting of a trench or breakage of a drain in the neighbourhood may have converted a draught, which before was chronicly unwholesome, into one imme diately perilous to life. These facts ought to be known to all persons having custody of pumps within urban districts; and it ought also to be known that the infiltrative spoiling of springs may occur to the distance of many hundred yards. (a)

"In final reference to the quality of water, whether supplied by our trading companies, or derived from springs within the City, I think it expedient to mention, that against its lesser impurities great protection is given by filtration through animal charcoal, as in various filters and purifiers which are before the public. These protective means do not lie within reach of the poorer classes; but, whatever their accessibility to individuals, no such personal arrangements can render it less important that water, the first necessary of life, be supplied for universal use in its utmost procurable purity."

METROPOLITAN CLEANLINESS.

"No city, so far as science may be trusted, can deserve immunity from epidemic disease except by making absolute cleanliness the first law of its existence; such cleanliness, I mean, as consists in the perfect adaptation of drainage, water supply, scavenage, and ventilation to the purposes they should respectively fulfil; such cleanliness as consists in carrying away by these means, inoffensively, all refuse materials of life—gaseous, solid, or fluid—from the person, the house, the factory, or the thoroughfare, as soon as possible after their formation, and with as near an approach, as their several natures allow, to one continuous current of removal.

"To realise for London this conception of how a city should cleanse itself, may involve, no doubt, the perfection of numberless details. Yet, most of all, it would presuppose a comprehensive organization of plan and method; not alone for that intramural unity of system which is needful for all the works, not least for those of drainage and water supply, but equally to harmonize these works with other extramural arrangements for utilizing to the country the boundless wealth of Metropolitan refuse—for distributing to the uses of agriculture what is then rescued from the character of filth—for requiting to the fields, in gifts for vegetation, what they have rendered to the town in food for man.

"How far the construction of London has proceeded on the recognition of such objects, or how far the advantages of such a plan have been realized, it could only be a mockery to ask. Our Metropolis, by successive accretions, has covered mile after mile of land. Each new addition has been made with scarcely more reference to the legitimate necessities of life than if it had clustered there by crystallization. With no scientific forecast to plan the whole, with little but chance and cheapness to shape the parts, our desultory architecture has eclipsed the conditions of health. Draining uphill or downhill, as the case might be, and running their aqueducts at random from chalk quarries, or river mud, or ponding sewage in their cellars and digging beside it for water, blocking up the inlets of freshness, and equally the outlets of nuisance, constructing sewers to struggle with the Thames, now to pollute its ebb, now to be obstructed by its flow, the builders of many generations have accumulated sanitary errors in so intricate a system that their apprehension and their cure seem equally remote.

"Therefore, by reason of causes ramified through the whole Metropolis, and deep-rooted in its soil, which bind all parts together in one common endurance of their efiects—therefore, cannot epidemic disease be thoroughly conquered by any exertions, or by any melioration, short of the complete and comprehensive cure. Against the danger we dread no shelter is to be found in petty reforms and patchwork legislation. Not to inspectorships of nuisance, but to the large mind of State policy, one must look for a real emancipation from this threatening plague.

"A child's intellect can appreciate the wild absurdity of seeking at Peru what here runs to waste beneath our pavements—of ripening only epidemic disease with what might augment the food of the people—of waiting, like our ancestors, to expiate the neglected divinity of water in some bitter purgation by fire.

"But it needs the grasp of political mastership, not uninformed by science, to convert to practical application these obvious elements of knowledge; to recognise a great national object irrelevant to the interests of party; to lift a universal requirement from the sphere of professional jealousies; and to found in immutable principles the sanitary legislation of a people."

The following is a copy of a letter addressed to the Home Secretary by Dr. E. Smith. In reply, Lord Palmerston stated, that it had been forwarded to the General Board of Health:—

"To the Right Hon. the Secretary of State for the Home Department.

"16, Norfolk-terrace, Westbourne-grove,
Nov. 4, 1853.

"My Lord,—I take the liberty to solicit the honour of your Lordship's attention to a suggestion in reference to the future statistical returns of cholera, and trust that it will meet with your Lordship's favour.

"Your Lordship is painfully aware, that the Profession is at issue as to the essential nature, the mode of origin and communication, and the treatment of cholera, and that, as a consequence, it cannot afford that real help which it is enabled to give in the treatment of other diseases. At the present moment even, the treatment is empirical, and, by consequence, very varied; and, in order to establish it upon a common and scientific basis, we need far more information than we have as yet obtained. Independently of the recorded experience of individual practitioners, and such valuable *résumés* as those published under the direction of the Board of Health, our only source is the 'Report on Cholera' issued by the Registrar-General. This latter is, indeed, most valuable, and, apart from its authentic portion,—the tables,—contains an admirable summary of much of our present knowledge; but it refers only to a part of the cases,—viz., the fatal ones,—and gives no account of the treatment. The reports of isolated practitioners in reference to the treatment of this disease, have not been drawn up upon a common plan, and are not numerous enough to warrant any deduction or any generalizations whatever. We need more of them, and that they should be framed upon one plan, and that a comprehensive one,—one which shall embrace the particulars of every case occurring in the kingdom, whether it proved fatal or not. Such an inquiry cannot be made gradually, as it might have been in reference to other diseases, since the epidemic is uncertain in its occurrence, and limited in its duration. The issue, moreover, is so fearful, that it does not brook unnecessary delays. A universal and simultaneous effort is therefore demanded, and one which could not be made except at a large pecuniary cost. The several heads under which this information should be sought may be arranged in the following classes:—

"1st. The precise value of certain presumed personal and local predisposing causes, as age, occupation, and poverty; the quality or timber of the bodily and mental organization, as evinced by the temperament, and the general habits as to activity, industry, excesses, cleanliness, anxiety, and past diseases; and also the influence of residence and locality.

"2nd. The precise value of other causes presumed to be more direct, as fear, errors in diet; the use of water rendered impure by excess of ordinary elements, as lime or iron, or by admixture of vegetable, animal, and human excrementitious matters; the respira-

(a) I am indebted to my colleague, Dr. R. D. Thompson for a fact strikingly illustrative of this—viz., at Liverpool. In three wells which he examined, distant severally 760, 800, and 1,050 yards from the Mersey, he found the water brackish from marine soakage, containing 400 or 500 grains of solid matter per gallon, and totally unfit for consumption.

tion of vitiated air, and more particularly of air loaded with exhalations, directly or indirectly, from the living or dead bodies of cholera patients.

"3rd. A more accurate and minute detail of the symptoms, both premonitory and confirmed, with their duration, dependence, and order of sequence, and more particularly of those indicating disorder of the powers of enervation, both organic and cerebro-spinal; of the circulation and respiration, primarily or secondarily affected; and also the condition of the excretions.

"The 'Report' already referred to has given us information on some of these points, but only so far as the fatal cases could furnish it. We seek information from every case, and detailed with greater minuteness.

"If it should be objected, that the urgent engagements of Practitioners at such a crisis would render it impossible to note so many and minute subjects, it may be replied, that a majority of the cases in all practices would require like entries, and that each Practitioner has usually one plan of treatment which he employs more or less constantly.

"If it be further objected, that these are purely medical questions, and that many theories have been devised in reference to them, and, therefore, that it would be more fitting to leave them to the consideration of the various medical bodies and learned Societies, it may be again replied,—

"1st. The pecuniary means at the command of any individual body would not permit it to make an effective general effort.

"2nd. The number of practitioners over whom any such body could exert an active influence is too limited for this purpose.

"3rd. It would not be possible to induce a united action of all the corporate bodies and Societies.

"4th. Each body is more immediately under the control of a few gentlemen, usually of eminence, and those gentlemen have, for the most part, adopted or promulged theories, in support of which they seek information, and each one would unconsciously frame the questions according to the leanings of his own mind. The proper prosecution of such inquiries on an extended scale, demands the assistance of gentlemen devoted to statistical pursuits, and also of an efficient staff to reduce the returns to order, and to obtain deductions of sufficient generality and minuteness; and such persons are not usually to be found in medical bodies.

"If it be again objected, that such inquiries would be more profitably made by Medical men associated together in districts, it might be further replied, that want of unity as to precise purpose and action, and especially the want of an efficient statistical staff, would frustrate the effort.

"Seeing, then, that the interests involved are of so great magnitude, that the information to be obtained is so earnestly sought by the Profession, and that in order to its full value it is desired that it should be on the widest possible scale; that the present corporate and private bodies and associations are inefficient for the purpose; that the General Registry office is, by its nature, engagements, and present highly effective organization, and probable freedom from the bias of preconceived theory, eminently fitted for such a further inquiry; and, lastly, that no other effectual mode of investigation is open to us, may I humbly suggest to your Lordship the propriety of directing the Registrar-General to issue blank forms, and to take all such other steps in connexion with the present outbreak as may lead to the desired issue?

"If it should be, lastly, objected, that the General Registry office is already overburdened with duties, and that the publication of abstracts from such returns as those now sought would be very costly, it may be replied, that neither consideration has any proportion when placed in opposition to the value of 70,000 human lives, and to the sufferings of four times that number of widows, widowers, and orphans, and the hundreds of thousands of pounds which would be sacrificed to maintain them.

"Such inquiries, if properly made, from every Medical man in England and Wales, would induce a more exact spirit and system of investigation in reference to this disease; would widely distribute all the most approved opinions on this subject; would enlarge the spirit of independence of thought and emulation, and could hardly fail to do good, in itself, to the Profession, and lead to a solution of our present fearful difficulties.

"With the utmost respect, and the expression of the hope, that the public nature of this suggestion may be deemed a sufficient apology,

"I have the honour to be, my Lord, your Lordship's most humble servant, "EDWARD SMITH, M.D., L.L.B."

A MORE DETAILED STATEMENT OF THE REQUIRED INFORMATION WHICH MIGHT BE ARRANGED IN A TABULAR FORM.

Note any change, under any head, which may have occurred within forty-eight hours.

Age, Sex, Married, Number of Members of Family.

Occupation.—State also if in or out-door, or mixed.

Resources.—Good. Moderate income, from 20s. to 40s. per week. Bad—state the amount.

Residence.—Usual or occasional, relative elevation, dryness, drainage, cleanliness, ventilation.

Locality.—Liability, to what diseases; elevation, dryness, drainage, cleanliness.

General Habits.—Industrious, (very?) temperate in eating and drinking, and what kind of stimulants. Active, cleanly, late hours, exposure.

State of Body.—Constitution, corpulent, past diseases, liability to disorders of alimentary canal and liver.

State of Mind.—General tone, over-worked, anxious, educated, oppressed by fear.

Ingesta.—Within twenty-four hours.

Water (local) from wells, opened or closed, ditches, or ponds, or cisterns; and (general) its character as brackish, fetid, muddy, impurities from cesspools or drains, or wooden supports in wells.

Egesta.—Normal quantity, quality as shown by ordinary inspection, by microscope, and chemistry. Any change within twenty-four hours.

Contagion and Infection.—Any evidence from family, or associates, or neighbourhood; if so, when and how many exposures.

Symptoms.—First set, or premonitory; what duration; progress. Confirmed; what duration; progress. Of returning health; what duration; progress. The precise condition of the circulation, respiration, enervation, and of the excretory organs. Those which were affected at the commencement, and throughout, with any alternation in intensity.

Treatment.—Principles adopted. Treatment in premonitory and confirmed stages. Remedies, their doses, frequency, periods of change and effects. Their appropriateness to all cases, or only a certain part, and what part. When they failed in any class of cases, state the probable cause of failure.

Atmospheric Indications.

Post-mortem Appearances.

Probable Origin, Essential Nature.—Opinions on.

THE TROOPS AT NEWCASTLE.

Dr. W. F. T. Ivey, Assistant-Surgeon 6th Royal Regiment, and Dr. H. C. Boate, Assistant-Surgeon 6th Dragoons, in reporting on the means taken to protect the troops forming the garrison in Newcastle, state, that,—

"Everywhere around us the devouring plague has left its fatal impress; yet have we been hitherto spared. Numerous cases have occurred in our immediate neighbourhood, and in some of the houses in which the soldiers' families are accommodated several deaths have taken place among the civil population. These are situated at distances varying from 50 to 200 yards from the barrack-gate. In the village of Spital Tongues, about 250 yards to the north of the barracks, the disease prevailed to a frightful extent for many days, scarcely a cottage escaping without numbering one or more victims. The barracks are situated about three-quarters of a mile from the centre of the town, and form part of the outskirts in a north-westerly direction. Immediately on ascertaining that the fatal scourge was abroad in our streets, aided by the ready co-operation of the officers, the following sanitary precautions were taken and are still continued:—We made a thorough inspection of all drains, sewers, privies, ashpits, and every other locality, both within and without the barracks, where filth was likely to accumulate, and had all offensive matters removed and effluvia corrected by the liberal and daily distribution of chloride of lime; the privies and ashpits by whitewashing. The custom of washing out the barrack-rooms was discontinued, and drying rubbing substituted. Since the announcement of the epidemic, the troops have been medically inspected twice, and the women and children once daily. The provisions have been carefully examined. The mode of cooking the dinners varied occasionally, from boiled to roast, or baked meats. The men strictly enjoined to apply immediately on the approach of any diarrhœal tendency, and the serjeants ordered to keep a careful watch, and to send any person to hospital who may be detected going more than once a-day to the privy. All hawkers of fish, fruit, and vegetables have been forbidden entry into the barracks, and the men cautioned to abstain from any irritating diet, and to keep from all the low and filthy parts of the town, as well as from situations where the cholera may be raging. They have also been confined strictly to barracks after evening roll-call, flannel belts have been taken into wear, and an extra allowance of fuel granted. Amusements in the vicinity of the barracks have been encouraged, and every endeavour made to procure from the troops a cheerful and ready compliance with our requirements without inspiring fear. The families of such soldiers as were

married without leave, not being accommodated in barracks, have been daily visited at their lodgings, and every means put in practice to enforce and maintain cleanliness and ventilation. The landlords applied to whenever necessary for the removal of nuisances, and lime occasionally used for disinfecting purposes. In some instances families who have taken up their abode in situations which seemed objectionable, either as being overcrowded or as teeming with noisome effluvia, were advised to leave, and better apartments were procured for them. As a result of these precautionary measures, it appears that among 519 persons, the total strength of the garrison in barracks, there have been 451 cases of diarrhœa, of which 421 have occurred among the 391 men, irrespective of the officers, women, and children in garrison, together with nine cases of dysentery, but no cholera. Among the persons connected with the same regiments outside the barracks, numbering in all 107, consisting of women and children, with the exception of three officers, there have been 29 cases of diarrhœa, 2 of dysentery and 1 of cholera, making a total inside and outside barracks of 480 cases of diarrhœa, 11 of dysentery, and 1 of cholera, but no death.

LUNACY ACTS

8 and 9 Vict., c. 100; 16 and 17 Vict., c. 96; 16 and 17 Vict., c. 97.

INSTRUCTIONS FOR THE GUIDANCE OF SUPERINTENDENTS, PROPRIETORS, MEDICAL PRACTITIONERS, AND OTHERS.

RECEPTION OF PATIENTS.

Orders.—In the case of a private patient, the order may be dated before or after the Medical certificates, or either of them.

In the case of every patient, pauper or private, the order must be signed and dated prior to admission.

No person who, or whose father, brother, son, partner, or assistant, shall sign either of the certificates is competent to sign the order.

Statement.—The statement subjoined to the order need not be signed by the same person who signed the order.

The special circumstances, if any, assigned as a reason for sending a private patient to an asylum with only one certificate, should be such as actually to have rendered the previous examination of the patient by two Medical Practitioners impracticable, or so difficult as to justify a deviation from the general rule.

If any of the particulars required to be set forth be not known, the words "not known" should be affixed.

Medical Certificates.—After the words "being a" the Medical Practitioner signing the certificate must insert, not merely the word physician, surgeon, or apothecary, but the diploma or qualification entitling him to practise as such in the United Kingdom; *e. g.* "Fellow of the Royal College of Physicians in London," or "Licentiate of the Apothecaries' Company," etc., etc. (See interpretation clause, 16 and 17 Vic., cap. 96, sec. 36.)

The certificate need not be filled up, signed, and dated on the day of examination, but the date and place of examination, and also the place of residence, and profession or occupation of the patient, must be set forth in the body of the certificate.

The examination of the patient must, in every case, take place within seven clear days before admission.

The Medical Practitioner signing a certificate must set forth, not merely his opinion, but the specific facts indicating insanity, upon which that opinion was formed.

No certificate will be valid unless it contains some fact, indicating insanity, observed by the Medical Practitioner signing. If other facts are set forth, it must be stated by whom they were communicated.

A partner or assistant is disqualified from signing the second certificate, in the case of a private patient. (See Sec. 4, 16 and 17 Vic. cap. 96.)

As to persons otherwise disqualified from signing certificates, attention is particularly directed to the 12th section of the Act, 16 and 17 Vic., cap. 96.

If a private patient be, under special circumstances, received with only one certificate, two other medical certificates must be procured within three days.

Amendment of Orders and Certificates.—Incorrect or defective orders and certificates may, under section 11, be amended by the person signing the same, within fourteen days after the reception of the patient; but no such amendment will have any legal effect, unless sanctioned by the Commissioners. Such sanction will only be given upon sufficient cause being shown.

Returns on Admission.—It is essential that returns upon admission be, in every case, made within the seven days limited by the 52nd sec. of the 8th and 9th Vic., cap. 100; although the orders and certificates may be amended within fourteen days, as before mentioned.

Notice.—If a private patient be received with only one certificate, the "special circumstances" must be set forth in the notice of admission, as well as in the statement subjoined to the order.

Statement.—The report of the Medical Officer must apply to the condition of the patient, not on admission, but after at least two clear days' observation of the case.

TRANSFER OF PRIVATE PATIENTS.

Private patients may, under the 20th section, be transferred from any asylum, hospital, or licensed house, to another, or to the care of any person, by order of the person having authority to discharge such patient, with the written consent of two of the Commissioners, without the necessity of fresh certificates.

DISCHARGE OF PATIENTS.

Notice of the recovery of a patient is now required, by sec. 19, to be given to his friends or parish officers; and, if he be not discharged within fourteen days, similar notice must be given to the Commissioners and visiters.

NOTICES OF DEATH.

In addition to the notices hitherto required, a statement, containing the particulars set forth in sec. 19, is to be sent to the coroner, on the death of every patient dying in an hospital or licensed house.

ATTENDANTS.

Notice of the dismissal, for misconduct, of any attendant is required, by sec. 26, to be given to the Commissioners. Any resignation, in order to avoid dismissal, must be considered as a dismissal within the meaning of the Act.

The object of this provision is, by means of a Central Register, available for general reference, to prevent improper persons from being employed in the care of the insane. It is very important that this enactment should be made known to all attendants.

The Commissioners in Lunacy trust that superintendents, proprietors, Medical Practitioners, and others, will co-operate with them, towards insuring a strict compliance with the provisions of the statutes; and they desire to impress upon superintendents and proprietors, that it is their duty carefully to examine all orders and certificates when brought with patients, and, where necessary, to take immediate steps to rectify defects and supply omissions.

To prevent any misconception with reference to the Lunatics' Care and Treatment Act, 1853 (16 and 17 Victoria, cap. 96), it may be well to add, that the same is only an amending statute, and that the Act 8 and 9 Victoria, cap. 100, remains in force, excepting so far as any of its provisions are expressly repealed or altered by the new Act.

By order of the Board,
R. W. S. Lutwidge, Secretary.

Office of Commissioners in Lunacy, Nov. 16, 1853.

REVIEW.

The Irish School of Medicine As It Is, and As It Ought to Be. An Address, etc. By Thomas S. Holland, M.D. Pamphlet. Pp. 19. Cork: George Purcell and Co.

"The Irish School of Medicine As It Is." These are words which at once suggest to the reader many reminiscences of Irish names distinguished in medicine, surgery, pathology, but, above all, in physical diagnosis in the department of auscultation. In these various branches the Irish school has high claims, and we may confidently say for our Irish brethren, that, in these several departments of scientific inquiry, their rights to the laurel have been here, as elsewhere, fully recognised; nowhere have the merits of their labours been ungenerously ignored. An address such as that of Dr. Holland brings us, however, to inquire how far the labourers of the actual present day in the Irish school are in advance of, on a level with, or behind, their compeers of other schools and countries. How are the newer branches of science, which have been investigated with such eminent success in France and Germany, in Scotland, and, we may say with pride, in England,—how, we may ask, are these departments, embracing physiological physics, chemico-

microscopic research, in its varied applications to physiological and pathological investigation, represented in the Irish school? Dr. Holland, in reference to this point, remarks: "The high character of Irish medicine was for some time so evident that it became almost proverbial, and formed the subject of all introductory lectures, the boast of the senior to the junior student; but no one has hitherto ventured publicly to inquire whether structural anatomy, physiology, pathological anatomy, or organic chemistry, existed as a part of our system of medical instruction." It is much to be regretted that, in these departments, the Irish school has not kept pace with the advances of recent times, and that, in its educational system, these now eminently important subjects should still be unrepresented. Indications are, however, shown that a new spirit of energetic work is steadily growing up in the younger minds, and of the truth of this opinion the little *brochure* before us is itself a convincing proof. Dr. Lyons, of Dublin, so long since as the spring of 1851, established a course of lectures on normal and pathological histology, and has since continued to teach the most important departments of microscopic science. Dr. Holland has established in Cork a course of lectures on "Pathological Anatomy and Histology in Relation to the Practice of Medicine and Surgery," and, from the inspection of the syllabus appended to the present lecture, we have no hesitation in saying, that, if he receives the encouragement and support necessary to carry out so laborious a course, and which his energy and zeal so well entitle him to, the students and practitioners of the Cork school will have an ample opportunity of making themselves acquainted with the most important, novel, and interesting results of modern pathological research, while, in the "Practical Part," they will find abundant means of acquiring a practical knowledge of the microscope in its varied applications to our science,—a knowledge now indispensable to every well-educated practitioner in medicine and surgery.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

ESSAY UPON INJECTIONS OF THE PERCHLORIDE OF IRON, AS APPLIED TO THE TREATMENT OF ANEURISMS.

By M. MALGAIGNE.

[Read at the Academy of Medicine, November 8, 1853.]

(Concluded from page 610.)

M. Velpeau tried this remedy for the first time upon a student who was suffering from varicose aneurism, consequent upon venesection, at the bend of the elbow. The artery was compressed above and below the tumour. Eight drops of the perchloride, prepared by M. Dubuisson, were injected, but, upon the removal of the compression, the pulsations returned both in the sac and in the arteries of the forearm. No accident ensued, and on the eleventh day M. Velpeau injected ten drops more. Nevertheless, the aneurism increased, when inflammation having been subdued, it was deemed desirable to put a ligature round the brachial artery a week after the second injection. Inflammation, however, again came on, and the aneurism burst, and the patient, after much suffering, considered himself fortunate in recovering at all. Two days previously, M. Lenoir had tried the same plan of treatment for a popliteal aneurism, the size of a pullet's egg. Seven drops of the liquid were driven into the tumour, but the pulsations continued, and twelve days afterwards M. Lenoir, encouraged by the apparent harmlessness of the remedy, injected sixteen drops. No result, good or bad, ensued. As it was possible that the fluid might not have been good, M. Lenoir procured some of that prepared by M. Dubuisson himself.

He first injected six drops; then, no effect having been produced, six drops more; the pulsations, however, continued as before. For six days the patient experienced no inconvenience; but then, sudden pain in the popliteal space came on. On the day following, there was inflammation: and, in spite of most active treatment, the result was death ten days after the last injection. Upon examination of the body, the femoral vein was found full of a reddish sanies, and the aneurism was full of a soft clot. These cases, observes M. Malgaigne, show that the surgeon has to encounter both inefficacy and peril in this mode of treatment.

A patient entered the Hospital St. André, at Bordeaux, for a crural aneurism, containing, apparently, nothing but fluid blood. M. Soulé injected six drops of the liquid, when the tumour immediately became hard. Two days afterwards he employed a second injection of seven drops; severe pain, followed by inflammation, ensued, and, fearing ulceration of the sac, M. Soulé applied the ligature to the artery in the usual way, after which the patient recovered.

M. Soulé tried the same remedy for a small aneurismal tumour, consequent upon a puncture of the posterior tibial artery. The operation was unsuccessful. An incision was made into the tumour, and it being impossible to tie the ends of the vessel, compression was employed with success. M. Alquié, of Montpellier, injected the perchloride in the case of a traumatic aneurism of the ulnar artery. Severe inflammation came on during the night, and, after proper treatment, M. Alquié was obliged, on the tenth day, to tie the brachial artery. Nine days afterwards, secondary hæmorrhage ensued, and it became necessary to tie both the upper end of the ulnar artery, and also a large collateral branch.

"Is it not a curious circumstance," says M. Malgaigne, "that after the cure of the first aneurism by M. Raoult, which was no aneurism, and the two successful cases most dearly purchased by MM. Niepce and Serre, all the other cases have gone on badly?" But, to give further evidence, he calls attention to three more cases: one by M. Dufour, surgeon to the Hospital of Lectoure. In consequence of two injections into a large aneurism of the right carotid, the tumour became gangrenous and burst, and the patient was carried off by a fearful hæmorrhage. A second by M. Jobert (who will shortly publish the case); the patient died of gangrene of the limb. A third by himself, in which both the brachial artery and median nerve had been wounded. A traumatic aneurism, which ensued, was injected with six drops of the perchloride; pain in the limb, numbness of the hand, inflammation, and threatening gangrene ensued, when it became necessary to tie the brachial artery, after which the patient recovered.

Thus, there have been, out of eleven operations, four deaths, five serious complications, two cures; but the cures were obtained at much cost. M. Lallemand does not hesitate to acknowledge the dangers attending this mode of treatment. M. Pravaz is no more, but M. Dubuisson confesses the risks, which he attributes to an excess of hydrochloric acid. He wishes to preserve the preparation neutral. But as the preparation of 45° cannot be kept without an excess of acid, he has adopted a solution of 30°, and he promises that this will be sufficiently energetic, and quite harmless. The author then relates some facts, to show how loosely cases have been reported, and he concludes that the injection of the perchloride of iron in varices appears less dangerous than in aneurisms. In the latter, the cures, though possible, are so rare, so complicated with severe accidents, and attended with so many chances of death, that no prudent surgeon would venture to expose his patient to so disastrous a mode of treatment.

An animated discussion succeeded M. Malgaigne's essay, and the conclusion left upon the minds of the audience seemed to be, that although M. Pravaz's bright anticipations had not been fully realised, although dangerous and even fatal complications had followed the employment of the perchloride of iron, yet the fact of the possibility of coagulating blood in the living body had been determined, and that further experiments and investigations in the same path were desirable. M. Leroy d'Etiolles has taken umbrage at the words, "that he had entertained the idea of coagulating injections," etc. He stated, in a letter upon this subject, that he had no wish to deprive M. Pravaz of the merit of a disastrous invention, but that he was desirous of showing that the method of treatment by coagulation of the blood need not necessarily perish with the shipwreck of Pravaz's proceedings. Other fluids would coagulate the blood without acting upon the arterial walls, such as alcohol, sulphuric alcohol, the "Eau de Rabel," aluminous solutions alone, as combined with resins, etc.

He also thinks that the injections should not be attempted in the aneurismal sac, but in the tube of the artery above.

The canula does not always penetrate the concentric clots so as to reach the fluid blood; consequently, the remedy does not act upon the circulating current. The inflammation in so large a part is often excessive; the amount of coagulating fluid must be more than would be required in the normal tube. He thinks that the clots formed may be driven from the sac by the force of the heart's action, and that they may plug up some of the smaller arteries, and hence cause gangrene of the limb; and he thinks this explanation applicable to the cases related by MM. Malgaigne, Alquié, and Jobert.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, December 10, 1853.

THE SCOTTISH UNIVERSITIES AND PARLIAMENTARY REPRESENTATION.

On the 5th instant, a meeting of Graduates of Scottish Universities, called by public advertisement, was held at Glasgow, for the purpose of considering what steps should be taken with the view of obtaining Parliamentary representation, and such other privileges as are possessed by the Graduates of many Universities in the kingdom.

Among those present we failed to see any graduates of note or eminence. The Secretary (Mr. Bryce, A.M., of the High School) indeed intimated that Principal Macfarlane, and Professors Ramsay and William Thomson, cordially approved of the movement; but certainly among those who appeared, or spoke, there were none who are likely to have the least influence on public opinion. The chair was taken by "Robert Baird, Esq., A.M., Writer," who, in his opening speech, stated that he had two conclusive reasons to urge on Government in favour of the movement.

1st. That a University constituency would embrace a sufficient amount of education, general knowledge, and independence, to exercise the franchise disinterestedly, freely, and independently.

2nd. That the fact of the Graduates being scattered over the country, would render them less liable to be influenced by anything but the appeals of reason, communicated by the candidates themselves, and not through their agents.

The chief speaker, the Rev. Dr. Robson, a Dissenting clergyman, dwelt much upon the fact, that there were no less than 2505 gentlemen graduated at the University of Glasgow alone, while Trinity College, Dublin, had two members, with a constituency only numbering 1780.

Dr. A. D. Anderson, one of the most respectable Medical practitioners of Glasgow, and President of the Faculty of Physicians and Surgeons there, stated, that he attended to expreses the cordial concurrence of that body, (having among them 75 Graduates,) in the movement.

It is difficult to conceive on what ground an application to this effect can be resisted by Lord John Russell, and the concoctors of the embryo Reform Bill. All that can be said against it, is simply, that the Scottish Universities have never enjoyed such a privilege. Mr. Disraeli, it is true, talked of postponing the claims of the Scottish Universities to those of South Lancashire, and the West Riding of York; but even he professed to do this with reluctance, and admitted the substantial justice of the claim.

Scotland, too, absolutely requires some men who must attend perforce to the literary interests of the country. Even were the English Universities deprived of their power of returning Members to-morrow, their interests would be safe in the hands of an assembly numbering among its members so many of their distinguished sons; but how few of the Scottish Members are graduates of a Scottish College! Nay, how positively illiterate are some of the men by whom our burghs are represented. Altogether, there is substantial justice in the claim, and we have too high an opinion of an Englishman's sense of justice to doubt, that, if it be firmly and respectfully urged, it will be conceded.

ALLEGED MURDER BY A MEDICAL MAN.

Considerable sensation has been occasioned in the last few days by the apprehension of a Medical man in Peterhead on a charge of murder. The party charged with the crime is styled by the newspapers "Dr. Smith." We sincerely trust it may turn out that he is an irregular practitioner. The circumstances are briefly these:—An old man was found lying dead on a moor at St. Fergus, with a recently-discharged pistol by his side. At first it was naturally enough concluded that he had committed suicide, until it was discovered that insurances on his life for a considerable amount had been recently effected by the aforesaid Smith. This caused further inquiry, which resulted in the apprehension of Smith, and a report of the investigation has been forwarded to the Lord-Advocate, Smith remaining in custody until it be decided whether or not he is to be brought to trial.

PRESIDENTS OF COLLEGES OF PHYSICIANS AND SURGEONS.

The annual election of the office-bearers of these bodies has recently taken place, when Professor Traill was re-elected President of the College of Physicians, and Dr. Archibald Inglis was chosen President of the College of Surgeons. The former gentleman enjoys a European celebrity; and, although he graduated so far back as 1802, he still enjoys a green old age, and, besides filling creditably his own chair of Medical Jurisprudence, is lecturing on Natural History for his colleague, Professor Jamieson, who is completely laid aside from age and infirmity; he also, a year or two ago, delivered a course of lectures on Chemistry, during the temporary illness of Professor Gregory; and has lately commenced the somewhat Herculean task of editing a new edition of the "Encyclopædia Britannica." Dr. Inglis is favourably known, as was his father before him, as a modest and retiring, but accomplished Physician.

I BY MYSELF I.

Under this somewhat quaint title, we remember once to have met with a racy article, by an old author, on a combination of character exhibiting egotism and self-reliance in a very marked manner. Our recollection of this has been awakened by the appearance in the *Times* newspaper of "The Memorial of James Syme, Professor of Clinical Surgery in the University of Edinburgh, to Viscount Palmerston, Her Majesty's Secretary of State for the Home Department."

The memorial sets forth by showing, that the memorialist is Regius Professor of Clinical Surgery in the University of Edinburgh; that for this office he holds a commission from Her Majesty, and receives 100*l.* a-year from the Consolidated Fund. Of all these facts, the Home Secretary must be painfully cognizant, as memorials from the same quarter have not been unfrequent, the possession of the aforesaid commission and salary generally forming the ostensible ground for memorializing.

The gist of the whole matter, however, is a well-founded complaint of the inequality of Scotland in regard to Medical practice, though we confess we fail to see what peculiar call there was on Mr. Syme to come thus prominently forward in the matter. The other Professors and Teachers of Medicine, and the whole College of Surgeons, have an equal interest in the matter, and it were surely better that they acted in these respects in concert, and not that one stepped out of the ranks somewhat obtrusively.

In his letter to the *Times*, accompanying the Memorial, Professor Syme states, that he has no connexion with the "Justice to Scotland Association." We certainly saw his name in some of the printed lists of that heterogeneous body.

GENERAL CORRESPONDENCE.

THE RECENT BLACKBALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

[We have received several letters on this subject, but can only select the following passages from one of our Correspondents.]

THERE are certain circumstances connected with this recent transaction which ought to be known, in order that the facts may be duly estimated. For the first time, since the granting of the Charter to the Society, the qualifications of the gentlemen proposed were considered by the Council, previous to their names being submitted to the Fellows for the ballot. An exception was taken in the Council by some of the Fellows of the College of Physicians, that an M.D. of the University of London did not qualify the holder to be elected a Fellow of the Society. This objection was fully discussed, and, no motion being made, it was considered the objection could not be maintained. After such a decision, it was thought that all honourable men would follow the usual course, and consider that the members of the Council were bound by the decision of the majority. But such was evidently not the feeling of the Fellows of the College of Physicians alluded to, who adopted a course neither creditable to themselves, nor to the College they appear so anxious to

uphold. Of these, Dr. Barker, one of the Vice-Presidents; Dr. Nairne, the Treasurer; Dr. Basham, the Secretary; and Dr. Mervyn Crawford, one of the Council, totally disregarding the decision of the Council, are said to have canvassed the Fellows, and succeeded in obtaining a sufficient number of black balls, on the ground that the candidate was not qualified. It was easy for these gentlemen, armed by the weight of their positions in the Society, thus to deceive the Fellows; but whether it was honest or honourable in them to do so, admits of a great doubt. Apart from the decision of the Council, the statement that the Candidate was not qualified could only have reference to two points,—either he was not qualified according to the laws, or by the usages of the Society. In both these points, however, the statement will be found to be incorrect. The law states, that "The Fellows shall consist of Physicians, Surgeons, and General Practitioners." There is no rule that the Fellows must belong to this College, or to that; while the conventional term "General Practitioner" evidently shows that this law was intended to have the widest interpretation. The usages of the Society, again, have been to admit qualified Medical men without reference to the source from whence they derived their qualification, which is clearly shown by examining the present list of Fellows. Among these there are many who practise as Physicians, and who not only do not belong to the College of Physicians, but who do not legally hold any medical qualification in England. Some even only possess the M.D. of a foreign University; but what is still nearer to the question at issue is, that graduates of the University of London have been previously admitted Fellows without any question being raised as to their qualification.

Further, if the last balloting list be examined, the conduct of these gentlemen appears still more extraordinary. A young student who has just passed the College of Surgeons is considered qualified, and admitted a Fellow; but a distinguished provincial Practitioner, who is an M.D. of the London University, is refused, in consequence of a statement circulated in the Society to the effect, that he was not qualified. It is also very strange, that, in this same list, a Licentiate of the College of Physicians is put down as an M.D. of the University of London, who is not an M.D. of any University whatever!

I am, &c. M.D. Londin.

NON-RESTRAINT SYSTEM IN LUNATIC ASYLUMS.

[To the Editor of the Medical Times and Gazette.]

Sir,—It always gives me pleasure to receive the Reports of the various asylums for the reception of the insane. As the originator of the non-restraint system, I feel the highest gratification in tracing the benefits which this system is silently, but surely, working out. Among these is the great proportion of cures in those asylums where this system is fully adopted. I may particularise two especially, out of three, whose Reports I have this year received; and probably, had I received the Reports of other institutions, I might have been enabled to trace these results in them also.

At the Surrey County Asylum, from its opening in June, 1841, to December, 1850, the recoveries per cent. were:—Males, 21·74; females, 21·21; total, 21·48; while, during the last two years, when, as shown by the Reports, the system of surveillance without restraint was adopted in its entirety, the average recoveries per cent. were:—Males, 33·81; females, 46·91; total, 40·61.

The great increase in the proportion of recoveries on the female side of the house, while it speaks volumes in favour of the non-restraint system, affords also the highest testimony to the ability and indefatigable attention of the Medical Superintendent, Dr. Diamond. The deaths are 27·59 per cent. The Dundee Asylum furnishes a remarkable instance of the triumph of sound principles over long-established prejudice. When the non-restraint system was first announced, it was thus commented upon in the Dundee Report:—"It is believed, that, if this point were to be settled by practical men, Mr. Hill would be left in a very small minority. But, even allowing the practicability of the measure, whether it be humane and desirable is a question that appears to be very problematical. . . . . It is not thought proper that in an establishment of lunatics, the life of an individual be placed in jeopardy, or the general comfort of the inmates be disturbed in support of a theory which seems to aim at ideal perfection rather than to promote practical utility." (Report, 1839.) Compare this with the Report just issued, in which we are informed, that "since 1842 there has been an entire disuse of all articles for mechanically restraining the limbs of patients; and every available and justifiable method has been adopted for making the contrast between the customs and amenities of ordinary society and the discipline established as narrow and as little irksome as possible. The *régime* has been examined by the present illustrious Chairman of the Lunacy Commission of England, the Earl of Shaftesbury, who expressed his approbation of what he characterised as 'the humane system' pursued." (Report, 1853.) This Report abounds with valuable and instructive matter, and proves that the system now pursued at this asylum, under its enlightened and talented Superintendent, Dr. Wingett, is calculated "to embody and apply all the suggestions of science and humanity."

The proportion of recoveries, previous to 1842, were, I find, 44·20 per cent.; since that date, 47·82 per cent. Deaths from the opening of the Institution to the present time average 17·42 per cent.

The other Report is from the Wilts County Asylum, of which Institution Dr. Thurnam, so well known by his literary and scientific labours, is the Superintendent. It has been only recently opened, and is filled, in great measure, with cases of long standing, most of them incurable for this reason. The proportion of recoveries, therefore, in that asylum, although small at present, is quite as large, if not larger than might be fairly expected from the circumstances. The deaths average 11·89 per cent.; the recoveries, 12·32 per cent.

Should these few remarks not trespass too much upon the space allotted to correspondents in your valuable Journal, their insertion will oblige

Yours, &c.

Robert Gardiner Hill, F.S.A.
Mayor of Lincoln.

Eastgate House Asylum, Oct. 22, 1853.

CASE OF GUNSHOT WOUND.

[To the Editor of the Medical Times and Gazette.]

Sir,—Thinking that the following case of gunshot-wound may interest some of your readers, I beg to forward it for publication:

Private Michael M'Donald, aged 24, resident in India five years, of a bilious temperament, muscular development of body and intemperate habits, was admitted into the Head-quarters Hospital of the 1st Madras Fusiliers, under my charge at Rangoon, Nov. 24, 1852. He had arrived the previous evening among the wounded from the Pegu expedition, but was not landed till the morning, being considered unfit for removal from on board ship.

On the 21st of November, while in the act of firing his musket during the action, he received a wound in the upper part of the left arm, and was immediately thrown violently backwards for about four yards' distance, where he alighted on his left side. He then complained of most intense pain at the epigastrium, and passed a considerable amount of blood by his mouth, which discharge had continued, subsequently attended with cough; but from the latter symptom he did not suffer at first.

Immediately after being wounded, he was bled to faintness, but had not taken any internal remedies; the intense pain he had suffered, combined with a general soreness over the whole surface of the body, with complete inability to move in consequence, or bear the pressure of his bed-clothes, had entirely prevented sleep.

On examination, a small round wound, with inflamed and inverted edges, was observed at the upper and outer side of the left arm, passing in a direction (as could be traced by a dark purple line, along which there was pain on pressure) towards the chest, over the whole surface of which most severe pain was present, especially on its being touched, even in the most gentle manner; slight swelling, with emphysematous crackling, was also observed, extending from the left clavicle downwards as far as the lower margin of the false rib,—in front, nearly to the sternum, and behind almost to the spine. The respiratory murmur could not be heard in the left lung below the nipple, but was distinct all over the right side; respiration hurried, sometimes rising to forty a minute; pulse eighty, and sharp; thirst excessive; urine scanty, and high coloured; bowels not moved since the accident; abdomen tense, and puffed up; skin hot, at times dry; sometimes bathed in profuse perspiration; countenance expressive of great pain, and altogether in a very low and desponding condition. Arrow-root for diet, and lemonade. ℞ morphiæ acet. gr. ½ st. Hirudines xx. abd. et lat. sinistro. Hirudines x. vulneri. Calomel. gr. x., opii gr. j., st.

Soon after taking the draught he fell asleep, and the next morning expressed himself as very much better. He coughed up a considerable amount of arterial blood, mixed with frothy expectoration, evidently from the lungs; but still the pain over the whole surface of the chest, and more especially about the ensiform cartilage, continued most acute, and the emphysema had somewhat increased. His bowels still being confined, the calomel was again given and repeated at night, but without relief. Thirty leeches were

again applied to his chest and side. The next day his bowels were freely moved by a purgative enema. No blood was observed in the stools. Leeching, with antimonials, narcotics, and afterwards calomel and opium, were continued till December 8, when, being detached with a force, I lost sight of him till the 20th. He was then much stronger; all bloody expectoration from the lungs had ceased, though he was still troubled with cough, and the pain in the side, more especially at the epigastrium, was still present, though not in so severe a degree as it was at first. The respiratory murmur still confined to between the clavicle and the nipple; all emphysema completely gone. He could walk about, and was daily improving in strength.

Being again detached on January 2, he did not come under my care afterwards; but the last I heard of him was, that he was doing exceedingly well, and said he felt almost as strong as he ever was.

The emphysema, bloody expectoration, difficult respiration, the sounds by auscultation, at the time he was brought into hospital as well as subsequently, and the severe pain which was present, clearly to my mind indicate that the lung was wounded.

An officer in the same engagement had the same symptoms, though rather more severely; and, after death, the course of the ball was traced through the left lung, the upper lobe of which was perforated, and the whole course was lined by spiculæ of bone from the third rib, which had been shattered. In this case, when the sloughs in the lungs separated, violent hæmorrhage occurring, death ensued.

FRANCIS DAY,
Assistant-Surgeon 1st Madras Fusiliers.

Neilgherry-hills, July 20, 1853.

CASE OF SCARLATINA PRODUCED BY INOCULATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to forward the following particulars of a case of scarlatina, which, in some respects, resembles that admitted into Charing-Cross Hospital, under the care of Dr. Rowland, as reported in your number of the 26th ult.

I am, &c. R. BARRINGTON COOKE.

Scarborough, December 1, 1853.

During the summer of 1850, I attended a child, aged 7 years, an out-patient of King's College Hospital, who was suffering from an attack of scarlatina maligna, with sloughing sore throat. The child died, and on making a *post-mortem* examination of the body, I inflicted a small wound on the third finger of the right hand. The wound shortly after became inflamed, and suppurated, the hand and arm painful; and red lines in the course of the lymphatics, extending up the arm, showed the track of absorption of the virus; the glands in the axilla likewise became painful and enlarged. During six days, I experienced a good deal of uneasiness and pain in the limb, accompanied with some irritative fever. Towards the end of the 7th day the characteristic eruption appeared over the body, accompanied with sore throat.

The swelling and inflammation of the arm now began to subside. The attack, which was not of a severe character, ran its usual course, and in about three weeks from the commencement of the illness, I was enabled, though in a weak state, to leave town, when after a short sojourn in the country I returned to my duties as physician-accoucheur's assistant. The urine was albuminous, but no œdema supervened. Three years previous I had suffered from a slight attack of the same disorder.

In concluding, I would remark, first, that the mildness of the attack in my own case, as contrasted with that of the child, arose, probably, from the difference in age between the subject affording the virus and myself; our different positions with regard to air, diet, etc., and, it may be, some degree of immunity from the effects of the previous attack; secondly, that the period of latency, or incubation, was more prolonged, owing, probably, to delay in the process of absorption through the lymphatics, whereas, in Dr. Rowland's case, the virus seems to have been at once received into the venous system.

DEATHS FROM INHALING THE VAPOUR OF CYANIDE OF POTASSIUM.—Four deaths have occurred at Elsecar, a village between Rotherham and Barnsley, which are attributed by Mr. Haywood, chemist, of Sheffield, to the accidental inhalation of the vapour of cyanide of potassium, which, he says, is evolved in large quantity from the lower part of smelting furnaces. The parties lived in a house abutting on one of the blast furnaces.

TESTIMONIAL.—The patients of Mr. Jackson, Surgeon, High Wycombe, Bucks, have presented to him a handsome brougham, upon his recovery from a severe illness, as a mark of their regard and desire for the maintenance of his health.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

DECEMBER 10, 1853.

FORBES WINSLOW, M.D., D.C.L., President, in the Chair.

FIBRINOUS CONCRETIONS FROM HANGING.

Mr. B.W. Richardson, in illustration of his views as to the formation of fibrinous concretions in the heart and great vessels, exhibited numerous clots obtained from the heart of a man who had lived two days after an attempt to hang himself. The constriction of the neck was imperfect on account of his having worn a stiff stock, and the elevation of the beam to which he was suspended being but little beyond his own height. The cord had not pressed on the trachea or larynx, but had left a deep mark just above the os hyoides, extending from the right to the left angle of the jaw. When cut down, after having hung for a quarter of an hour, the respirations were only eight per minute, but after having been bled, and exposed to a free current of air, with the application of warmth, the respirations increased to 60, and the pulsations of the heart to 120 per minute. Blood was drawn from the temporal artery, but without producing change in the symptoms; and the patient continued in the same condition for thirty-six hours. As the man was lying in a perfectly inactive state, breathing with great rapidity, and with a rapid pulse, and with evident signs of an increased combustion, he (Mr. Richardson) was of opinion, that the blood would become superoxidized, that symptoms of sinking from fibrinous concretion in the heart would present themselves, and that the case would terminate with them. In this he was not deceived; about forty hours after the suspension, the heart commenced to beat tumultuously, a bruit was detected, the veins began to appear congested, and the temperature of the body fell. He continued in the same state until the following night, when symptoms of fibrinous concretion set in, such as tumultuous action of the heart, diminution of temperature, and a typhoid condition; these continued eleven hours, and the patient died. At the inspection, the brain was found congested to the last degree, and there was effusion of serum under the arachnoid; the lungs were congested; the right auricle was distended with coagulated blood to nearly three times its natural size; in the right ventricle there was found a large, firm, fibrinous cylinder, which filled up more than one-half of the ventricle; the base of the fibrinous cylinder was attached to the mitral valve, and it had not been detached; long prolongations of a similar kind ran into the pulmonary artery, and the Society would be good enough to observe that they, too, were all cylindrical. This fact alone proved that they must have existed previous to death. A small concretion also existed in the left auricle; the other organs of the body were healthy. The case was interesting in a medico-legal point of view, but the author only referred to it now in support of the views on the formation of fibrinous concretions which he had so often laid before the Society. He accounted for the formation of the concretions in this case in the following manner:—The man, by the act of suspension, had arrested the cerebral circulation without interfering with the windpipe or checking respiration. When the ligature was removed, and the heart recommenced to play, the circulation through the head remained very much impeded, and the central organ of the circulation had to make unwonted efforts to distribute the blood in the body through the shortened circulation.

Drs. Winslow, Snow, and Ward entered into the discussion.

NEWLY-INVENTED FORCEPS.

Mr. De Méric, by request of the Council, explained the action of some newly-invented forceps which had been presented to the Society by M. Apostolides, a Greek. The merit claimed for them was that of tying the artery as securely and more rapidly than by other modes. They differed from ordinary forceps in having a steel rod attached to one branch, capable of sliding beyond the end of the forceps, and of pushing the prepared running noose upon the artery. They had not been tried in the London hospitals.

Dr. Druitt read a Paper on the

MODERN PHILOSOPHY OF CANCER.

He said that there were three systems in which cancer and allied diseases might be classified: 1st. According to naked-eye resemblances; 2nd. According to vital characteristics; 3rd. According to structure. The object of his Paper was to show that the last was the only true basis of classification. When morbid growths are classified according to minute structure, as revealed by the microscope, they are dealt with in the same way in which all other objects of natural history are dealt with. They are divided into

groups defined by the presence of certain definite forms; and the variation of these forms at various stages of development, and the clinical history of each growth, can be conveniently studied. The author then proceeded to define the forms which were characteristic of cancer; namely, the large, bright, oval nucleus; with the cell around it, and the one or more nucleoli contained within it; and stated his belief, that, if allowance be made for circumstances which occasionally interfere with the identification of any individual specimen of any object in any branch of Natural science, such as want of development on the one hand, and degeneration on the other, the cancer nucleus or cell would be found an unfailing physical sign of the species cancer. The varieties of cancer he stated to depend on variations in the tissues which accompany the cancer-cell. Great multiplication of cell-growth, with little intervening substance, constitutes soft cancer; scantier cell-growth in the meshes of a firm fibrous tissue, constitutes hard cancer; and so of the villous, osteoid, colloid, and other varieties. While speaking of the black or melanotic variety, he observed, that the term "melanosis" was used in an exceedingly vague and uncertain manner. Properly speaking, it signifies a disease, evidenced by the deposit of black pigment. But there were many tumours which might have black pigment; for instance, those fibro-plastic tumours of the skin called moles, soft cancer, and various fibrous or fibro-plastic tumours, which were especially common in the horse. Yet, on one shelf in a Museum might be seen specimens of black tumours, all described as melanotic, yet differing widely in their real structure, and in their degree of fatality. The author then gave short definitions of the fibrous, fibro-plastic, enchondromatous, glandular, and other chief tumours; and then stated his adhesion to the doctrine of Lebert, that cancer, as a species, is one disease; that wherever the cancer-cell or nucleus exists, under whatever variety of accompaniment, there is cancer, no matter whether fatal or not; but, on the contrary, where there is no cancer-cell, there is no cancer; no matter whatever texture there may be, and no matter whether the disease, be it what it may, is or is not as fatal and incurable as cancer itself. On the other hand, a classification founded on vital history divides morbid growths into malignant, semi-malignant, cancroid, benign, and the like, according to their susceptibility of cure, or tendency to destroy life. It does not regard structure so much as consequences, and groups diseases together as cancerous, if they display certain of the clinical qualities of cancer, no matter whether they display cancer structure or not. The author strongly condemned this principle of classification, and entered into an analysis of the vital characteristics of cancer. There were twelve or fourteen, the sum of which is expressed by the word malignant. They are,—constitutional origin, rapid progress, constant progress, pain, return after extirpation, diffusion over the economy, secondary deposits, cachexia, resistance to treatment, infiltrating mode of growth, degeneration and softening, ulceration, invasion of lymphatics, heterology of structure, death. As an occasional accompaniment, inflammatory hyperæmia must be mentioned. The writer then entered into an analysis of each of these characters in succession, endeavouring to affix a precise meaning to every term, and to ascertain how far each quality was or was not peculiar to cancer. He adduced instances, illustrative of the constitutional origin, and of the alliances of various morbid growths; and of the fact, that certain morbid growths, such as enchondromatous and glandular tumours, though usually what is called benign, may return after extirpation, and behave as if malignant. He spoke of the cachexia, the influence of which in causing death he believed to be much exaggerated; of pain, which he said might attend cancer, in several varieties. There might be pain from inflammation, ulceration, distension, or pressure, but the peculiar pain of cancer was of a neuralgic sort, such as is exhibited by certain small tumours called painful subcutaneous; and it had been long since pointed out by Dr. Ferguson, that if, after extirpation of a doubtful tumour, the patient complained of neuralgic pain, secondary cancer might fairly be suspected. Having gone through the other characteristics, he observed that cancer was the only disease which possessed them all; that epithelium (commonly, but wrongly, called cancer of the lip, of the scrotum, etc., etc.) differed from cancer in its anatomical elements, as well as in the circumstance, that it never (so far as is known,) becomes diffused over the body. The Greek Elephantiasis and Lupus were shown to have eight or ten of these qualities; and even the fibrous and glandular cartilaginous tumours, were shown, in some exceptional cases, to possess many of the qualities of so-called malignancy. It was argued, therefore, that since the same structure may, in different cases, exhibit different clinical characters, since different structures may exhibit the same clinical character, since a so-called innocent disease in rare cases behaves as a so-called malignant one, and a malignant in rare cases as an innocent one, that, therefore, vital history, which was inconstant, could not be taken as a basis of classification, instead of structure, which is constant. It was argued further, that the word "malignant" was useless and mischievous; that, if intended to signify cancerous the word cancer was better; and if intended to signify anything else, was the source of much confusion. Lastly, as to treatment, the writer stating his belief, that cancer in general proved fatal by its local effects, and not by cachexia, insisted on the expediency of combating every local symptom as much as possible, and mentioned the efficacy of diffusible stimulants, ether, quinine, and chloroform, in relieving neuralgic pain.

Mr. Richardson highly commended the paper, and was disposed to adopt most of the author's views. He also was of opinion, that the term "malignant" is apt to inspire terror; but instanced cases of this disease of the lip and stomach, which although malignant had a long duration, and permitted, almost to the last, a continuance of some of the functions of those parts. He thought that the cancerous cachexia in uterine cases was rather due to the profuse hæmorrhage, and to the employment of opium, chloroform, and other narcotics, than to a constitutional taint.

Dr. Semple slightly differed from the author on several points. He thought the term "malignant" not inapt to a disease which terminates in death. The morbid effects of the disease are not solely due to the local mischief and drain from the system, or there would be no reason why it should not be cured as readily as an ordinary large ulcer of the leg. He was not satisfied with the progress which histology and chemistry had made in reference to this disease, but yet believed that the former furnishes the best mode of diagnosis of cancer. Still, he would not altogether reject the vital phenomena of the disease, since they alone could furnish a diagnosis during the life of the tumour, and thus indicate the treatment. He was not aware of any remedy for cancer, but would advise that extirpation be effected at an early period, and that although it may be essentially a blood disease.

Mr. Adams had examined cancerous tumours carefully for many years, but could not detect any form of cell, or any series of histological elements whatever, which infallibly diagnosed cancer. He would, therefore, reject the anatomical basis of classification considered alone, and would conjoin the microscopic characters and vital phenomena. He approved of the author's views in reference to the constitutional character of the disease, and to the supposed attendant cachexia. He had not found any cachexia in the fungoid form of the disease, but in other cases, when occurring past middle life, he had been accustomed to observe it.

Mr. Pilcher believed that cancer is usually a constitutional disease, but yet agreed with Mr. Travers, that in some instances it is purely a local one. He was of opinion that it might begin and continue to the end as a local disease, or that, having commenced as a local one, it might ultimately involve the constitution. He also inquired why the disease must of necessity recur; and if so, what was the nature of those cases which had never had a recurrence of the disease, after the removal of a supposed cancerous tumour?

Mr. W. Cooke attached much value to the histological characters of cancer, and stated, that he had usually met with the large nucleated, caudate, or otherwise irregularly-shaped cell described by Mr. Paget. This distinctive cell might not be found in every part of the tumour so as to be at all times obtained by the exploring needle, but was always present on an ulcerating surface. He would not extirpate the disease until it had maturated, but yet not so to involve the surrounding tissues that the whole could not be removed. He believed that certain so-called benign tumours are liable to recur, and then to assume a cancerous character; and referred to a case in which a sero-cystic growth, of 18 lbs. weight, having been removed by Mr. Fergusson, the disease had twice re-appeared. He was of opinion that this was a case of colloid cancer from the beginning. He did not object to the term "malignant."

Mr. H. Smith also referred to the case mentioned by Mr. Cooke, and stated, that Mr. Fergusson did not admit, even now, that the case was one of cancer. The recurrence was probably owing to a small portion of the tumour, or of its capsule, having been left in the cicatrix. He had found that the patient had lost the cachectic appearance after having been well nourished in the hospital. After alluding to another similar case, he invited Mr. Pilcher to state the number of cases in which he had not observed a recurrence of the disease after operation.

Mr. Pilcher, in reply, was inclined to doubt if such cases had been really cancerous.

Dr. Snow affirmed, that cachexia is commonly absent in patients in good circumstances, and who live only a part of the year in London, while it is often present in hospital cases. He believed the disease to be constitutional from the beginning, but did not think

that it thence followed that it was a blood-disease. He referred to the impossibility of the formation of the cancer-cells in the blood-vessels, or rather of their extravasation, if so formed, without a rupture of the vessels; and was of opinion, that the liability of the uterus to cancer might be owing to the deficient supply of blood consequent upon the cessation of its functions.

PHYSIOLOGICAL MEETING.

Dr. Tyler Smith, Vice-President, in the Chair.

COLOUR OF THE BILE IN VARIOUS ANIMALS.

Dr. Crisp exhibited very many dried specimens of bile from man, the quadrumana, carnivora, ruminants, rodents, and marsupials, from birds, reptiles, and fish. The animals had all been dissected by the author, and the causes of death, as far as possible, ascertained. The prevailing colour of the bile was yellow in various shades, brown, greenish brown, blackish green; and, in reptiles, a green tint of many shades was very common. He had never met with the black bile mentioned by the ancients, and thought that, if it had ever occurred, it must have been from the presence of blood corpuscles. He had instituted a lengthened inquiry, for the purpose of testing the correctness of Kölliker's assertion, "that the decomposed blood globules in the spleen form the colouring matter of the bile." Dr. Crisp was of opinion, that there is no proof whatever that the blood globules are dissolved in the spleen, and that their *débris* form the colouring matter of the bile. He had ascertained that the colour of the bile was but little if at all altered in animals from which the spleen had been excised.

PROTOXIDE OF COPPER A NEW TEST FOR SUGAR.

Dr. Gibb, who had discovered this test, applied it as follows:—Add to the fluid under examination from ½ to 2 grains of the black protoxide of copper; then pure liquor potassæ in equal bulk with the fluid, and boil from two to three minutes, or even longer. When sugar is present, the fluid becomes of a dark brown or sherry colour; the whole or part of the protoxide is decomposed with the escape of bubbles of oxygen gas, and a deposit of red or reddish brown suboxide of copper follows. Dr. Gibb conceived that it has the advantage over Trommer's test, in being more delicate, producing a deeper colour, and converting the black protoxide into the red suboxide. If it be applied to maple or Muscovado sugar, a sherry or lemon yellow colour will result; but, as Dr. Hassall affirmed in 1851, and Dr. Gibb in the seventh volume of the "British and American Medical and Surgical Journal," it is as distinctive of the presenee of sugar as the deeper colour would have been. No change, however, is produced with the colourless or refined sugars.

Dr. Snow read a paper on

THE *MODUS OPERANDI* OF NARCOTICO-IRRITANTS.

He said that all narcotics were more or less irritants, causing redness and heat in most cases when applied to the skin, and general excitement when absorbed into the blood. It was the opinion of many physiologists that these agents acted as stimulants in the first instance, and produced their narcotic effects by exhausting the excitability; but this view was untenable,—first, because the stimulant effects were often absent altogether, and, when present, they bore no relation to the amount of stupor which might follow; secondly, because excitement often appeared again in the process of recovery, when the insensibility passed off; and, lastly, because, in the use of volatile narcotics, the coma could be continued or allowed to subside at pleasure by merely keeping up or leaving off the inhalation, which proved also that the excitability was merely suspended and not exhausted. The connexion between the irritant and the narcotic effects of medicines was of a very close nature, although it was not one of cause and effect. He considered that both the irritation and the narcotism were caused by one power in the agent applied, viz., the power of diminishing oxidation in the living body. A number of reasons were given, to show that narcotics have the power of diminishing and preventing the process of oxidation, on which sensibility, contractility, and the other animal functions depend. The following are some of the reasons. The amount of carbonic acid gas produced in respiration had been found to be diminished by certain narcotics, as alcohol, ether, and chloroform. The colour of the venous blood was lighter than usual in patients under the influence of the two latter agents, showing a diminution in the changes which take place in the systemic capillaries. When animals were killed in the space of about five minutes by narcotic vapours, the chief symptoms and phenomena were the same as in asphyxia by privation of air. The greater number of narcotics had the effect of preventing combustion, putrefaction, and other forms of oxidation out of the body, their power as antiseptics, etc., bearing a direct relation to their power as narcotics, when they resemble each other in their chemical constitution. While the diminution of oxidation in the system produced narcotism directly, it indirectly caused irritation, by inducing congestion in the capillaries and small arteries, where sufficient vascularity existed. Dr. Alison, the late Dr. John Reid, and others had shown, by facts which he enumerated, that the circulation through the capillaries was assisted by the various changes of composition, etc., taking place in the neighbourhood of these vessels, the chief of which consisted in a process of oxidation. When this process was diminished, the flow of blood through the capillaries was impeded, and these vessels and the smaller arteries became congested, causing the redness and other phenomena of irritation. It was in the most vascular organs and the best-nourished persons that irritation and excitement was most frequent. Microscopic observations had shown that the circulation through the capillary blood-vessels was impeded or stopped by the action of opium, carbonic acid gas, and some other narcotics. Narcotico-irritants did not increase either the mental or bodily powers of persons in perfect health, in whatever doses they might be administered; but a small quantity of wine or opium often gave temporary energy to those who were in a state of debility. In such persons, what blood they had loitered chiefly in the large veins, and a slight obstruction to the capillary circulation caused it to accumulate a little in the arteries, and the heart was called into increased action to overcome the resistance. Under such circumstances, the better supply of blood to the various organs more than compensated for the true narcotic action of the agent employed. From the continued presence of certain narcotico-irritants in the blood for a long period, in Bright's disease of the kidneys, the left ventricle of the heart often became hypertrophied by its efforts to overcome the resistance to the circulation through the capillaries. It had been lately stated, that the poison which caused coma and convulsions in this disease was carbonate of ammonia arising from the decomposition of urea in the blood, and some experiments he had performed on gold fishes showed that carbonate of ammonia was a much more powerful poison than urea.

Dr. Sibson cordially concurred in the author's views, and was gratified to learn, that they so completely correspond with those which he had long ago published in the *Provincial Medical and Surgical Journal*. He had always, with the author, referred the action of narcotics to the capillaries, and, indeed, had proved it by experiment. He placed the web of a frog's foot in a solution of opium, and found that the capillaries became congested. In a few minutes he observed, that the capillaries in the opposite foot were distended also, although they had not been immersed in the solution; thus proving, that the opium, having been absorbed by one web, had been applied from within to the web of the opposite foot. He laid stress upon the fact, that, whether narcotics are applied externally or internally, they have a local, although it may be, at the same time, a universal, effect upon the capillaries. He also believed, that, when æsthetic effects are induced, it is by a similarly local application,—perhaps first to the brain, but then almost simultaneously to every part of the nervous system. The reflex function of respiration is quickly, yet secondarily impeded; the direct action of the narcotic being upon the incident, the indirect or secondary one upon the reflex nerves. This effect is one of exhaustion, as was shown in the experiment of Dr. Marshall Hall, in which, although the first pinch of the forceps caused the frog to start, the repetition of it had no influence whatever. He had also no doubt as to the fact that the action of narcotics upon the capillaries depends upon the presence of oxygen. The chemical action of that gas in the lungs is undoubtedly essential to the production of animal heat; but that alone would not suffice, for, in Sir B. Brodie's experiments, artificial respiration was maintained in the absence of the brain, and yet the temperature fell to 55° or 60°,—as low as is observed in animals dying from cold. The nervous influence is essential. When a student is deeply engaged in study his extremities lose their temperature; and so also in disease accompanied by great exhaustion and deficient assimilation of food. He somewhat differed with the author as to the use of oxygen as a stimulant, since working-men had found that beer had enabled them to do a greater amount of work; and our northern neighbours believe that spirits sustain the animal heat. So also in disease, as in low condition of the system, and in cases of severe uterine hæmorrhage, wine and spirits do clearly sustain the vital powers. Of course this result is due to the primary action of the stimulant.

Mr. B. W. Richardson also attached the greatest value to the labours of Dr. Snow in reference to the mode of action of narcotics, and agreed in the main with his views. He was convinced, that

the tendency of cold and other narcotics was to lessen the oxydization of the blood, and to cause the colour of arterial blood to approach to that of venous; while the effect of an elevated temperature is to raise the colour of the venous towards that of arterial blood. Still he thought that exceptions might occur, in which complete anæsthesia would be accompanied by a state of super-oxydization of the blood. As it respects the influence to which the oxydization is due, he believed it to be purely chemical, and that the nervous influence is not involved, except as a secondary result.

Mr. Headland expressed doubts as to the correctness of Dr. Snow's views, and could not reconcile them with the following series of effects. When aconite is applied to the nerves, it produces an immediate action. The action of hydrocyanic acid has no period of irritation. Certain narcotics produce effects on special organs, so that opium affects the head, digitalis the heart, and tartarised antimony the lungs. In all these instances, he could not conceive, that they acted through the capillaries of the whole, or part, of the body; but if, in any case, they do act in that way, he was disposed to think, that it could not be in their first action; and if it occurred in their second action, it might probably be due to the diminution in the action of the lungs and heart. He reminded the meeting, that Liebig had proved that the exhibition of alcohol in small quantities is followed by the evolution of carbonic acid from the lungs; and this, he believed, did not indicate a lessened oxygenization of the blood.

Dr. Crisp referred to the opposite and unsatisfactory results which had been obtained from experiments on the lower vertebrate animals, and was of opinion, that animals of a high organisation should be selected for that purpose. It is well known, that the poison of vipers produces serious results when introduced into the higher animals; but he had placed it in the mouth of a toad, a snake, and several insects, without any ill effect having followed. In support of Dr. Snow's theory, that narcotics produce irritation on their first operation, he stated, that when the poison of the rattlesnake, or of the cobra, is inserted into a bird it causes the creature to wag its tail as if pleased and excited, and then suddenly kills it. He was of opinion that the nervous system has but little influence over the capillaries; and even as it respects the larger arteries, nerves had not been traced into their middle coat. The artery of a paralysed limb beats synchronously with that of the opposite side, and is of equal power, except when the surrounding muscles have become pale and flabby.

Dr. Cogswell combatted the notion, that all muscular action must take place through the nerves, and reminded the Fellows that muscular fibre has an inherent irritability which is capable of direct excitation on the application of conia, or other substances. This may be seen if a detached fibre be placed under the microscope and experimented upon. When Dr. Christison introduced conia into the heart he caused death by the muscular action produced directly from the action of the drug. On the whole, he disbelieved the opinion that narcotics have a period of irritation. In reference to the action of hydrocyanic action, he stated, that it is not that of a sedative, since it is accompanied by muscular contraction.

Dr. Chowne briefly, but earnestly, dwelt upon the importance of our bearing in mind the existence of a vital force in the system acting above and beyond anything merely chemical and physiological.

Dr. Snow said, in reply, that Prout and Böcker had ascertained that the amount of carbonic acid gas produced in respiration was diminished by a moderate quantity of alcohol. He considered that narcotics removed sensibility and prevented pain by diminishing the oxidation of the nervous tissue. Hydrocyanic acid was an irritant, as was shown by the convulsions it occasioned, and by the redness and tingling it caused when applied to the skin. Opium and all narcotics acted on every part of the body, although their effects were more apparent in some organs than others.

KING'S COLLEGE MEDICAL SOCIETY.

Mr. John Wood, Vice-President, in the Chair.

This evening, Mr. Henry Smith, Vice President of the Society, read a Paper upon

CONSERVATIVE SURGERY, AS APPLIED TO THE TREATMENT OF DISEASES AND INJURIES OF THE JOINTS.

The author commenced the paper by dwelling upon the importance of conservative surgery in general. During the last few years it had made rapid progress, and surgeons are now employing its resources in instances where, but a few years ago, they were little thought of. But, in diseases of the joints more especially, its greatest triumphs are seen; and not only with reference to operations performed upon these parts, but where attempts are made to arrest destructive disease, and prevent operations. The symptoms, pathology, and progress of diseases of the joints, were gone into by the author, who stated, that when called in to treat a serious case of affection of any joint, the surgeon should at once endeavour to dismiss from his mind the idea that an operation will be necessary, and thus he will be the more induced to put in force those resources which constitute the elements of conservative surgery. These are a skilful application of local and general remedies, perfect rest of the part affected, and a patient reliance upon the efforts of nature. It was extraordinary what a vast amount of benefit might be effected by patiently employing these means in instances where apparently destructive disease of the joint was imminent. The great importance of rest was more fully dwelt upon, and some instances were mentioned in which its employment had been attended with excellent results. One instance was, where a middle-aged man had received a severe blow on the shoulder, and had rapidly got destructive inflammation of the joint; ulceration of the cartilages took place, and the general system was so much disturbed, that death appeared to be imminent. The patient was sent to bed, the joint was kept perfectly quiet, remedies were given which removed constitutional irritation, and, by these means, the symptoms of the disease became subdued, and in a few weeks the patient had a partially stiff joint. In another case, where the author was called, a fine man had received a very serious injury to the knee and thigh, and amputation was proposed, and the instruments were actually taken to the house; but on careful examination, a large quantity of matter was discovered, situated very deeply; free incisions were made, and the patient rallied. Three weeks after this, Mr. Smith saw him again; destructive inflammation had been going on in the knee-joint, and it was now considered proper to amputate the thigh, but the patient strenuously opposed it, and, therefore, the resources of conservative surgery were patiently employed, and with the greatest ultimate success, for, some months afterwards, the man walked some miles to see him, his health being quite restored, his knee being stiff, and the whole limb little shorter than its fellow. In the treatment of diseases of the wrist-joint, more especially were the advantages of rest observed; some cases were narrated where the advantages of placing the forearm and hand on a splint, in apparently incurable disease in this joint, were most conspicuous. These recoveries were seen, and always more frequently to be expected, when the articular inflammation, and subsequent morbid changes, had been the result of injury rather than of constitutional disease. In these instance more time should be allowed for the beneficial operation of the resources of conservative surgery. The author next referred, at length, to the application of this species of surgery in operations upon the various joints of the body when diseased. Most well-informed surgeons were, now-a-days, more disposed than even a very few years ago, to perform limited operations, rather than submit the patients to the loss of an entire limb. When the joint alone was diseased —thanks to the example of Park, Moreau, Crampton, Liston, Syme, and Fergusson— great triumph had been achieved in this department of scientific surgery. The success following resection of the elbow-joint was quite remarkable, and indeed the operation had almost been confined to that and the shoulder-joint, until lately, when inquiry had been made as to what would be the result of its application to the hip. Much opposition was excited against this inquiry being practically carried out; but the operation has been attended with such success, that it is now an established one in surgery. Then came the knee, and this question has, and is now, exciting great attention and some senseless and angry discussion, but, he was happy to tell this meeting, that some very able surgeons had tried the operation fairly, and the result has been most satisfactory. He had recently paid a visit to Jersey, and had examined four out of five cases which have recovered from the operations performed by a most able surgeon, Mr. Jones, and he was delighted with the result. He strongly hoped that the day would come when amputation of the thigh would no longer be performed—in King's College Hospital at least—for disease of the knee-joint, unless there were ample reasons for such extensive mutilation. This question, like others in surgery, only wanted fair inquiry, and its settlement will neither be advanced nor retarded by hebdomadal or monthly effusions from the pen of those who did not take the trouble to look carefully into the facts, both in favour of and against the operation. The author then referred to the method of making free incisions into diseased joints, as advocated by Mr. Gay, and considered it to be a most important measure, and a step in advance in conservative surgery. He had seen some admirable results produced by in-

cising joints freely, but he could not go so far as Mr. Gay, in supposing that the plan of treatment would obviate excision.

An animated discussion was afterwards carried on, principally by the President, Mr. Hulke, Mr. Edwards, and by Mr. Gay, who was present as a visiter. The meeting then adjourned.

MEDICAL NEWS.

OXFORD UNIVERSITY.—CONTRIBUTION TO MEDICAL SCIENCE.—We are glad to observe systematic steps taken to redeem our Universities from the charge of neglecting physical science, while all their means and efforts have been put forth in the departments of theology and classical literature. Dr. Acland, Lee's Reader of Anatomy at Oxford, has just brought out a "Synopsis of the Physiological Series in the Christ Church Museum; arranged for the use of Students, after the plan of the Hunterian Collection, and chiefly under the Divisions of the Hunterian Catalogue." From this it would appear, that a nucleus already exists in the University for the establishment of a school of medicine in the most extended sense of the words. Dr. Acland has done much for the improvement of the Museum itself. On his appointment as Lee's Reader in 1845 he decided on forming a more systematic physiological collection, so as to represent, on however small a scale, the whole range of anatomical and physiological study, and he has now succeeded in providing a collegiate educational series. Not satisfied with this, however, he has brought out a complete key to the series, in which he digests his materials in divisions and sub-divisions, illustrative of the various forms of animal and vegetable life, from their simplest to their most complex developments, and of the arrangements for the continuation of their species; and again, in series or sub-series, illustrative of the various organs, with explanatory remarks bearing upon each main feature of the arrangement. Appended, also, to every link in the chain, he gives a list of the works, to be consulted in the Museum, specially belonging to the branches of study indicated.

APPOINTMENTS.

MILITARY.—3rd Regiment of Light Dragoons: Assistant-Surgeon William Legge Reid, M.D., from the Staff, to be Assistant Surgeon, vice Tronsdell, promoted on the Staff. 20th Foot: Surgeon Thomas Alexander, from the 60th Foot, to be Surgeon, vice Maclagan, M.D., who resigns. 60th Foot: Staff-Surgeon of the Second Class Henry James Schooles, M.D., to be Surgeon, vice Alyxander, appointed to the 20th Foot. 74th Foot: Staff-Surgeon of the Second Class James Macbeth, M.D., to be Surgeon, vice Fraser, who exchanges. Hospital Staff: Surgeon James Alexander Fraser, M.D., from the 74th Foot, to be Staff-Surgeon of the Second Class, vice Macbeth, who exchanges. Assistant-Surgeon William Green Tronsdell, M.D., from the 3rd Light Dragoons, to be Staff-Surgeon of the Second Class, vice Schooles, appointed to the 60th Foot. John Clarke, gent., to be Assistant-Surgeon to the Forces, vice Reid, appointed to the 3rd Light Dragoons.

NAVAL.—Acting Assistant-Surgeon Archibald Stevenson (1852), is confirmed as Assistant-Surgeon to the Rodney, 90, on the Mediterranean station. Acting Assistant-Surgeon Robert Burrows (1853), to the Medea steam-sloop, at Portsmouth.

DEATHS.

HOOPER.—Dec. 12, at 3, St. Peter's-alley, Cornhill, in his 27th year, Henry Hooper, M.D.

AGAR.—Lately, Dr. J. Agar, of Parham, Antigua.

PHILP.—Dec. 6, John Philp, Esq., Surgeon, Kirkcaldy, Fifeshire, L.R.C.S. Ed. 1814; Certificated Surgeon under Factory Act for Kirkcaldy District; Medical Officer Kirkcaldy Prison, until it was abolished; Author of a Paper on "Spurious Melanosis of the Lungs, as it appears among Miners and Colliers."

MEETING OF THE METROPOLITAN BRANCH OF THE PROVINCIAL MEDICAL AND SURGICAL ASSOCIATION. — MEDICAL REFORM.—A meeting of the Metropolitan Branch of the Provincial Medical and Surgical Association was held on Tuesday last, at the rooms of the Medical Benevolent College in Soho-square, to take into consideration the question of Medical Reform, and on other business. Sir John Forbes, M.D., the President, was in the chair. The following important Resolutions were unanimously adopted:—1st. That, in the opinion of this meeting, the Medical Reform Bill to be introduced into Parliament by the Association should recognise the necessity of the representative principle, generally extended, in the election of the governing bodies of the Colleges, and of the Superintending Council; and that no Bill can give general satisfaction to the Profession which shall tend to the constitution of superintending Council, containing a preponderating influence of the Colleges of Physicians and Surgeons, as at present constituted. 2nd. That, in the opinion of this meeting, it is expedient that the provision of the former Bill, promulgated by the Reform Committee, which determined the minimum of age at which candidates were rendered admissible into the Profession, be altered from 21 to 22 years, in order to allow of a higher standard of qualification in general education, including classics and mathematics, for the Profession at large. 3rd. That, in the opinion of this meeting, the proposed Medical Reform Bill ought to contain a clause, rendering a preliminary examination in classics, mathematics, and general science, imperative, before the student commences his medical education. 4th. That a copy of the foregoing Resolutions be forwarded, by the Secretary, to the Reform Committee of the Parent Association, with a request to them to give these subjects their most serious consideration.

MEDICAL BENEVOLENT FUND.—At the last monthly meeting of the Committee the following cases were relieved:—1. The widow of a late annuitant who was blind; he died leaving his widow and daughter unprovided for. Recommended by Sir John Forbes and Mr. Toynbee. Voted 5*l.* to assist the daughter to an outfit, in order that she may enter upon a situation. 2. The widow of a surgeon who was improvident, and left his widow and family wholly unprovided for. The mother has hitherto been supported by her children, but they have great difficulty in doing so. Recommended by Mr. Vesey. 3. An aged and infirm medical man and his wife residing in an almshouse. Recommended by Sir John Forbes and Mr. Toynbee. Voted 2*l.* 10s.; the name of the husband was entered on the list of candidates for an annuity. 4. The widow of a medical man who has a large family to assist, but who is suffering from a disease of the uterus, and, therefore, unable to work. Recommended by Mr. Pall. Voted 10*l.* 5. A surgeon, residing in the neighbourhood of London, having a wife and family, and who, from various circumstances, has had great difficulty in keeping his ground. Voted 5*l.*

A NEW ORDER OF CHIVALRY has been established beyond the Rhine. The King of Bavaria, on the occasion of his last birthday, founded a new order—an order of intellectual chivalry,—to which the grandest celebrities of the Fatherland, authors, artists, men of science, and musicians—all who cultivate the arts of peace, who beautify life and ennoble society, are to become associated. Already a selection of the Forty has been made, and the list includes the names of all that is most renowned in German literature and culture. The order is entitled, the Order of Maximilian the Second. The members of it bear the title of chevaliers or knights. Here, then, is yet another instance of the inauguration of a method by which can be rewarded greatness which is not that of the sword, and services which are not those of the Cabinet or the battle-field. Here is an order having intelligible meaning—its foundation being laid on ideas now existing and now active. The aversion which men of the pen express towards the decorations which belong of prescriptive right to the sword is founded in nature and logic. To assume them would not merely be to strut in borrowed feathers,—but to admit that their services and their attainments need a reflected light to set them off. The pride of genius—of literature—of civil service—refuses to endorse so absurd an admission. It is not true in fact: why should it be so in appearance? The slow-paced genius of the English State is long in travelling to a logical conclusion:—the "Order of Victoria"—a graceful and appropriate name for a chivalry created in the cause of the Muses and in the interests of peace—waits for an auspicious moment. Meanwhile we are content to chronicle the progress made abroad in carrying out a notion we have never ceased to urge as one of the necessities of such an age as that in which we live.—*Athenæum.*

IMPORTANT TO MEDICAL MEN CONTRACTING WITH BENEFIT SOCIETIES.—In the Court of Queen's Bench, on Saturday, an action was brought by Mr. Parkes, a surgeon, of Great Marlborough-street, to recover 75*l.*, under circumstances of some interest to the Medical Profession, who now so largely contract for medical attendances and medicines to Benefit Societies. The case occupied some considerable time, but the facts are briefly these:—In 1850, one Scully established an "Omnibus Servants' Protection Society," the constitution of which closely allied itself to trade protection societies, being more of a "wages" nature than for assistance in the time of sickness. In the year following, a "Burial and Sick Fund" were added, and only those members of the "Protection Society" who contributed to the burial and sick funds were entitled to its benefits, a majority of whom, however, became members. One of the rules of the Sick Society was, for the members to have medical attendances, etc., free; and, as the members were living in all parts of London, it became necessary to appoint medical men in several quarters of the Metropolis, who were to attend members applying to them in their districts, and for which services they were to be paid at the rate of one shilling per quarter for each member. The plaintiff was appointed a medical officer, upon these terms, for the district of Camden-town and Paddington, and had the lion's share of practice, omnibus men locating more in his district than elsewhere. Scully was appointed manager under a Committee; and to make the defendants liable (Hardwick and others), Scully swore, that the plaintiff's appointment had been ratified at a meeting of the Committee, and that a minute of the appointment had been made at the said meeting. Unfortunately for Mr. Parkes, the books could not be found, or could not be produced, the plea being, that the Secretary was dead. The defendants also contended, that it was Scully, who had since been dismissed, who

appointed the plaintiff, and not the Committee, and that plaintiff's services were rendered to the "Sick and Burial Fund," and not to the Protection Society. It was also urged, that one object of the Sick Society was to provide pecuniary assistance to the sick, who chose their own Medical men. The three defendants swore positively to never appointing the plaintiff; and *modestly* added, that they all along supposed that Mr. Parkes tendered his services gratuitously to their sick members. Mr. Hills, plaintiff's counsel, said, he could not carry his case any further, and a verdict for defendants was recorded. The reporter adds, that in London alone there are at least 1000 Societies, whose Medical men are in no better position than Mr. Parkes. Odd-fellows, Foresters, Old Friends, Druids, and others, could alike repudiate. A written agreement should at once be properly drawn up and taken to the Stamp-office, when, for half-a-crown, Medical men would hold some legal evidence in case of dispute.

THE CLOSING OF THE BURIAL-GROUNDS IN THE METROPOLIS.—Besides the drainage of the soil, the removal of dirt, and the adequate supply of pure waters,—of living waters, as they have been well called,—the entire cessation of the burial of the dead in churches and churchyards in towns is an indispensable sanitary measure. The execution of this delicate and important measure has been entrusted by the Secretary of State to Dr. Sutherland; and the following statement shows that it has been prosecuted with no ordinary activity and success in the Metropolis:—1st. Nearly every vault under churches and chapels has been or is under order for closing. 2nd. Burials have been prohibited within every church and chapel where they are known to have taken place. 3rd. 181 burial-grounds, parochial or private, have been closed, or are under order for closing immediately. 4th. 61 parochial or private burial-grounds are under notice or order for closing within a limited period, almost all within a few months. 5th. 16 burial grounds are partially closed, all the interments except those in private vaults and graves being prohibited. 6th. 13 burial-grounds are closed, under conditions for the protection of the public health. Lastly. Nearly all the remaining grounds within the Metropolitan districts are now under inquiry.—*Registrar-General.*

MORTALITY NOTABILIA.—The present return discovers a decrease of mortality in London on the two previous weeks; but it still indicates a not very favourable state of the public health. The deaths registered in the last four weeks were 1162, 1339, 1414, and (in the week that ended last Saturday) 1308. In the ten weeks corresponding to the last week of the years 1843 52, the average number was 1215, which, if raised in proportion to increase of population, becomes 1337. The actual number of deaths being 1308, it differs but to a small extent from the estimated amount. The increase in the deaths caused by diseases of the respiratory organs has been the principal feature of late returns. The numbers referred to this class have been, in the last four weeks, 180, 297, 379, and 343. From phthisis in the tubercular class, they were, in the same periods, 133, 166, 175, and 157. Last week bronchitis was fatal in 159 cases; while the corrected average of ten corresponding weeks (in 1843-52), was 113; pneumonia was fatal in 142, while the same average was 134. Typhus and hooping-cough predominate at present among epidemic diseases,—the former numbering 64 fatal cases; the latter 56. Typhus shows an increased tendency to prevail.

DEATHS *in the Metropolis for the week ending Saturday, December* 10, 1853.

CAUSES OF DEATH.	DEC. 10. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	579	418	296	1308	12145
SPECIFIED CAUSES	576	417	296	1289	12097
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	201	56	20	277	2804
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	6	28	16	50	512
3. Tubercular Diseases	68	132	8	208	1759
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	45	25	53	123	1245
5. Diseases of the Heart and Blood-vessels	1	26	25	52	414
6. Diseases of the Lungs and of the other Organs of Respiration ...	176	79	88	343	2795
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	12	29	8	49	610
8. Diseases of the Kidneys, etc. ...	...	7	5	12	110
9. Childbirth, Diseases of the Uterus ...	...	10	2	12	116
10. Rheumatism Diseases of the Bones, Joints, etc.	2	6	...	8	90
11. Diseases of the Skin, Cellular Tissue, etc.	...	3	...	3	10
12. Malformations	5	...	...	5	45
13. Premature Birth and Debility ...	24	2	...	26	286
14. Atrophy	19	...	11	30	210
15. Age	...	...	56	56	616
16. Sudden	1	4	1	6	129
17. Violence, Privation, Cold, and Intemperance	16	10	3	29	346
CAUSES NOT SPECIFIED	3	1	...	19	48

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BOOKS RECEIVED.

The Laws of Cholera. Reprinted from the *Times*. London: Knight. 1853.
Journal of the Statistical Society of London. December, 1853.
Reminiscences of a Medical Life. By Jonathan Toogood, Taunton. 1853. London: Longman.
On Fatty Degeneration. By the late W. F. Barlow. London: Churchill. 1853.
Third Annual Report of the Manchester Royal Lunatic Hospital. Manchester. 1853.
Orr's Circle of the Sciences. No I.
An Introductory Lecture. By G. Southam, F.R.C.S. Manchester. 1853.
The Upper Canada Journal. No. II. Toronto. 1853.
Some Remarks on the Medical Evidence Given at the Trial of W. B. Kirwan. By J. J. Feild, M.D. With a Commentary thereon. By F. C. Skey. London: Highley. 1853.
A Treatise on Dentistry. By S. Fowell, Dentist. London: Simpkin, Marshall, and Co. 1853.
The Nature of Cholera Investigated. By J. G. French, F.R.C.S. London: Churchill. 1853.
Practical Observations on the Treatment of Stricture of the Urethra, etc. By John Lizars. Edinburgh. 1853.
The American Medical Examiner. Philadelphia: Lindsay and Blakiston.
Adams on the Prostate Gland. Second Edition. London: Longman.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I had the melancholy satisfaction of reading my obituary by the wreck of the Anne Jane, in your paper of October 22. I only arrived from Barra last Sunday morning. Most of my friends must still think me dead; in fact, I was shown the report of my death by a friend no later than yesterday.

Perhaps you will be good enough to insert these few lines.

I am, &c., FRANCIS GOOLD.

Dublin, Nov. 8, 1853.

Our Correspondent from Bristo-street, who assures us that, by publishing his paper, we shall become a "benefactor to suffering humanity," and confer an "invaluable boon" on our readers, and who signs himself both *Surgeon* and *Minister of the Gospel*, is informed that equal parts of laudanum and tincture of rhubarb is not the *specific cure* for Cholera he supposes it to be.

W. H. Borham, Esq.—We shall be glad to see the other papers. The case sent shall appear shortly.

Medicus certainly shows in his letter that gentlemen who signed a testimonial to Dr. Gavin were not independent of local authorities; but we cannot allow any one to impugn the motives of a large body of gentlemen anonymously.

Condenser.—It was found that the lectures required further preparation to bring them up to the present state of the science; but such practical instructions as those desired by our Correspondent will be published in the ensuing Volume.

Philanthropist.—We should be very sorry to try the "Exhausting Pan" recommended.

H. Lawson, Esq.—The drawing is in the hands of the engraver.

Several Answers to Correspondents are unavoidably postponed.

COMMUNICATIONS have been received from—

Dr. SNOW BECK; Dr. MITCHELL, Liverpool; Dr. HOFMANN; T. H. FURNESS, Esq.; H. LAWSON, Esq; Mr. GEORGE GIBSON; Mr. J. WYATT CRANE, Leicester; Mr. S. KNAGGS, Huddersfield; Mr. GEORGE ROBB, of Edinburgh; Dr. COLLINS, Cape of Good Hope; Mr. JOSEPH STRINGFIELD, of Weston Super-Mare; Dr. BOYD, of Wells, Somerset; A SUBSCRIBER; Dr. MERRIMAN; J. P. TEALE, Esq.; C. H. MOORE, Esq.; HORACE K. DEBENHAM, Esq.; Mr. CALLENDER; Mr. TURLE; Mr. PALEY; Dr. SLOANE; J. COOPER FORSTER, Esq., &c.

SCARLET FEVER has latterly raged with a virulence never experienced before for the last ten or twelve years in Hobart Town.

SMALL-POX (by last advices) was still ravaging the Sandwich Islands.

A PERSON, named George James Browne, mentioned in the Police Reports of Monday as a surgeon, practising in Clapham, and as having been concerned in a most disgraceful affair, is quite unknown to the Clapham members of the Profession. No such name can be found in the "Directory."

ORIGINAL LECTURES.

CROONIAN LECTURES, 1853,

DELIVERED AT

The Royal College of Physicians.

By THOMAS MAYO, M.D., F.R.S.

ON

MEDICAL TESTIMONY AND EVIDENCE IN CASES OF LUNACY.

Lecture III.

Idiocy most frequently a Civil question; here considered principally in relation to Criminal acts.—Illustrations.—Unsoundness of Mind.—Examples illustrating the distinction between it and Insanity.—Each of these states involves some responsibility in reference to Crime.—Desirableness of Personal Examination before the Jury in Criminal as well as in Civil cases, both of Unsoundness and Insanity.—Judicial Remarks on a state of Abnormal Mind, which does not fall under the head of Insanity, Idiocy, or Unsoundness.

IDIOCY.

I have now to speak of that congenital, though sometimes acquired, deficiency of the intellect which, in the first case, is properly called idiocy; in the latter case, is understood under the term imbecility. The diagnosis of this state, whether in its civil or its criminal relations, may in one case be most obvious and simple, in another case may involve the deepest and most difficult questions as to the competency of self-regulation in the individual. "It is by no means easy," says Dr. Taylor, "to draw a distinction between the better classes of imbeciles and those who are reputed sane, since the minds of sane persons differ remarkably in their capacity for receiving instruction." It has been well observed by the same author, "that by endeavouring to make a very close distinction of this kind, one-half of the world might reason itself into the right of confining the other half." But the difficulties of this subject, as far as medical responsibility is concerned, involve their own cure, at least in relieving us from the necessity of attempting to draw a rigid line. Every case must be determined alone, and on its own merits. The judgment of the medical officer has most frequently to be shown in relation to the civil question; in exerting it he may also prevent the criminal acts which the unrestrained idiot is liable to commit. This function of the medical practitioner is the more important, in that idiocy or imbecility often assumes so bland and quiet an aspect, as to occasion its being allowed very dangerous latitude. There is a curious passage in Las Casase's Memoir of the Emperor Napoleon, which I will quote, as it illustrates the distinction which we must have in view on this latter point. The Emperor, in one of his conversations at St. Helena, observes, in reference to the general subject of lunacy, that there is such a thing as a "*folie innocente*" and a "*folie terrible;*" a fatuous state, which is safe, and one which is dangerous. A fatuous person, "*un fou*" of the first kind, the Emperor describes as reasoning with the proprietor of a vineyard in which he is trespassing, thus:—"Why, here are we two; the sun sees us both, therefore I have a right to eat grapes." The "*fou terrible,*" he proceeds, "is he who cut off the head of a man whom he found sleeping under a hedge; then hid himself behind it, in order to witness the surprise—*embarras*—of the body on waking." Of these half-witted persons, the former indulges a love of apples, the latter a love of bloodshed; the process of thought in each case is that of a deficient understanding, which could neither prevent the one from stealing apples, nor the other from committing violence under the influence of opportunity, but rather forwarded the crime by suggesting excuses. "An idiot," says Dr. Hainsdorff, "in the Hospital of Salzburg appearing to be singularly insusceptible of fear, an experiment of an appalling character, and of appalling consequences, was made upon him, as a means of putting his susceptibility to the test. It was proposed to produce in him the impression, that he saw a dead man come to life. A person accordingly had himself laid out as a corpse, and enveloped in a shroud; and the idiot was ordered to watch over the dead body. The idiot perceiving some motion in the corpse, desired it to lie still; but the pretended corpse raising itself in spite of this admonition, the idiot seized a hatchet, which, unluckily, was within his reach, and cut off first one of the feet of the unfortunate counterfeit, and then, unmoved by his cries, cut off his head. He then calmly resumed his station by the real corpse; a strong illustration of the dangerous hypothesis of harmlessness as connected with this state of mind.(a)

In regard to these frightful risks, the idiot is far less favoured by the operation of a principle which often comes into play with preventive effect in regard to the destructive tendencies of insane persons,—namely, the antagonism of opposed motives. The struggle of affection, or of moral principle against the homicidal orgasm of *insane* persons has been successful in many cases on record. But the *idiot*, as such, seems to labour under *successive* motives or states, each engrossing him wholly for the time; a mixed motive is unusual in that character. It does not appear to me, that any examples are wanted to illustrate this succession; and if I am correct in asserting it, I need not say, that this unity of each successive purpose must give great certainty of accomplishment to such of them as admit of sudden and rapid execution.

Such are the principal circumstances that suggest special vigilance and caution in our evidence and testimony respecting the idiotic class properly so called; for the shock which has destroyed the mental faculties of the imbecile person,—*i. e.*, the *non-congenital* idiot,—has generally so deranged his physical powers, as to render him far less capable of such mischief as I have adverted to. Acute attacks of mania may supervene in such cases, marked by its characteristic symptoms; but ordinarily, I think, they undergo no such change.

UNSOUNDNESS.

I have thus considered the judicial responsibilities and evidence of that state of perverted mind which is meant by insanity or mania in our language; and I have made some remarks on that *deficiency* of power existing in those respects in which the insane labour under *perversion*, which is called idiocy or imbecility. The expression unsoundness of mind in its primary sense is one of great inclusiveness. I here use it as forming one of the abnormal states expressed in the medical certificate on which these remarks are built, and presumably distinguished from insanity and idiocy, both in respect to the structure of the certificate and to the exigencies of the subject.

A person, of whom neither insane delusion, nor incoherency, nor, again, idiocy, can be predicated, may be brought before a physician, as requiring precautions in reference to the management of his property and person. The man in question is not in his dotage,—of that state I am not speaking at present,—he talks with sufficient fluency, and without anything remarkable in the sequence of his thoughts. But, on every subject of business, his mind goes into a state of confusion, of which he is not conscious. He is unable to appreciate value, and, though fond of property, will purchase and part with it at absurd prices. He can believe anything that is told him, however improbable, and, if he takes a dislike, can invent or believe any fiction that falls in with his feelings of resentment. I may add, that his conversation being on the whole continuous and coherent, there is a nervous, flighty character in it, and often some deficiency of articulation. While I am thus presenting in intention a diagram of a state, I feel that I am virtually drawing a portrait. I shall best make myself understood by giving a few more examples of unsoundness, according to the use of the term which I suppose to be intended in the certificate. And, first, I will adduce one already alluded to in my first lecture, in which its non-appreciation, or tardiness of appreciation, apparently involved a long and expensive process, replete with *avoidable* contradiction and uncertainty,—that of Mrs. Cummins, in 1852. In this case, one at least of the contending parties seemed to permit the question, whether

(a) Esquirol.

the patient required coercion, or at least surveillance, to turn upon the question, whether she was or was not insane, either *eo nomine*, or under some synonyme, ignoring the consideration, that, without being insane, she might still conform with one of the descriptions affirmed in the medical certificate as implying such mental disease as the law intends to be inconsistent with free agency. Now, a candid perusal of the testimony given on this case, with the fullest admission of the probable truthfulness from the respectability of the witnesses, may suggest the reasonableness of this compromise. On the one hand, there was neither false perception, nor incoherency, nor inconsecutiveness of thought, alleged of Mrs. Cummins. She saw no unreal objects; she heard no unreal voices; she indulged in no misconceptions, as to her property or position, which could be construed into an insane notional delusion. She could, accordingly, by no means incur the imputation of insanity. On the other hand, it was in evidence, that she had, out of a moderate property, bequeathed 2,000*l.* to her then solicitor, who showed his unfitness for that trust by at another time forcibly obstructing physicians appointed by the Lord Chancellor to examine into the actual state of her mind; that she had, by her screams, attracted policemen to a house, in which she was residing at her own free will, but separated from her family, as if violence had been used, no such violence being proved; that she was in a state of constant removal from place to place, so as to prevent her family from knowing where she was; and that her solicitors were constantly being changed by her. There was excessive and unexplained, or unsatisfactorily explained, hatred of her daughters, leading to an unreasonable accusation against one of them of an attempt to strangle her. With respect to these daughters she avowed that they had that day been drinking at the bar of the Horns Tavern, of which no proof was adduced; that one of them, Mrs. Ince, was a prostitute, and that her husband had murdered three children. Equally extreme and unreasonable, as well as unfounded opinions were entertained by Mrs. Cummins respecting the conduct of her aged husband. Now, in regard to the apparently conflicting opinions of the medical witnesses as to her present state of mind, the assertions of one group of them could not be viewed as antagonising those of the other party, unless it be clearly proved that they were talking of the same thing; whereas, for anything adduced in the examinations, I am justified in supposing that one party were contravening the opinion that Mrs. Cummins laboured under insane delusions or incoherency, while the other party were labouring to prove that she was incapable of managing her person and property, which she might be as an unsound person, in the specific sense which I attribute to this term as consistent with the probable intention of the certificate, without any evidence of insane delusions or incoherency. Thus, to advert to a remark made by Dr. Conolly in the course of his evidence, I might agree with him in thinking that a person believing, on the authority of a letter, that he was about to marry the Queen, is not, therefore, chargeable with an insane delusion; and yet I might consider such a belief, so accruing, a material addition in the way of cumulative evidence to any other proofs of mental unsoundness as disqualifying him for self-management. In truth, the distinction, which I am applying here, does not seem to have escaped the learned Commissioner, Mr. Barlow, before whom the proceedings which I allude to took place. He remarks to the Jury, in summing up, that if they saw ground for restraint, it should be so ordered by him as to exhibit as little as possible the character of precautions against an insane person.

In the above cases, the phenomena of unsoundness had relation principally to the civil interests of the patient, and his friends or relations. In that which I now proceed to adduce, the interests of society, as well as his own, required that the patient should be submitted to restraint, on criminal as well as civil grounds. This person, aged twenty-one, was the son of a very respectable farmer, well grown, and in good general health. When I saw him, he exhibited in his general appearance nothing noticeable except a coarse and sullen expression of countenance. I learnt, from his relations and a family friend, whose testimony bore strong internal evidence of truth, that he had been a singular child, with obstinate fancies, such, for instance, as refusing to be dressed in the morning without some absurd condition being granted. By five years old he was a confirmed liar, as well as a believer in his own marvellous assertions. By fourteen he had run away from school, and was domesticated at home, under careful, but ineffectual surveillance. He would, I was told, at that time obtain, if he could, any article that struck his fancy, upon credit, then promptly throw it away, or give it without judgment. As an instance of intellectual vagueness, the following detail was quaintly given me:—"He paid a visit to his grandfather, and, during it, behaved remarkably well. But, then starting home on his pony, he went several miles in an opposite direction, and visited his old schoolmaster, to whom he told a false, but plausible tale, without any apparent purpose; thence to another town equally without an object; there he did nothing but sit in an inn; then turning towards home, he was found in a lane crying, and brought back to his father's house; where he appears to have always been treated with great kindness, and no want of discretion. Of all the above freaks he gave no explanation. His conduct darkened as he became older; after turning into money other people's property as well as his own, he proceeded to forge cheques of his father, absconding with the cash. These matters having been arranged, he was sent on a voyage to Calcutta, and after having behaved well at first, dropped into a series of scrapes similar to the former. Subsequently he enlisted as a common soldier, then became a cabman, always rejoicing in the lowest company, but without indulging to excess in drink; habitually defrauding, when he could, his near relatives, and in his other conduct towards them equally remote from affectionateness when kindly treated, and from malignity when thwarted. No advice had, at any time, the slightest effect on him. The leading moral elements of this young man were a love of acquisition, and a love of change. His intellect was limited, and though his powers of acquiring knowledge were not obviously below par, it could by no means modify, direct, or restrain the above tendencies, in which task, it must be observed, his intellect was neither aided nor antagonised by any passion or affection. It was as obvious that this young man's case required some one of the forms of coercion or surveillance, which it is our duty, in such cases, to authorise on proof, as that it did no fall under the head of insanity; though, with respect to the practical effects of the distinction, it is probable that this young man's obtuse quality of mind would have rendered him less capable than many others of appreciating them, as to the different degrees of coercion which they might involve.

One more variety of unsoundness of mind. Mrs. H., aged fifty, has for many years been subject to the conditions which I will describe. Having a husband and daughter, both of them amiable, kind, and intelligent, she quarrels with both of them irritatingly, and with entire opposition to every scheme of life proposed for herself and them. But more than this. After she has been for some time resident in the same house with them,—and apparently on that very account a cloud comes over her,—she takes to her bed; her appetite and digestive powers sink; and she becomes almost continuously silent, and indifferent to everything. While this state lasts, every duty of life is neglected by her; she is utterly incapable of managing person or property, and yet never incoherent or inconsecutive in any remark that may be elicited from her, nor under the apparent influence of any morbid delusion. Out of this state she will emerge gradually, and in the course of weeks, into a more lively one. During this second stage, she will converse with much readiness, often very cleverly, sometimes with much ill-temper, and occasionally with the introduction of abusive terms and even indecent expressions, her normal character being pure and correct, her intellect vigorous but paradoxical. Out of this stage she gradually improves into her healthy state, provided her recovery is not anticipated by a reunion with her husband and daughter. In managing one of these attacks, I treated her as unsound, not insane; and, agreeably to the distinction laid down by Mr. Commissioner Barlow in Mrs. Cummins's case, I so ordered any restraint that was required, "as to exhibit as little as possible the character of precautions against an insane person." I was the more disposed to this view, by coming to the conclusion, that a former attack had been very much prolonged, with the best intention, by this distinction being neglected, and undue coercion applied. On this point, I may, indeed, refer to the first case given by me under the head of unsoundness. The gentleman whom

I described lives under very necessary control, through adequate certificates; still he lives apparently his own master, in a good house, entertaining there his friends, a considerable allowance being made out of his large income, and managed by a very respectful and confidential upper servant. In fact, he is not reminded that the law holds him to be a person of abnormal mind by such restraints, as his total freedom from insane delusion, and his power of consecutive though limited thought, render unnecessary.

Such is the hypothesis of mental unsoundness in its application to *civil* cases. In applying it *criminally*, that is to say, in making it express an exculpatory plea, where there is neither inconsecutiveness, nor insane delusion, nor again idiotic diminution of power, I must assume, though not without some misgivings, that the law means to take the same precautions against its abuse, viz., the confounding disease of mind with vice, as it takes in reference to insanity; that is, that Lord Lyndhurst's test holds good here, also, and to the same extent; so that unsoundness shall confer impunity, only so far as it implies ignorance of the illegal nature of the act in question. The following case will suggest some grounds for my doubt:—On the 2nd of September, 1843, Thomas Rowe, a wine-cooper, aged 76, was discharged from the service of Mr. Thomas Waller, a wine-merchant, on the ground, that his faculties had given way, and that he did not know what he was about. On the 2nd of October, Mr. Waller received from him a letter, requesting Mr. Waller to give the applicant some other employment, or to help him to one. On the 6th, Rowe calls upon Mr. Waller. Being admitted, he ineffectually sought for employment, and again urged Mr. Waller to take him into his service, either in town or in the country. Mr. Waller declines this, and asserts, that Rowe must have actually saved enough to live upon. On another request for employment, reiterated by Rowe and negatived by Waller, Rowe draws a pistol from his pocket, fires it at him and wounds him, at a distance of two or three feet. He then draws another pistol, and observes to another person, who prevents him from using it, that "such a fellow as Mr. Waller is not fit to live,"—an idea which he afterwards expressed again with equal force. Evidence was given on Rowe's trial, that latterly his faculties had much given way; that he frequently, in the last six months, "had seemed not to know what he was about, and had a giddiness in his head." The usual averments, that the defendant did not know right from wrong, were made by the medical witnesses; it was urged, that the announcement which the prisoner had recently received from his master, that he could not employ him further, had upset his mind; that when he fired he was incapable of reasoning, from the great excitement under which he laboured, &c. Mr. Ballantine, for the Crown, contended, that "it must not go forth to the world, that trivial acts of eccentricity and absurdity were to be held up as a subterfuge for crime; neither must it be understood, that persons upon such grounds were to receive immunity from punishment." Mr. Justice Maule having summed up, the Jury immediately acquitted the prisoner as a lunatic. This elderly person, therefore, gained his object, and was comfortably provided for for the rest of his life.

Now, I would ask, is it likely that this man would have thus escaped, assuming the facts to have been as described, if he had been examined in the presence of the jury? The question is an important one; it has a direct reference to all criminal cases, in which a plea of lunacy in any one of its kinds is adduced. It thus opens up a topic on which I would fain offer some remarks. There is a principle to which Great Britain adheres as tenaciously as if it were one of the unwritten laws of natural justice, the principle, namely, that the prisoner should not be made a subject of examination on his trial. That the protection involved in this principle is favourable to guilt rather than to innocency must, I fear, be admitted. "Whatever evidence," says Jeremy Bentham, "a supposed delinquent may furnish against himself is carefully prevented from coming into existence; though," the same author observes, "whatever the supposed delinquent is supposed to have said *out of the presence of the Judge* is heard, on his trial, with perfect readiness." On this point, Bentham pungently adds, that, "In England, for the protection of the delinquent against legal accusation, *the faculty of mendacity with its attendant non-responsion* is carefully reserved as a branch of the lawful faculty of self-defence. In pursuing this system," he observes, "the Judge obtains the praise of humanity and patriotism at no other expense than that of the interests of truth, justice, and public security. A deluded public pays a man with its praise for betraying its own interests." But if the principle of non-responsion is thus generally noxious, when allowed to the supposed criminal under ordinary circumstances, it becomes peculiarly subversive of the legitimate purpose of justice, when it is applied to the case of one in whose behalf the plea of insanity or mental unsoundness is set up. It is an understatement of the truth to say, that, whatever grounds exist for an examination of a supposed lunatic in the presence of the judge in civil cases, exists equally with regard to the same person viewed as a delinquent; for, in the latter case, the attainment of truth is far more requisite for the protection of the public, as well as the individual, than in the former; while, again, in criminal cases of supposed lunacy, passion and feeling are peculiarly liable to shade the truth, unless the strongest light of evidence be thrown on it. Captain Johnson, the deliberate murderer of his ship's crew, would have been very unlikely to have escaped punishment had it been permitted by the judge and jury to see and hear him examined in court. But if my proposal, made in a former lecture, of a scale of secondary punishment in some criminal insane cases be accepted, it must increase the expediency of a personal examination of the prisoner before the judge and jury, in order that these parties, assisted by the testimony of medical witnesses, should be enabled fully to estimate the shades of psychological distinction which must then be kept in view.

Whatever estimate may be formed of the practical working of the above suggestions, their intention at least is of a practical kind; namely, to facilitate an understanding between law and medicine in the most proteiform, the most intractable subject of investigation which is brought before either; and, in doing this, to give full weight and value to the deductive reasoning of lawyers, while we support the claim of the Medical Profession to aid them in the work of decision or inquiry. I have accepted the terms which are laid down by Acts of Parliament, as expressing the conditions on which abnormal states of mind are imputable. And with respect to their meaning, while I have declined to consider them virtually synonymous, or as having the same force, I have endeavoured to adopt that which the law may be presumed to intend, and which expresses real and not verbal differences. I would have taken a much larger basis of division, had I proposed to discuss the entire pathology of mind, and not this subject in its sole reference to law. Thus, when I was considering the appropriateness of the expressions, "instinctive" or "moral insanity," as used by Dr. Prichard, I would gladly have discussed another question, Whether a state of the human mind is not conceivable, which shall be distinguished entirely from insanity, as implying no delirium; from unsoundness, as implying no incapacity for the conduct of person and property; and which shall bear the same relation to the moral sense as idiocy bears to the intellectual sense, involving an entire absence or imperfect development of the former, as idiocy does of the latter? A complete practical division or system of abnormal mind, would comprehend such a head, and the distinction would involve none of the mischief which I have imputed to the doctrines of moral insanity. That mischief is contained in one short expression—impunity afforded to crime. No such impunity is implied in the hypothesis, which avowedly represents the abnormal state, as a mode of wickedness consisting in the non-development or absence of the moral sense. For, from a being thus constituted to remove the fear of punishment would be to denude him of the sole preventive of crime afforded him by Providence. Moral rectitude, to *his* mind, can have no basis in sentiment; it will be significant of something ruled and ordered, (conformably to that etymological theory of right on which Horne Tooke most unjustly based *all* the ethical motives,) and, thus operating solely on utilitarian principles, must require penal enforcement of some kind or other. Now, it is also to be observed, that, in allowing to this man impunity, and thus depriving him of the means of self-restraint involved in the apprehension of punishment, you must increase his liability to other preventive restraints in a degree and extent far more incompatible with his comfort and his presumed rights as a citizen of his state than is implied in any conceivable risk of punishment. You must treat him as a person of unsound understanding, in order to prevent his abusing a privilege which you ought never to have conceded to him.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. XIII.

CASE OF ANEURISM OF THE FEMORAL ARTERY CURED BY THE APPLICATION OF A LIGATURE, AFTER FAILURE BY COMPRESSION.

By JOHN MITCHELL, M.D.
Surgeon, 7th Royal Fusiliers.

Private Thomas Barnes, of the 7th Royal Fusiliers, was admitted into the Military Hospital at Plymouth on the 30th March, 1853. He was 32 years of age, six feet high, and a man of powerful and muscular figure. He had been a soldier for fourteen years, and of rather dissipated habits.

There was a large, diffuse, hard swelling on inner side of left popliteal space, extending half-way up the thigh, and round to the inner and fore parts of the thigh, but not ascending so high in this direction.

This swelling at every part had a pulsatory movement synchronous with the pulse, which movement was arrested by compression of the femoral artery, when a slight subsidence of the swelling was observed; but it immediately regained its former size on the compression being removed. On the ear being applied to the stethoscope placed over it, a whizzing sound was heard. There was great pain in the site of the tumour, but it remitted, and became worse at night.

Below the knee there was slight swelling of the leg, and the pulsation of the posterior tibial at the heel was rather weak. The sounds of the heart's action were natural, and the rest of the arterial system appeared to be free from disease.

He stated, that he had been troubled with pains in the left poples for the last twelve months; but that it was not till after a field-day, on the 28th of March, 1853, that he observed any tumour. The pain at this time underwent an aggravation.

The pulsation, when the aneurism was first discovered, was more distinct than it became within a few days. The swelling was smaller and better defined, and the expansion on pulsation was much more general and forcible.

I conceive that a true aneurism existed for a considerable time up to the field-day, and that a rupture of its coats or sac then took place, thus converting it into a false aneurism.

Having called a consultation consisting of Dr. Rae, Inspector of Naval Hospitals; Dr. Allen, Surgeon of the Royal Naval Hospital at Plymouth; and the military medical officers of the garrison, it was agreed to give compression a trial.

We were not sanguine of success by the adoption of this method of treatment for the following reasons:—

1st. The aneurism was of great size, and of the diffuse kind.

2nd. The integuments in the groin, and for some distance below, would ill withstand the effects of compression, as they had previously been extensively ulcerated from open bubo.

3rd. Compression made lower down would not be very serviceable in compressing the artery, from the immense bulk of muscle and cellular substance which would impede the effective application of the compressing instrument.

The compression by means of two clamps was accordingly kept up for six days; one clamp was applied over the brim of the pelvis, and the other in the upper part of the thigh, and with sufficient tightness to arrest for hours together the pulsation in the swelling.

On the 22nd of April, I took up the superficial femoral artery at the usual place. The operation presented nothing unusual, excepting that the vein was very large.

The same consultation which recommended the trial of compression pronounced in favour of tying the artery, for the following reasons:—

1st. The aneurismal tumour had increased since the compression was begun, and the pulsation in it was still distinct.

2nd. The leg and thigh were much swollen.

3rd. The compressing apparatus had induced vesication and redness on the extensive cicatrix in the groin.

4th. The apparatus had been applied lower down, but it brought on insupportable pain.

After the operation, the pulsation never returned in the tumour, and the general swelling of the leg and thigh rapidly diminished; but the large aneurismal tumour was long in being absorbed, and the ligature did not come away till the 17th September.

The Regiment having moved from Plymouth to the Camp at Chobham on the 15th July, the patient was necessarily left behind, and when he rejoined his Regiment at Manchester on the 23rd October, hardly a vestige of the tumour could be detected. The limb is still rather weak, and swells a little towards night, but it improves apace; and I have no doubt that in a short time this soldier will be restored to the service.

Manchester, Nov. 15, 1853.

CASE OF NATURAL CURE OF POLYPUS UTERI BY SLOUGHING.

By FRANCIS H. RAMSBOTHAM, M.D., F.R.C.P.,
Consulting Physician in Obstetric Cases to the London Hospital, &c., &c.

In the Number of the *Medical Times and Gazette* for the 12th of last November, there is a case of polypus uteri detailed by Mr. Canney, in which the tumour came external to the vulva in a sloughy state, and was removed by the knife, the patient in a week being enabled to resume her ordinary occupations. The same periodical for January 22nd and February 5th, 1843, contains also two cases of the sloughing of a polypus while yet attached to the uterine structure, before any artificial ligature was had recourse to, published by myself. I shall now relate another; because, although such an occurrence is rare, and the knowledge of its possibility should by no means induce us to wait for the growth's spontaneous decay, nevertheless a series of these cases proves, that nature occasionally succeeds in getting rid of the disease by an effort on her own part, without the intervention of any surgical assistance whatever.

On the 25th of last October, I was requested by Mr. Stephenson, of Dalston, to see Mrs. S., a tall, spare woman, aged 33, the mother of three children, the last four years and a-half old. She had twice miscarried before the last birth, but not since. The catamenia appeared at twelve years old, and the function had been performed very naturally until rather more than two years ago, when the discharge at each recurrence was very profuse, and lasted much longer than it should. The hæmorrhagic disposition gradually increased, so that latterly she has seldom been more than a week, and sometimes only three days together, free from uterine bleedings more or less copious; these have frequently required her to use twenty napkins in the day. For the last eighteen months small shreds of a membranous substance have occasionally passed with the coagula; she has also suffered much from leucorrhœa ever since about a year before the first appearance of the menses.

From the time the menorrhagia began to annoy her she has been subject at intervals to what she then considered a descent of the womb. She was in the habit of returning the protruded substance, and allowing herself two or three days'

rest, when the inconvenience was for a time suspended. On any exertion, however, it recurred, and on each such occasion she treated herself in the same manner. She now believes this substance was the tumour; and of this, indeed, I think there can be little doubt. She states, also, that, on the fourth day after her last labour, the womb came down, remained external a whole day, and was returned by the medical gentleman then in attendance. Whether this substance was really the uterus, or the polypus enlarged by the growth of pregnancy, I have had no opportunity of learning, but I suspect the latter was the case.

Mr. Stephenson was first called to her about a year ago, when she was suffering from common continued fever, being much debilitated, and greatly blanched. In a week she was free from fever, and continued to follow her ordinary mode of life, until the end of last September, when an attack of diarrhœa induced her to seek his advice again. The hæmorrhage was now almost incessant; she complained of a distressing sense of weight at the vertex, much pain in the lumbar region and groins, particularly the left, and a sensation, when she sat down, as though the whole of the lower part of her bowels was being pressed upwards. She suffered also from violent bearing down pains when she stood, and was far more easy in the recumbent position. In the early part of October she became again the subject of continued fever, attended by hæmorrhage, headache, and severe vomiting. During one of her attacks of sickness a fleshy mass was protruded from the genitals, but without pain; this she took to be the uterus, and passed it up again. Mr. Stephenson was summoned to her in haste, and the following I give in his own words:—"On examination I found a soft, smooth, loose, membranous body, occupying very nearly the whole length of the vagina, of a pyriform shape, free at the lower end, and attached to the uterine structure above, at about half-an-inch beyond the mouth. I could pass my finger completely round it, within the hard projecting uterine neck, and trace its narrow root. By gentle traction I found it give a little, and was able to bring it down till its free end reached about two inches external to the vulva. That part of the abnormal growth external to the body presented the appearance of a pale, glossy, membranous bag, not unlike *prolapsus vesicæ;* and, when rolled between the thumb and index finger, felt very like thick layers of mucous membrane. The woman expressed no sense of pain when it was pinched. There was no hæmorrhage at this time. Having concluded that it was a case of polypus, and that nature was making an effort to cast it off, I resolved upon leaving it in her hands for a short time, and waiting the result, unless symptoms arose calling for active measures.

"In twenty-four hours, the mass external to the body had assumed a shrivelled appearance, was dusky in colour, and had begun to emit a gangrenous odour. On traction, it was brought down about an inch further. On the next day it had become perfectly black, and the odour it exhaled was almost intolerable. As the patient evinced symptoms of great exhaustion, I recommended a consultation with Dr. Ramsbotham."

I saw her at 3 p.m. on the 25th. The tumour had then been down nearly three days; the part external was as large as a man's fist; it was highly putrid, and very readily torn; the attachment by the stem within the cervix uteri still remained perfect. The woman was of waxy paleness; her countenance bore a distressed, cadaverous expression; the pulse was quick, jerking, and easily compressible; tongue and lips moist and pale; and altogether she displayed unequivocal marks of having been for a long time the subject of copious losses of blood. I passed two fingers of my left hand well within the os uteri, carried their points up to the attachment of the tumour, and with very little trouble separated the diseased mass from the healthy structures, by tearing it away. When brought away it was about seven inches in length and five in breadth, having the ordinary appearance of the fleshy polypus, partially destroyed by putrefaction. The removal occasioned neither pain nor loss of blood. "About four hours after the operation," says Mr. Stephenson, "the patient expressed herself as being greatly relieved, and seemed to mend and rally from the moment of its removal."

The bowels had not acted for six days, in consequence of the medicine having been invariably rejected by vomiting. On the separation of the tumour, however, the sickness ceased, and the sulphate of magnesia, dissolved in infusion of roses, was speedily efficacious. The tinctura ferri sesquichloridi was afterwards administered, and she was ordered a generous diet and a pint of porter daily. For the first fortnight there was a pale straw-coloured discharge, along with which some shreddy membranous portions came away, evidently the remains of the neck of the tumour.

Four days after the removal the menses returned, at the regular period, but in so small a quantity as "scarcely to stain the linen." On November 23 they again appeared, and continued flowing only three days, though copiously while they lasted. In the interval there was a small quantity of pale yellow discharge. Mr. Stephenson made an examination on November 16. The os uteri was then sufficiently open to admit the passage of the first joint of the finger, but "nothing like the remains of a polypus could be detected." She came down stairs on that day, is rapidly gaining strength and colour, and says herself she has not felt so well for more than two years.

7, Portman-square, Dec. 17, 1853.

AN ACCOUNT OF FIVE CASES OF AMPUTATION AT THE ANKLE-JOINT, AFTER THE METHOD OF MR. SYME. WITH OBSERVATIONS.

By SAMUEL HADWEN, M.R.C.S., L.S.A.

Whether this operation has been attended generally with as happy results in the hands of others as in those of Mr. Syme, I do not know. I have heard of several instances of want of success; and believing that these are to be attributed more to some error at the time of, or subsequent to, the operation, than to the amputation itself, I have thought it might be useful to make known the histories of the following cases which have been under my care in the Lincoln Hospital.

I shall first make a few observations upon the condition of the soft parts; the manner of operating; the after-treatment; and the results.

1. The state of the skin and subcutaneous structures, in reference to the propriety of adopting this operation, deserves, in the first place, to be remarked upon. As a rule, in amputations nearer the trunk, I hold it to be a matter of great importance to select a perfectly sound portion of integument, as well as of the deeper parts, for the site of incision. In amputation at the ankle-joint, I am of opinion both may be disregarded with impunity, provided the disease be not malignant. Of course the more healthy the condition of the integument the better; but when very diseased, if the patient's state will allow of the delay, much improvement may be obtained in many cases, which at first sight might appear completely to forbid this operation. Rest in bed, a favourable position of the limb, and attention to the visceral functions, especially those of the digestive and assimilative organs, will best promote these desirable results. The state of the soft parts was bad enough in the case of Hallam, but a worse condition can hardly be conceived than that which existed in Porter. The foot and all the parts about the ankle were enormously enlarged, the skin discoloured, and numerous abscesses and sinuses existed, so that I at first feared I must of necessity cut off the leg. I waited a month, kept the leg and foot elevated, let out matter twice, and obtained great improvement both in the health of the body and the state of the foot; yet, after all, the incisions of the amputation were made through several sinuses and scrofulous deposits, and after removing the latter I laid open a sinus extending from the edge of the cut two inches up the inner side of the leg. The removal of the diseased bones and articular surfaces, is the one great point to be attended to here; the diseased action in the other parts is soon changed into that of health when these are gone.

2. The thumb and index finger of one hand resting respectively upon each malleolus, the first incision was made by introducing a stout scalpel through the soft parts, down to the bone of the point indicated by the thumb, and carrying it directly across in the course of the flexure of the joint to the other, or that occupied by the finger; the direction of the knife was then altered, and made to pass from the centre of the last point, the malleolus, through the sole, with a little inclination backwards, up to the centre of the opposite malleolus; terminating, in fact, at the point of commencement. In this manner, the external incision was effected by one nearly continuous sweep of the knife. The most admirable feature in this operation is the conversion of the sole of the heel into a flap to become the future covering of the bony stump. Thus a part, naturally endowed with properties purposely designed to bear the superimposed weight of the body and to resist compression, is again made to fulfil, after the removal of disease, its appropriate purpose in the economy. It is, consequently, of some importance in dissecting back the flap to keep the nail of the thumb and the knife directly in the rear, close up against the bone of the heel, so as to preserve not only the skin, but the whole of the fibrous and fatty granular structure of the sole, thereby securing the whole of this beautiful and elastic cushion of support. Not only will this point be secured, but that which at the best is a tedious bit of dissection, will be much facilitated; and, what is more, incisions through the skin, or "button-holes," as they have been called, avoided. There is no difficulty in this dissection which ordinary care and a steady hand does not readily surmount. The difficulty has been exaggerated. When the surgeon is about to perform this operation for the first time upon the living subject, he will do well, if he have the opportunity, to practise it previously upon the dead. An excuse has been made for the "button-holes." They are pardonable only because of very little consequence; and, as neatness in operation is a point always to be admired, it behoves the surgeon to avoid these perforations. "What is worth doing at all, is worth doing well;" and though at the time the patient may be insensible, when chloroform or ether be used, to the pain of these punctures, I am not so sure that the process of healing, even of these small incisions, is accomplished without uneasiness. That these openings through the skin may be useful for the escape of matter, (an alleged but questionable result,) is no reason or excuse for a slip or unintended stroke of the knife. If the surgeon would make it a rule, throughout this operation, to keep his knife close to the bone, he need be under no fear of button-holes. Another, and that a very disastrous, circumstance he will also, by this rule, escape. In dividing the parts behind the internal malleolus, it is of the first importance that he keep his knife free from the posterior tibial artery; and this will best be done by cutting quite behind the flexor tendons, close to, or even shaving the periosteum. From want of attention to this point, I have seen this vessel completely divided, the operation frustrated, and obliged to be superseded by amputation above the joint, thereby depriving the patient of the benefit of the plantar cushion for a flap; and, disadvantageously, still more curtailing the limb. When the flap has been reflected back, and the great tendon of the heel and the lateral ligaments divided, the disarticulation may be accomplished with ease. From want of attention to this latter circumstance,—the division of the ligaments,—I have seen the disarticulation rendered very embarrassing. The thinner the slice of bone removed by the saw the better. In two or three instances it barely cleared the depth of the pit in the tibia. Chloroform was successfully used in all the cases except the third, in which the patient requested, in consequence of the very disagreeable after effects experienced on two former occasions of its use, that it might be dispensed with. He afterwards assured me the pain of the amputation had been more endurable than the distress, depression, and illness previously experienced from the chloroform.

In one instance I deviated from the course above described, by disarticulating the astragalus before dissecting the flap from the heel, desiring to see whether I could thereby facilitate this object. It forms the only occasion when a button-hole was made by me in these operations, and rather impeded the performance than otherwise. The hole was of no use. It soon healed; and some matter which afterwards formed required a fresh opening to be made.

3. As in operative surgery, conservatism, as far as admissible, should be the surgeon's rule, so, in medicative, should simplicity be his guide. In the following cases, after the arteries had been tied, the wound washed, and any diseased structures connected with the parts removed, the flap was adjusted, and retained in position by as many sutures (inserted about an inch apart) as were required. The two first were then dressed in the ordinary way with adhesive straps and bandage; the remainder in the following manner:—Strips of linen, about a foot long and an inch wide, soaked in warm water, were applied to the stump, between the sutures, and extended on each side of the leg three or four inches upwards; a broader and somewhat longer piece was then made to surround the lower part of the leg, so as to secure the ends of the pieces overlapping the flap. A single loose piece of lint or linen cloth, always kept moist with warm water, covered that part of the extremity not in contact with the bed; and a concave sponge, also soaked in warm water, and the latter squeezed out, received the end of the stump. This was made to keep up a gentle pressure by means of a pillow placed behind, and also to preserve the temperature, which was still further insured, and evaporation prevented by a piece of oil-silk laid over all. The patient having obtained an easy position, reclining upon the side of the amputated limb, was enjoined to keep the extremity as much as possible immoveable.

I have been thus particular in describing this mode of dressing, because it is far superior, in my opinion, to the old practice of adhesive straps and bandages; keeping up a better regulated pressure; revealing at a glance the state of the stump; allowing discharge an easy escape; lessening mischievous stretching and laceration of tender adhesions when removed and replaced; diminishing pain to the patient and trouble to the dresser by the facility of removal; and requiring, from its greater cleanliness, less frequent renewal. I have now for several years past practised this kind of dressing, with or without the sponge, in all my cases of amputation. The unsuccessful result in the second case caused me to abandon the old plan, and the above-named advantages have confirmed me in the use of this more simple method. A few weeks ago, a double flap amputation of the thigh was healed after only six renewals of this kind of dressing. The sutures, or, at least, the greater part of them, were removed on the fifth or sixth day; and, in all the cases save the second, rapid union by the first intention (as it is called) of the greater part of the flap ensued.

4. In four of the five cases admirable stumps were obtained. The first individual, Checkley, recovered with a perfect stump, but was attacked, some months after leaving the hospital, with spitting of blood, and eventually died consumptive. The stump continued sound to the last. In the second case, the whole of the flap sloughed away. Whether this was owing to any injury of the posterior tibial artery, unobserved during the operation, (not very likely), or whether owing to the diseased state of the integuments, or the low state of the vital powers, (the man was greatly reduced, and the skin in a very diseased condition,) or to over pressure from the applications, or to a combination of any of these, I am unable to say. More pressure, by means of the strapping and bandages, was applied than I have ever since deemed it necessary to use; and though I cannot assert that this was the cause, the suspicion that it may have been is strengthened by what I have heard of other cases in which a portion or the whole of the flap mortified. Reasoning *à priori*, firm pressure would appear to be indispensable for the purpose of keeping the loose, hollow flap in contact with the large cancellous surface of the ends of the bones. It is, I am satisfied, a fallacy to suppose a greater degree of pressure is required either in this or other kinds of amputation than that which may be obtained by the simple method advocated above. Hobson, the subject of the third case, has for nearly four years been able to walk with an artificial substitute, almost as well as he did before the disease of the foot existed. He pursues his employment regularly, and stands for many hours in succession, and gets through his work as well as though he had not lost his foot. Notwithstanding that he has twice had the misfortune to break the thigh-bone on the same side as that on which the amputation was performed, once before and once since that event, and has thereby still further shortened the limb, he walks without a stick, and with a hardly perceptible limp. Hallam and Porter, (Cases 4 and 5,) have equally excellent stumps. With an artificial aid, similar to that used by Hobson, they both walk well.

[To be continued.]

NEW INVENTIONS.

LIFTING APPARATUS FOR BEDS.

[To the Editor of the Medical Times and Gazette.]

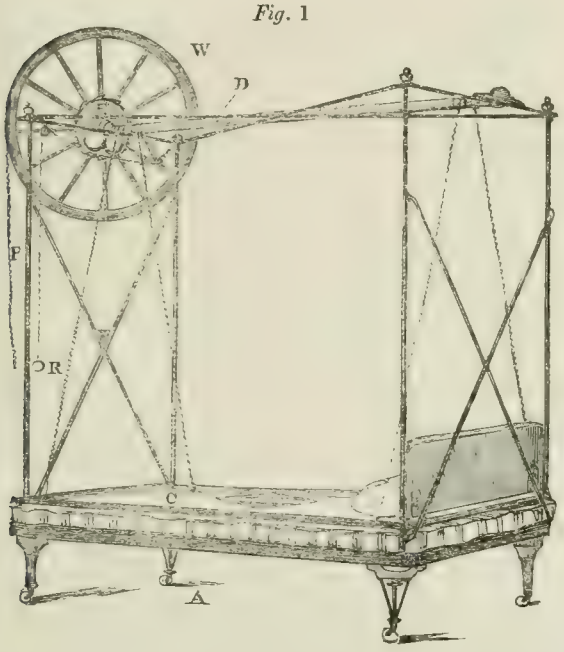
Sir,—I am anxious to bring to the notice of the Profession an admirable apparatus for raising patients from the bed without change of posture, particularly applicable to paralytic cases, and those of injury or disease of the spine or pelvis.

Henry Lawson, Esq., of this city, invented it, and kindly presented it to this hospital, where we have tried it, and found it answer in every respect, a single nurse being sufficient to raise and attend upon the heaviest patient.

I am, &c. R. S. Fowler,
House-Surgeon.

United Hospital, Bath, November 30, 1853.

Fig. 1



A is a four-post bedstead, of any kind; in the Bath Hospital it is of iron, and with French castors, for the facility and ease of being moved.

B is a mattrass of any kind; either of wool, or flock, or feathers.

C is an oblong strong frame, on which is strained a strong cloth, well supported by interlaced webbing beneath, and having an aperture of requisite size in the middle.

D is an axis, with a grooved wheel fixed at one end, and resting on rollers placed close or near to the wheel, the other end of the axis resting upon the bar, as shown in the drawing. From this axis four cords descend, which are fastened by hooks to the four corners of the frame C.

E is a ratched or notched wheel, with the teeth peculiarly formed, so as to prevent accidents; and appertaining to which wheel is a ratchet or click, which communicates by a cord with the ring R.

F is a cord which goes twice round the wheel W, and hangs near to the ring R, ready for use.

The purport of this arrangement is to enable an individual nurse to attend to the wants of a paralysed patient without loss of time or need of assistance. On the wants of the patient being made known, the nurse draws the cord F; and the lines or cord fixed to the corners of C, by winding round the axis D, raises the patient to the required height, and he is retained there by the click or ratchet near E. When it is required to replace the patient on the mattrass, the nurse pulls the cord F with one hand, and with the other pulls the ring R, which releases the click, (in consequence of F being first pulled,) and the patient can now (by the nurse permitting the cord F to slide slowly through her hand) be lowered with the necessary gentleness, and placed again on the mattrass, without noise or derangement of his recumbent position.

The bed at Bath is furnished with a duplicate of the frame C, which may easily be substituted for the one in use, when, for the purposes of cleanliness, such change is advisable.

The benefits that are sought to be attained by the above contrivance are, the great facility with which the heaviest and most helpless patient can be moved and adjusted for the operations of nature; that it can be manufactured by any good carpenter, having no noisy metallic wheel-work or winches, or complex machinery, in its construction; that it may be transferred, without fear of derangement, to any house where it may be required, and placed on any four-post bedstead that presents itself with the greatest ease and facility.

Fig. 2.

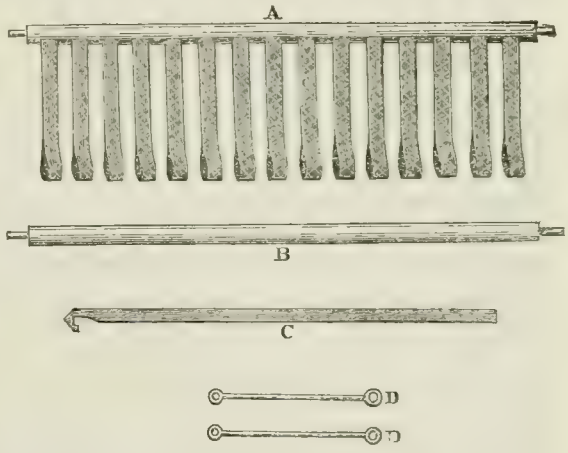


Fig. 2 represents an instrument or machine whereby the most severely wounded person can be transferred from one bed to another, or one place to another, with the least risk of deranging dressings, or inflicting pain. A is a pole, about seven feet long, to which is affixed, at equal distances, and equal spaces between, a number of loops of webbing or girthing, about two feet six inches long, and two inches wide. B is the antagonist pole. C is the needle for drawing the loops. D D are iron stays, about two feet four inches long.

When the patient is to be removed or transferred, the pole A must be placed on the bed, alongside the patient, taking care to have all the loops on that side; then pass the needle C under the legs of the patient, either above or below the sheet on which he lies; and, hooking it into the loop of the first web, draw it towards you. Do so in succession up to the head, and the patient will then be lying on the webbing. Now slip the pole B through the loops of the webbing, and place the iron rods D D on the ends of the poles, and the machine is ready for use. Two men—one at the head, and the other at the foot—can now raise and transfer the patient with ease and safety to wherever required.

The transferrer will, in many cases, by not using the iron rods, be found more safe and convenient than a chair for the removal of weakly and somnolent patients up and down stairs.

Dimensions of Apparatus.—Diameter of wheel, three feet five inches; diameter of axis, two inches; length of axle, six feet four inches; bedstead, six feet five inches by three feet three inches; height from floor to axis, seven feet; height from floor to upper surface of mattrass, two feet.

The Lawson bed and transferrer is made by Mr. Roper, carpenter and builder, Guinea-lane, Bath.

THE LONDON

PRACTICE OF MEDICINE AND SURGERY.

STATISTICAL REPORT

OF THE PRINCIPAL OPERATIONS PERFORMED DURING THE MONTH OF NOVEMBER.

In the subjoined Report, the following hospitals are included:—University College, King's College, St. George's, St. Bartholomew's, Guy's, St. Thomas's, the Middlesex, the London, the Westminster, Charing-cross, St. Mary's, and the Metropolitan Free.

Lithotomy.—Four cases were left under treatment by our last report. Of these, two have recovered, one remains under care, and a fourth has died. In the latter, death was due to a low form of inflammation of the lungs which supervened some weeks afterwards. The wound was nearly healed, and the parts in the pelvis were in a healthy condition.

During the month five operations have been performed. Of these, one, a child, aged 4, is recovered; a second, a child, aged 3; two others, adult men of the respective ages of 59 and 60, are doing well. One patient, an infant of sixteen months old, has died. Unusual difficulties had attended the operation, which was prolonged; death took place forty hours afterwards, and was caused by inflammation of the cellular tissue within the pelvis.

Lithotrity.—The patient, whom we mentioned last month as under Mr. Cutler's care in St. George's Hospital, has been discharged well. The operation was repeated several times during the last month.

Herniotomy.—Number of operations, 15; recovered, 10; still doubtful, 2; died, 3. *Sac opened* in 8, of which 6 are out of danger, and 2 dead. In those recovered, the periods of strangulation had been respectively 4, 8, 12, 24, 40, and 72 hours. In one of the fatal cases the patient was a man aged 62; strangulation had existed for eight hours only, but the tumour was of enormous size, quite as large as a child's head, and had been much abused by efforts at taxis. The strangulation was very tight, and the intestine intensely congested. The man was extremely depressed at the time of the operation, and he afterwards gradually sank, and died within seven hours. Death was apparently caused by exhaustion, consequent on the shock to the system. No further lesion was discovered at the *post mortem*, and the congestion of the bowel had somewhat decreased. In the other, strangulation of a large inguinal hernia in an old man had existed upwards of 120 hours. The patient was almost moribund when subjected to the operation. The bowel was found to have ulcerated, and fæces at once escaped when the sac was opened. Death took place thirty-six hours afterwards. *Sac unopened* in 7, of which 4 are recovered, 2 are yet in danger, and 1 is dead. In the recovered cases, strangulation had existed for the respective periods of 12, 18, 48, and 120 hours. In those yet under treatment, it had existed for 30, and 6 hours. It must be stated, respecting the case which did well after 120 hours' strangulation, that the symptoms had not been severe. There had, however, been constipation and a tendency to sickness present throughout. The patient in the fatal case was a woman aged 60; a femoral hernia had been strangulated sixty hours. She did well in respect to the intestinal lesion, but died of chronic bronchitis on the fifteenth day after the operation.

Trephining of the Skull.—This operation has been performed in one case for the relief of compound fracture with depression and laceration of the dura mater. The patient died in less than one hour afterwards.

Ligature of Arteries.—In the London Hospital the following have been performed:—Ligature of both ends of the brachial, on account of wounds from which most profuse hæmorrhage had occurred. The patient, a little girl, is doing well. Ligature of both ends of brachial in two cases, and of the temporal in one, on account of wounds. All the patients are convalescent. In St. Mary's Hospital a man was admitted after an accident with glass, in which all the parts in front of the forearm had been divided. He was all but dead from bleeding. Mr. Lawrence, the house surgeon, immediately placed ligatures on both ends of the radial and ulnar vessels, as also on one of the muscular branches. The patient rallied and seemed in a hopeful condition for a day or two, but subsequently died from sloughing of the arm.

Mr. Hilton's case, in which compression is being tried for the cure of popliteal aneurism, remains under treatment.

Amputations.—The cases which remained under care last month may, with two exceptions, be considered well. The exceptions are both amputations of the thigh; one, primary, is in a doubtful condition; the other, secondary, has ended fatally. The latter case is that of the Irishman, under Mr. De Morgan's care, in the Middlesex Hospital, who refused to have the limb removed when first proposed. The amputation was done a month after the injury, and death from exhaustion occurred thirty-five days later. Much visceral disease was discovered at the autopsy.

There were performed, during November, 16 amputations, out of which two patients have died; in one there is at present suspicion of phlebitis; and the rest are doing well. Of the fatal cases, one is that to which we alluded last month, under the head of "*Excision of Joints, etc.,*" as having had a gouging operation performed on the head of tibia; since which the inflammation had invaded the knee-joint. Amputation of the thigh was performed five weeks after the previous operation, and the patient, a young woman, for the first week did well. On the ninth day a severe rigor occurred, and she rapidly sank, and died within twenty-four hours of the accession of serious symptoms (incipient pyœmia?) No *post-mortem* was permitted. The other fatal case is one of which the subject was an old man who had his thumb and little finger, with their metacarpal bones, removed on account of a crushed hand. He was cachectic, and had, in addition, lost much blood. Three days after the operation, erysipelas and hospital gangrene set in; they subsequently spread up the arm, and death took place on the eighth day. Gangrene was at the time prevalent in the hospital. The case in which phlebitis is feared is one of primary amputation of the arm. Of those which are doing well, three are primary amputations of the leg, and one of the greater part of the hand. One, secondary, of the thigh, in a boy aged 14; one, secondary, of the arm, two months after a compound fracture of the olecranon; one of the forearm for gangrene on the fifth day, after a compound and comminuted fracture of the radius into the wrist-joint, in a boy aged 9; one of the whole hand, excepting the thumb and index finger; one of the thigh for strumous disease of knee-joint, in a girl, aged 11; one of the arm for diseased elbow-joint; one of the forearm on account of destruction of the wrist-joint, and disease of the carpus following traumatic erysipelas, in a man, aged 30; one of the middle, ring, and little fingers, with the greater part of their metacarpal bones, for epithelial cancer of the hand; one of the great toe, for diseased joint following bunion.

Excision of Loose Cartilage from Joint.—In St. Mary's Hospital, Mr. Lane has removed a loose cartilage from the knee-joint. The patient has recovered without a bad symptom.

Excision of Bones, Joints, etc.—The cases reported last month are all progressing as favourably as could be expected, with the exception of the one in which Mr. Hilton had gouged out the carious head of the tibia, and which we have above placed under the head of "*Amputations.*"

During November, there have been performed—Excision of the head, neck, and great trochanter of the femur, by Mr. Erichsen, in University College Hospital. The patient, a boy, aged 14, was extremely reduced by hip-joint disease, and has since much improved. The bone was dislocated on to the dorsum ilii. Excision of the left upper maxilla, by Mr. Cock, in Guy's Hospital, on account of malignant disease. The patient, a man, aged 50, has done well. Excisions of parts of the tarsus and metatarsus, on account of carious ulceration, have been performed in five cases, in three of which the os calcis was involved. Excision of the distal two-thirds of the entire thickness of the metacarpal bone of the index finger, and the same operation on the ring finger, in a second case, on patients respectively under the care of Mr. Partridge, in King's College, and Mr. Hilton, in Guy's Hospital.

Trephining Operation for Abscess in Bone.—Mr. Simon's patient has left the hospital; the cavity filled up, and the sore almost healed.

Removal of Necrosed Bone.—Of the 21 cases left under care by last report, 10 have been discharged, and the others remain under treatment. Ten operations of this class have been performed during the month, but none of them require especial comment.

Excision of Malignant Growths.—All the cases previously reported have recovered as far as the operation is concerned; in several the disease is already returning. Six patients have been operated on during the month, of which four were for scirrhus of the breast, one for chimney sweep's cancer of scrotum, and one for epithelial of the hand. (See "*Amputations.*") All the patients are doing favourably. The case of chimney sweep's cancer is under the care of Mr. Fergusson, in King's College Hospital. The entire scrotum and the skin of the whole penis, with the exception of a strip on its dorsum had to be dissected away.

Excision of Non-Malignant Growths.—Mr. Cock's case of nasal polypus remains under care. The remainder of those previously reported are recovered. During November, 19 operations have been performed, the subjects of which, with one exception, in which death has occurred, are doing well. Several of them

have been for diseases of a recurrent, if not of a semi-malignant character. One of the latter was a tumour, microscopically a fibroid structure, from the back of a little girl, from whom, on two previous occasions, medullary growths had been removed. Another of fibroid and once recurrent, from over the patella of a young man. A third of similar character, from over the front of the tibia. One of sero-cystic tumour of the breast. The cases of a strictly innocent character are fatty tumours, 4,—2 of large, and 2 of small size; encysted, 6,—3 of which had attained very large dimensions; fibrous, 2—both from the front of patella; fibro-cartilaginous, 1, situated under the parotid; exostosis, 2,—1 of the femur, and one of the humerus; chronic mammary, 2,—in both of which the gland was left uninjured; hydatid tumour in the female breast, 1. The fatal case was the one of exostosis from the humerus. The tumour had a large flat base, and its excision involved a long operation. The subject, a healthy boy of 13, afterwards suffered much from sickness and constitutional disturbance, probably produced by the chloroform. He never subsequently got into a satisfactory condition, but gradually sank, and died on the twelfth day. No cause of death was discovered at the *post-mortem*.

Operations for Urethral Stricture.—In King's College Hospital Mr. Fergusson performed the perineal section of a stricture through which no instrument could be introduced. He cut down on the end of the sound in front of the stricture, and then carried his incision backwards, and without difficulty opened into the urethra behind it. A flexible catheter, of full size, has since been retained in the urethra; the wound is closing, and no urine escapes by it. The operation of opening the membranous urethra behind strictures, to allow of the escape of urine, by an instrument there introduced, has been performed in two cases. An operation which amounted to the same measure has also been performed in the case mentioned last month under the care of Mr. Shaw; a large quantity of calculous fragments were removed from a cyst just anterior to the prostate. In a case of old-standing perineal fistula, the result of a traumatic stricture now fully dilated, Mr. Adams, in the London Hospital, made a free division of the diseased structures up to the urethra. The wound has since granulated well, and promises to heal. All the above cases, as also those reported last month, remain under treatment.

Paracentesis Thoracis.—Dr. Bennett's case of empyema, of which mention has been made for several successive months, has terminated fatally. Death was caused by the bursting of a large abscess in the liver into the peritoneal cavity. As far as the condition of the thorax was concerned, the patient was doing well. (We shall report the case in full before long).

The operation has been twice performed during the month by Mr. Prescott Hewett, on a patient in St. George's Hospital.

Paracentesis Abdominis.—In 16 cases. Ovarian dropsy, 7; of which 1 has ended fatally; the others are well, as regards the operation, but under care for the original disease. Ascites, 9; of which 2 have died, and 7 recovered. In one, death was due to the organic disease previously existing; in the other, it was consequent on the operation, or at least materially hastened by it. The patient, a woman aged 56, died exhausted rather suddenly twenty-four hours after its performance. She had structural disease of heart, lungs, and liver.

Ligature, etc., of Nævus.—Operations for the cure of nævus have been performed in 7 cases, in most of them with success. There were points of unusual interest connected with several of them, which we propose at some future time to enter upon in detail. Most of them yet remain under treatment.

Tracheotomy.—The cases previously mentioned are yet in the condition they were at last report. The operation has been performed in one case for what was believed to be inflammatory obstruction in the larynx. The patient died five hours afterwards, and at the *post-mortem* the larynx was found healthy, but there was discovered an aneurism of the arch of the aorta, over which the recurrent laryngeal nerve was stretched, and through which, bathed in blood and much thinned, the trunk of the pneumogastric passed.

Fistula in Ano.—The cases reported upon last month are, with one exception, recovered. Six other operations have been performed, and the patients are doing well.

Operations for the Cure of Ununited Fracture.—Mr. Paget informs us, that in his case, in which setons had been employed, there now appear some evidences of consolidation between the bones. The patient has left the hospital. During the month Mr. Lloyd has operated on a case of ununited fracture of the lower third of the humerus in a young and apparently healthy man. The operation consisted in laying freely open the false joint, and applying the actual cautery to the ends of the bones. The case is yet under care, and appears thus far to be doing satisfactorily.

Plastic Operations.—In a case under the care of Mr. Quain, in University College Hospital, an opening into the nostril has been closed by a transplanting operation. It is intended to perform a second on the same patient for the relief of an ectropium. *Hare-lip.*—Five cases of single hare-lip have been successfully operated on. *Vesico-Vaginal Fistula.*—None of the cases previously reported are as yet quite cured. *Cicatrix after Burn.*—The case reported last month, as also another since operated on, remain under treatment. *Webbed Fingers.*—A girl, aged 6, is under Mr. Hilton's care in Guy's Hospital, on account of webbed fingers. The middle and ring fingers of both hands were affected, and, in the left hand, the joint between the first and second phalanges was deficient. Mr. Hilton has divided the superfluous webs of integument, and, to prevent their reunion, has fastened portions of whipcord, padded with lint, so as to press into the commisures of the adjacent fingers. The process of healing progresses favourably.

Employment of Galvanic Cautery.—Mr. Marshall's cases remain under treatment; in that of perineal fistula, the cautery has been again applied.

Operations for Cataract.—Extraction.—In one case, a woman, aged sixty, had the lens extracted; shortly afterwards severe vomiting came on; and the contents of the globe escaped. The patient recovered, with a collapsed eyeball. *Solution.*—Two cases are under treatment, and have had several operations performed; both are doing well.

THE MIDDLESEX HOSPITAL.

OBSTRUCTION OF THE BOWELS BY A TUMOUR IN THE PELVIS, RELIEVED BY OPENING THE COLON IN THE LEFT LOIN.

[Under the care of Mr. MOORE.]

In May, 1853, a woman, aged 55, was admitted into the Middlesex Hospital, under the care of Mr. Moore, for a recently strangulated femoral hernia. She had never had a rupture before, but the symptoms were positive, and the tumour characteristic, and, with some difficulty, Mr. Moore accomplished the reduction by the taxis.

When discharged, at the end of a week, as cured of the malady for which she had been admitted, (the hernia never again protruded,) she made a complaint of some slight disorder, which led to her being examined per vaginam. To her own surprise, no less than to that of her attendants, she was discovered to have a firm, uneven tumour low down in the vagina, which was evidently a cancerous enlargement of the os uteri. Its inner surface, which could be felt through a large opening in the centre of the mass, was rugged, but not distinctly ulcerated. She was at once sent to the female cancer ward.

She was at this time spare, but had not emaciated. Her complexion was, and always had been, remarkably dark. She was quite free from pain, and was only conscious of a sense of general weakness, which had not been usual with her. She stated that natural and regular menstruation had recommenced six years after its entire cessation; that it was at present as natural in its character, and as regular in recurrence, as when she was sixteen years of age, and that it had caused her no inconvenience. She had been conscious of no other discharge, or of any symptom that could have led her to suppose she had any uterine disease.

From May to October she remained in Whitbread's Ward (Cancer), and was usually remarkably free from pain. The discharge of blood was pretty regular in its monthly recurrence, copious, attended with a brief general illness, and but once mixed with clots. In the intervals she was very comfortable, and was up daily for a short time. Towards the end of this period she became emaciated, and throughout the case it was found necessary to employ purgatives rather frequently and freely.

Oct. 27.—During the last week she has suffered from obstinate constipation. She complains of much pain in the abdomen, and to-day has vomited. The abdomen is full, tense, and tympanitic; the tongue moist and white, and the pulse 96 and firm. The rectum is felt to be squeezed flat against the front of the sacrum by a large, firm, lobed mass, which fills, and is fixed in the pelvis, and of which the enlarged os and cervix uteri form a part. Some pultaceous fæces lie in the rectum below the obstruction.

She was ordered to take a pill of croton oil and colocynth immediately, and to follow it up with half an ounce of sulphate of magnesia, and two drachms of the same purgative every six hours.

28th.—The bowels have not acted, but the pain is less. It is, however, occasionally severe, when the bowels roll over within the abdomen. The abdomen is no less tense or full, and the contour of distended bowel can be seen on the surface. A little fæces are again found in the rectum, even after an injection of castor-oil.

29th.—Abdomen is more tense and larger. There has been no motion. She has not slept, and looks haggard and distressed. She says she has vomited some very offensive matters to-day. She is very thirsty. The tongue has a thicker white coat in the middle. Her pulse is still good, 98. The urine is passed frequently, readily, and in good quantity. A small quantity of fæces remained in the rectum, but as no real relief had now been obtained for nine days, as a tube could not be passed beyond the compressed part of the rectum, and not even the air that distended the bowels above could escape, Mr. Moore determined to open the bowel above the obstruction.

After chloroform had been given her by Mr. Sibley, the patient was so placed on the table as to lean forward, and towards her right side across a pillow. The left loin was thus made very prominent. A curved incision, of about three and a-half inches in length, was carried obliquely from about an inch and a-half internal to the tip of the last rib, downwards and backwards to the crest of the ileum. The stretched muscles and deep fascia were readily opened at the upper part, and the finger introduced through the opening, and carried in the loose tissue within them to the crest, served as a director for their complete division. The bowel, covered with loose fat, instantly protruded through the wound, and above the level of the surrounding integument. It was bound by four thick double sutures to the edges of the wound, and a search made for any vessels that might require ligature, before giving vent to its accumulated contents. As soon as a vertical incision had been made into it, three or four pints of greenish fluid poured forth, with much air, and so rapid and copious was the discharge, that it was thought advisable to stop it, and to give the patient some wine before the whole was permitted to escape.

The relief was complete, and continued, with one exception, throughout the remainder of her life. That exception occurred on the 1st November. A quantity of solid fæces collected both above and below the opening in the loin, but did not escape; and she experienced the rolling action of the small intestines again, and felt sick; while considerable dulness was found on percussion over the right side of the abdomen. An injection of warm water through the artificial opening sufficed to empty the bowel, and relieve her symptoms. And not only was the relief thus complete, but no annoyance was perceived from the escape of fæces at the unnatural opening. The opposite wall of the bowel protruded through the opening, and was withdrawn only at regular intervals by the action of the bowel in expelling fæces. For the purpose of protecting the parts, the skin around was smeared with oil, and some lint covered with spermaceti-ointment bound over the opening; but nothing like excoriation took place: indeed, scarcely any fæces escaped, except at the time of the regular action of the bowels.

Some œdema of the right lower extremity had existed at the time of the operation, and it continued and increased afterwards. Pain also was complained of when deep pressure was made over the region of the right iliac vein. These symptoms increased, together with her general weakness and emaciation, until, in the night of the 5th of November, she died—(eight days after the operation).

Autopsy.—The pelvis was filled with a mass of diseased structures, which were adherent to one another and to the pelvic walls. The uterus, of twice its natural size, lay on the upper surface, presenting its anterior face, and concealing below and to the left a large tumour. The half of this tumour nearest the uterus, was solid, while the lower part was distinctly an ovarian cyst, containing about six ounces of straw-coloured fluid. The os and cervix uteri were entirely cancerous, shreddy, and ulcerated on their inner surface, and the ulceration extended into the vagina. The cancerous portion of the back of the uterus was adherent to the tumour behind it, and a section of the two displayed no definite line of distinction between them, although the more distant part of the tumour presented the appearance of an innocent growth, being soft and fibro-cellular. The rectum, as it passed down the back of the pelvis, was not only flattened by the pressure, but also formed a double curve, or sigmoid flexure, in such a manner as to present a pouch downwards, in which the bougie must have caught, if it had reached so far, and another upwards, beyond which the fæces could not descend. The intermediate transverse portion contained a little glairy mucus.

The right external iliac vein was inflamed and plugged, and near it one or two small abscesses were found beneath the peritoneum, in the adhesions within the pelvis. There was also a little subacute peritonitis in the same vicinity; and pus was found in some of the veins within the substance of the ovarian tumour.

In some clinical observations on the case, Mr. Moore called attention to the fact, that instant and complete relief of a most distressing symptom had been afforded by the operation during the last stages of an inevitably fatal disease. The patient, he remarked, had been enduring very agonising and unceasing pain from an obstruction of the bowels, which daily threatened to terminate her life. But a very simple operation, which gave her no inconvenience, had not only proved the means of prolonging her existence, but had allowed of her sinking undistressed by incessant torment.

The *post-mortem* examination had, indeed, suggested the possibility that relief might have been afforded in another manner, for the fluid part of the ovarian tumour lay so low in the pelvis, that it might have been reached through the rectum with a long trocar, and the escape of six ounces of fluid would in all probability have relieved the rectum from complete obstruction, and the bowels of their great distension. Even if, however, the character of solidity presented by the compressed and firm-walled cyst, had not served to conceal the fact of its containing fluid, it would have been certainly advisable to avoid punctures and other surgical interference in the vicinity of diseased and already injured parts. The case, so far as it went, plainly showed that the advantage was on the side of a simple and harmless operation, which relieved the bowel through healthy parts, and, finally, saved to the diseased parts, and so to the weakened system, the distress of a daily recurring and increasing difficulty. The instant, entire, and permanent relief afforded by the operation in this case, fully bore out all that had been said of it by writers on the subject, and would tend to justify surgical interference in a class of cases which, until lately, were tardily, incompletely, or not at all relieved by the administration of violent medicines.

Mr. Moore further remarked, that it would be impossible to bear too earnest testimony to the advantages derived from the operation, and to the entire absence of difficulty in its performance. The knowledge of these facts might lead to its adoption at an earlier stage than usual, in cases of known and hopelessly increasing obstruction, and would be the means of preventing the severe symptoms which so often occur in them. Practitioners would feel it less incumbent on them to exhaust the force of the Pharmacopœia on their patients, and to yield them to the knife only when worn out by long-continued constipation and pain. Local diseases would be less injured by the presence of tympanitic distension, and life, as well as comfort, would, in the end, be prolonged. In the present instance, inflammation had arisen, in all probability, before the operation was performed; for the small collections of matter, the phlebitis and the peritonitis, were consequences of local injury, by the pressure, and, probably, of that only. Mr. Phillips had fairly stated the best rule for practice in such cases, in his paper on Intestinal Obstructions, (Medico-Chirurgical Transactions, Vol. XXXI., p. 35,) "That the interference by surgical operation is justifiable when three or four days have passed without any relief from ordinary means, (provided the constipation be complete, and vomiting of fæcal matter continue,) because it affords a greater chance for the preservation of life than ordinary means."

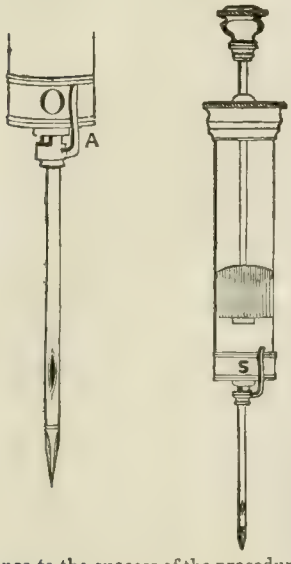
THE ROYAL INFIRMARY FOR CHILDREN.

TREATMENT OF NÆVUS BY THE INJECTION OF PERCHLORIDE OF IRON.

[Cases under the care of Mr. COOPER FORSTER.]

A few weeks ago, we described an instrument which had been invented by Mr. Ferguson, of Giltspur-street, for the purpose of injecting a solution of the perchloride of iron in cases of nævus, aneurism, etc. Our pages have also since contained allusions to several cases in which the remedy has been employed.—See *Medical Times and Gazette*, for Oct. 22, p. 421; for Nov. 26, p. 553; for Dec. 3, p. 579; for Aug. 27, p. 219; for Sep. 3, p. 244.

The success which attended these trials was not on the whole very encouraging; in several, probably from too large a quantity of the fluid having been used, severe inflammation followed; and in another, a case of nævus, an only partial destruction of the erectile tissue ensued. We allude to the subject on the present occasion, however, in order to mention some cases which have recently been treated by Mr. Cooper Forster, at the above Hospital, and have resulted much more favourably.



The instrument which Mr. Forster has used we here figure; it is a modification of the one proposed by Mr. Ferguson, and consists of a glass syringe, with an accurately adapted piston, and ending in a narrow platinum tube. In one side of this tube is an oval aperture, and over it another tube is placed, terminating in a trocar point, and having an aperture of similar size. By rotating these tubes the one over the other, the openings may be made to correspond or not at the will of the operator. An indicator, A, marks their state as to whether open or shut. Mr. Forster does not use the trocar point of the instrument to break up the structure of the nævus, as has been recommended, since he has found it quite ineffectual for that purpose. He believes that the free division of the whole morbid tissue is of the greatest importance to the success of the procedure, since, without it, the coagulating fluid does not obtain access to the blood on which it is to act. Having charged the syringe in readiness,—Mr. Forster introduces a narrow-bladed tenotomy knife, and with a few sweeps divides subcutaneously the tissue of the nævus,—if small, from a single point of entrance,—if large, from several. Immediately on the withdrawal of the knife the tube of the syringe is introduced; its indicator pointing to S. The tube is at once turned round, so as to point the indicator to O, and make the openings correspond; while at the same time a few drops of the fluid are forced out. During the withdrawal of the tube, in order to prevent bleeding, a little more of the solution is to be injected, so as to plug the orifice by the coagulum formed. If the tumour be a large one, the same process of injecting is to be repeated at two, three, or more places.

Mr. Forster informs us that, as far as his experience has yet gone, and it already includes quite a series of cases, this treatment always produces simple coagulation of the blood, unattended by inflammatory action.(a) There is some increase of size in the tumour, and a hard clot forms, which is afterwards slowly absorbed, leaving the vascular tissue of the nævus quite obliterated. As examples we will subjoin the particulars of two cases, the only ones in which the process of cure is as yet complete.

Case 1.—Thomas H., aged 1½ years. The nævus was of the mixed variety, situated over the left frontal eminence, and had previously been subjected to treatment by the application of nitric acid without success. It was increasing slowly in size, and was about as large as a florin, and considerably raised above the level of the surrounding skin. It was injected for the first time on October 2nd; no incision was, however, made, and, from the imperfection of the instrument used, it was doubtful whether any of the solution was thrown in. No effects followed; and, on the 8th, the operation, according to the plan above described, was repeated. Probably, from five to eight minims were thrown in. The tumour became hard and swollen, but no constitutional disturbance or local inflammation followed; and, within a month, the whole had disappeared, with the exception of a few small cutaneous vessels. For the cure of the latter, a pad of lead was laid over the part, secured by an elastic band, and worn for a week or two. The disease now appears to be perfectly destroyed.

Case 2.—Louisa C., aged 11. The nævus was of the subcutaneous variety, situated on the right side of the neck, behind the border of the sterno-mastoid, and about the size of a small egg. Six years ago, it had been treated at an hospital by ligature; but it had subsequently enlarged to its original dimensions. On the 4th of November, the injection was practised. A free division of the diseased structure having been effected, about twenty minims of the solution were thrown in. As in the previous case, swelling and solidification were the only consequences, excepting that for three or four days afterwards the girl complained of some pain. There was no constitutional disturbance, and no inflammation in the surrounding parts. The induration has since gradually subsided, and is daily becoming less; it now feels of an almost stony hardness, and is about the size of a filbert. The tumour has quite lost its vascular character.

The instrument used by Mr. Forster, and also the mode of operation practised, appear to us to be important modifications of those previously employed; and we have, therefore, hastened to bring them before our readers. The subject is one now receiving much attention, and it is very desirable that the plan should be fairly and efficiently tried. From the experience of the French surgeons, as conveyed in M. Malgaigne's paper on the subject, translated in our last two Numbers, it may be gathered, that the treatment, when applied to aneurisms, is attended by great risk. Such, however, it is evident, in no degree holds in respect to nævus. In the latter disease, beyond an excess of irritating action, no evil consequences have, we believe, yet been noticed.

(a) This statement must be a little modified, for while the above was going through the press, a case has occurred in which the injection produced a little inflammation, and caused the formation of a few drops of pus. Mr. Forster had injected about ten minims,—a quantity which, he believes, as a rule, more than it is safe to throw in at one spot.

THE PROVINCIAL
PRACTICE OF MEDICINE AND SURGERY.

THE LINCOLN HOSPITAL.

A CASE OF COMPOUND FRACTURE OF THE LEFT LEG.—SIMPLE FRACTURE OF THE RIGHT THIGH, AND RUPTURE OF THE URETHRA.

[By SAMUEL HADWEN.]

William Burton, aged 22, farmer's servant, was brought to the hospital on the 31st of March, 1853, a little before noon. He was sober and sensible, and stated that, while driving a team drawing a wagon loaded with two and a-half tons of coal, he was knocked down, and a front and a hind wheel passed over him. From the situations of the injuries, the wheels must have passed in an oblique direction. The left leg presented a large, black bruise, and a wound about four inches above the ankle, communicating with a very loose fracture of both bones at the same place. The right thigh was broken in the upper third; there was some ecchymosis of the penis near the base, and bright red blood flowed from the orifice of the urethra. There was no external injury observable about the hips, nor could any crepitus be perceived in the bones of the pelvis. The face was pale, and the features contracted; the skin was cold and clammy; the pulse 96, weak, small, and jerking. He states, that he has not made water since 8 o'clock this morning. Some brandy and gruel were given. The compound fracture, when the external wound had been closed with a pad of lint soaked in blood, was put up in splints, and slung in Scott's manner. The fracture of the thigh was treated with the long straight splint.

At night, the pulse was 92, and rather stronger. The body was full. The bleeding from the urethra had ceased. He wanted to make water but was not able. A catheter was introduced, but it would not pass further than to about the commencement of the membranous portion of the urethra. Forty drops of Battley's sedative solution were given. April 1.—Has not made water, and cannot make it. The scrotum is swollen, hard, and black; the perinæum the same, full, and resisting to the touch; the swelling extends upwards by the right groin to the top of the thigh and lower part of the body on the same side, and all the swollen parts are tender when touched. The hypogastric region is tense, and sounds dull on percussion. Upper part of body full from flatulent distension of the intestines. A full sized catheter was passed with ease as far as the membranous part of the urethra, but could not be made to enter the bladder. A very patient and careful trial was made with various sized and shaped instruments, silver and elastic, with and without the wire, but without success. At 2 o'clock p.m., a consultation was held; he was then in great distress; tongue furred, brown, and dry; teeth and gums dirty and glazed; the face was anxious, the features sunk; the skin hot; pulse 94, small and thready. It was obvious, that an attempt to afford relief must be made, if made at all, as speedily as possible. The patient's bed was at once removed opposite to a second bed, foot to foot, leaving a space between; the patient was lifted down to the end of his own bed, until the buttocks overhung the mattress; each leg was then supported upon the opposite bed, leaving just space enough for a spare person to sit sideways between the extended legs. The splints were, of course, retained upon each. In this awkward position, the left shoulder directed forwards, jammed in between the knees without turning room, and with the use of his arms much impeded, sat the operator. The patient was made perfectly insensible by the inhalation of chloroform. A grooved staff having been passed down the urethra as far as the point above indicated while using

the catheters, and held by an assistant, an incision two inches in length was made from the verge of the anus in the course of the seam, upwards through the skin and cellular tissue. The knife was then made to cut through the deep parts upwards and backwards until the groove in the staff was reached. The wound then being sufficiently large to admit the finger as far as the prostate gland, a careful search was made in order to find, if possible, the vesical opening of the urethra. This failing, a trocar and canula, used for puncturing the bladder from the rectum, was, under the guidance of the finger, introduced up to the prostate, and, the middle line being observed, was passed onwards into the bladder. A large quantity of urine escaped. A gum elastic catheter was inserted through the canula and retained. Very little blood was lost. The perinæal structures were quite black and bulging, and the cut surfaces showed that gangrene was near at hand. After the operation, the patient expressed that he had obtained great relief. Pulse 80. A dose of sesquicarbonate of ammonia with sedative solution of opium, and brandy and gruel, were given. At night he was comfortable. Pulse the same; œdema of scrotum and perinæum very much diminished. Countenance improved; tongue moister; urine escaping freely.

2nd.—Had the yelks of two eggs with wine in the night; slept well, awaking at intervals, but soon asleep again; pulse 72 to 78, and rather fuller; tongue moister and cleaning; expression very much improved; scrotum quite relaxed, and no tension in any of the parts in which it was yesterday so evident. The urine flows freely by the catheter; no fulness or tenderness of the body. At night, complained of some diffused pain about the navel, increased by firm pressure. Inspirations 24 in the minute; pulse the same; urine escapes freely. Let him take citrate of potash and ammonia in an effervescing state every four hours, and five grains of compound colocynth pill, and two of extract of henbane with each dose. The bowels acted freely on the 4th, and he appeared, in all respects, in a very favourable state. The urine passed freely, had become alkaline, and deposited a thick, ropy, tenacious sediment. On the night of the 5th, the catheter was found in the bed, reported by the patient to have escaped without his knowledge. The house-surgeon made an effort to restore it, but failed. Finding, at my visit the next morning, that the urine escaped at intervals in sufficient quantity through the wound, I did not deem it necessary to make any further attempt to replace the instrument. He was no worse in any respect. The impossibility to keep him dry, on account of the fractures, preventing the frequent renewal of the linen required for this purpose; as well as the failure of every effort that could be devised for collecting the urine as it escaped, lead me to have the patient removed to Earl's fracture bed. The long splint was removed, and four thigh splints were substituted. The splints on the leg were not removed. This change had the desired effect. The urine escaped by gushes, at intervals of an hour or an hour and a half. On the 9th, it was necessary to remove and re-adjust the applications to the thigh. Notwithstanding an unreasonable, impatient, and very restless disposition, he continued to improve in a remarkable manner, until the night of the 12th. This evening, after eating some sweet-stuff unlawfully brought him by his friends, bilious vomiting came on. At my visit, the following morning, I found that he had undergone a great change. He looked very ill in the face, which was contracted, and the features pinched; the breathing was quick and laboured, the inspirations 40 in the minute; the pulse 84, and small. Body full, and pain at the pit of the stomach. He had vomited incessantly all night, and the stomach rejected everything swallowed. The matter discharged was of a green colour. A dose of calomel and opium was given, and he took effervescing salines with laudanum every two hours. He continued to get worse, vomiting by day and by night everything he took, and throwing up great quantities of bilious fluid. Counter-irritation by sinapism and blister was produced upon the epigastric region, and the medicine persevered in; but after the bowels had been relieved by the calomel, reliance was chiefly placed upon opium and ammonia. One grain of the former in the solid state, and four of the latter every two hours. He was allowed beer, for which he had a great craving, with soda-water at pleasure. Not only did the vomiting persist, but the man grew so ill, that at length no reasonable hope could be entertained of his recovery. The countenance was pinched, pale, and anxious; the pulse weak, small, and thready; hiccup arose, and the abdomen became wonderfully collapsed and flaccid, so that the wales thereof appeared actually to lie upon, and to be supported by, the lumbar portion of the spine; and the pulsations of the aorta above its bifurcation were seen to elevate at each stroke the umbilical integument. He became exceedingly restless, and most anxious to be removed to another bed. This was accordingly done, but more with the hope of making a dying man as comfortable as such distressing circumstances could possibly admit than with any other view. The wound in the perinæum, during this commotion, looked well, and the urine flowed freely through it.

The report on the morning of the 16th is: "Has slept at intervals; no pain of body; tongue rather less furred. Has not vomited since two o'clock a.m. Body, extremities, and face, very much thinner. Pulse 120, very small. To have beef-tea." On the 17th the report runs thus, "Had several hours sleep at intervals during the night. Passed water last night and this morning by the urethra to the amount of six ounces. Pulse 100, and firmer. Tongue moist, but furred. No pain. No sickness. Removed back to the fracture-bed. Thigh done up afresh in four splints. Bore the change well. To have a mutton chop and beer. The opium to be continued every four hours." From this time he gradually made progress. There was a return of vomiting on the 19th, but it soon subsided. The urine resumed its course through the perineal opening, and ceased to flow through the natural passage. Owing to the patient's restlessness it became necessary to re-adjust the thigh splints again on the 20th. At this time quinine and nitric acid, in bitter infusion, were prescribed, in addition to the opium. The report on the 6th of May records, "Improving. Good consolidation of the fracture of the thigh. Great thickening about the tuberosity and ramus of the ischium; the nates are also enlarged on this side. The inclined position changed for the horizontal, which is more comfortable. Several hours now intervene between the discharges of urine, and considerable pain from wanting to make water precedes its expulsion. There is a feeling at first as though it was about to flow by the natural passage, but only a few drops come along the urethra." On the 9th he made water with ease in a fair stream by the urethra, and continued to do so without any further interruption. On the 10th the wound was quite closed. The splints and bandages were removed from both limbs. Perfect union and firm consolidation were found to have taken place at each fracture, and the extremities were of the same length. On the 14th the urine was observed to contain very little mucous, and had acquired its healthy acid re-action. The wound re-opened some days after this, and discharged some matter; urine also continued for a short time to dribble through when it passed by the natural channel, but permanent closure soon followed. On the 16th he reported that he made water almost as well as he ever did. He was removed to a common bed, from which he was not permitted to rise for some weeks. His health was perfectly restored; he was cheerful and happy; had gained flesh and strength, and was thankful. He got down stairs into the garden on the 13th of June, and was discharged on the 27th in perfect health.

"July 22.—This patient called upon me to-day in good health, can walk well without a crutch or stick, and makes water as well as ever."

Observations.—The foregoing case affords ample material for a clinical lecture; so many were the points of interest which it presented to the consideration of the practical surgeon. I shall confine myself to the following brief remarks:—

Although fracture of the pelvic bones could not be detected at the examination on admission of this accident, I am inclined to think, from what was subsequently observed, (see Report of 6th of May,) that such was the case. Extravasation of urine had evidently taken place, and was rapidly producing its well known consequences. The almost instantaneous relief of these dire effects, and the stop to their extension, which followed the operation, were very conspicuous and satisfactory. The case beautifully illustrates the reparative powers of the animal structures when left to themselves. It might have been supposed, in the first instance, a very unlikely thing that the integrity of the urethra would ever have been restored without artificial assistance. So thoroughly did it seem to me that the membranous portion of the urethra must be broken up, and, in all probability, its tract destroyed, that the result appears as gratifying as remarkable. The true office of surgery is, doubtless, to assist, not to interrupt and prevent the ordained endowments of the natural powers and tissues in their intentions and efforts at preservation and restoration. Whenever there may be evidence that the natural actions are impeded, and their designed work obstructed or perverted, it becomes the part of surgery to investigate the causes and the effects; and, if possible, afford assistance, removal, and prevention. It behoves the surgeon, however, to proceed with caution; to watch, and not intermeddle without necessity; nor rudely make his efforts, even when he has reason to conclude that they ought to be interposed. We are all too anxious to make it appear that we are the power that alleviates or restores, not seldom forgetting, that, at the best, we are but Nature's assistants. Alas! perhaps, too often Nature's obstructors.

The trash brought by the patient's friends might have acted as an exciting cause of disturbance; but the view I entertain is, that

the excessive irritability of the stomach owed its origin to the combined action of the several sources of irritation,—the fractures, the wound in the perinæum, and the disordered bladder, upon the nerves of organic life. Hence my persistence in the use of solid opium. The turgid state of the perinæum increased the depth between the surface and the bladder. The finger was, in consequence, with difficulty made to reach the prostate, and caused, in addition to the unfavourable position of the patient's legs, still greater embarrassment to the performance of the operation.

Bearing in mind the extreme exhaustion and emaciation which occurred, it appeared remarkable, that consolidation of the fracture of the thigh should have taken place in so short a time as five weeks. I would not allow the patient to leave his bed for nearly a month after the splints were removed; hoping by rest, gentle motion, and frictions, to assist the natural powers in moulding and strengthening the union of the broken bones; and, as his health manifestly improved at the same time, I persevered.

Medical Times & Gazette.

SATURDAY, DECEMBER 24, 1853.

PROFESSIONAL INDEPENDENCE *v.* HOSPITAL COMMITTEES.

The following advertisement appeared in the *Daily News* on the 15th inst.:—

"Royal Free Hospital, Gray's Inn-road,

"A General Court of Governors will be held in the Board-room at the Hospital, on Friday, 30th day of December next, to consider, with a view to confirmation, a Resolution of the Committee of Management unanimously passed at their meeting held on Wednesday, Dec. 14, 1853.

"By order of the Committee,

"W. H. Fenn, Secretary."

Had the circumstances which led to this advertisement been a mere quarrel between Mr. Gay and Mr. Wakley, we should not have deemed the subject worthy either of our notice, or of the attention of the Profession; but, as a principle is involved, and as an important professional question interesting to every Surgeon who may possibly be connected with an Hospital Committee is likely to be agitated, in consequence of recent and impending proceedings at the Royal Free Hospital, we should not be doing our duty if we allowed the matter to pass without observation or inquiry.

The Royal Free Hospital—an institution founded by a Dr. Marsden, who is now chiefly known by the industrious advertisements of a Cancer Hospital—was established in Greville-street, and during the early stages of its existence Mr. Gay was elected Surgeon to it seventeen years ago, and has been attached to it ever since. Mr. T. Wakley, a son of Mr. Wakley the proprietor of the *Lancet*, has been for years past a surgical colleague of Mr. Gay, and is, of course, his junior.

It appears that a few months ago a Medical Paper was published, which has since been occasionally distributed among the Profession, in which attacks are said to have been made upon the character of Mr. Wakley and his family, and in which one of the features of the *Lancet* has been imitated. We allude to the practice of publishing biographical sketches and portraits of living members of the Profession, a practice upon which it is not our present intention to comment. In March last one of these biographical notices was published, Mr. Gay being the subject. In the course of his notice, the biographer called Mr. Gay *principal* Surgeon of the Hospital, and said that Mr. Gay was not indebted to the Hospital for his reputation, but that the Hospital was deeply indebted to him for his exertions and skill. We presume no one can deny the truth of the latter part of this statement, for we suppose, except for the constant advertisements in the *Times*, an action in a court of law for malpraxis, and a late attempt to establish a school which the College of Surgeons refused to recognise, 99 out of every 100 medical men who ever heard of the surgery of the Royal Free Hospital, have heard of it in connexion with Mr. Gay's modification of the operation for strangulated femoral hernia, and his more recent investigations into the result of making free incisions into diseased joints.

Some months appear to have passed before the biographical sketch attracted the notice of the Hospital Committee. At length, on the 15th of July, Mr. Gay having had no previous notice of the matter, received the following letter from the Secretary, which we publish, with Mr. Gay's reply:—

"Royal Free Hospital, July 15, 1853.

"Dear Sir,—In conformity with a Resolution adopted by the Committee of Management of this Hospital, I take the liberty of submitting to you the following questions:—

"1. Was the manuscript or proof of your Biography, published in a Medical paper of the date of the 30th of March last, seen by you previously to its publication?

"2. Did you supply any part of that Biography?

"3. If that Biography was published without your knowledge or sanction, have you written to the publisher to complain of any statements or allegations it contained?

"If you will favour me with an early reply I shall be obliged, and am, dear Sir, yours, &c.

"John Gay, Esq." "W. H. Fenn.

"Finsbury-place South, July 19, 1853.

"Dear Sir,—In reply to your note of the 15th, relative to a Biography of myself which has recently appeared in a Medical Periodical, I beg to make the following observations:—

"I supplied the Editor of that Journal with the simple facts of the places of my birth and education, and with such references to my own writings and other works as were required for the compilation of that Biography.

"I am not in any way responsible for the personal or general observations which it contains. I did not either supply or suggest them; I did not see them in manuscript or proof; nor was I aware of their nature prior to their publication.

"I have not complained to the Editor of any statements or allegations contained in that Biography.

"I am, yours truly, John Gay."

We should state, that Mr. Wakley is a member of the Committee, and was present at the meeting in July when the Secretary was directed to write the above letter to Mr. Gay,—a letter in every respect so impertinent, that we can only explain the fact of any man who has a proper regard for the independence and honour of his Profession condescending to reply to it, on the supposition that he was naturally anxious to disavow the implied charge that he had puffed himself at the expense of his colleagues. Be this as it may, the reply was made; and, to any unprejudiced person, it must surely appear to be satisfactory; but the Committee thought otherwise. A resolution was passed on the 9th of August, "That Mr. Gay's explanation is not satisfactory to the Committee;" and on the 11th of the same month, "That John Gay, Esq., one of the Surgeons of this Hospital, has forfeited the confidence of the Committee." Lastly, on the 14th of December, after a letter of Mr. Gay had been read, in which he reiterated his disavowal of the obnoxious remarks in his memoir, the Committee passed the following Resolution:—

"Resolved,—That this Committee, referring to its former Resolution of the 10th of August, records its conviction, that neither Mr. Gay's letter, read this day, nor any other act of his since that period, has in any way tended to alter the opinion of his conduct then expressed; and, therefore, it is

further resolved, that Mr. Gay be, and he is hereby, dismissed from his office as one of the Surgeons of this Hospital. —Carried unanimously."

According to the Rules of the Hospital, this dismissal must be confirmed by the whole body of Governors; and, as we have seen, a general meeting is called for next Friday. We shall then, doubtless, see all that an active, unscrupulous clique can effect; but it will be difficult for them to add, by any future transactions, to the disgrace of their past conduct. That a gentleman, who has fulfilled the onerous duties of Surgeon to an Hospital for seventeen years, not only without affording one single ground for a charge of neglect of duty or incompetence, but in a manner which has raised his own reputation and that of the Institution which he served, should be called upon by a Committee, of which the proprietor of a Journal is an active member, to explain his relations with a rival Journalist, and, after he had condescended to give the fullest explanation, should be dismissed from his office because that explanation was not considered satisfactory, is a proceeding so unprecedented, so contrary to all our English notions of fair play and honourable dealing, that we sincerely trust the Governors will not join their Committee in any such disreputable intrigue.

The question involved in this case, when duly considered, is seen to be one of very wide extent. It concerns not Mr. Gay alone, but all who hold public medical appointments. Is it to be understood that, in accepting, without fee or remuneration, such a post, a man engages, not only to fulfil honestly and well all its duties, but also to submit to the criticism of the governing body the whole of his private acts? If such a system is to prevail, who will be safe? for it appears, moreover, that length and efficiency of services are to be counted nothing! We repeat, for seventeen years has Mr. Gay zealously fulfilled his onerous engagement as Surgeon to the Royal Free Hospital; during that time, no charge of incompetency or of neglect of duty has ever been brought against him; on the contrary, whatever surgical reputation the place has acquired it owes to him. Is it credible, that a governing body could be found so destitute of all sense of propriety as to propose the rewarding of such services by a disgraceful dismissal, alleging, moreover, but the suspicion of a fault,—of a fault, too, which in nowise concerns the interests of the Institution? Yet, not only has this been the case, but the details of the transaction have been attended by circumstances of peculiar aggravation. From the fact that the charge was delayed three months after the committal of the alleged offence, and from some others not needful here to enter upon, there is reason to believe that the project is the result of mere personal spite, that the Board are but tools in the hands of others, and that the pretext put forward is a mere after-thought. We have no wish whatever to see the powers possessed by those who govern our Medical charities diminished. In cases of incompetency, of superannuation, and where grave moral turpitude has been proved, it is well that the Governors should be competent to compel the resignation of a Medical Officer. If these powers are, however, to be retained without restrictions, they must be exercised with moderation and fairness. There must be nothing of capriciousness or of the love for meddling, least of all of the base pandering to the suggestions of individual passion or jealous rivalry. We would remind these Boards, that though they may have power within their own little spheres, there is yet a tribunal before which even they must bow. Public opinion will pronounce an unfaltering verdict on transactions such as those we have recorded. It will do more: it will find means to make that verdict felt.

STUDENT LIFE IN LONDON.

There are some circumstances which place the Medical student in a more precarious position than other classes of pupils; for the exigencies of the Profession require that Medicine should be learned in large cities, and the congregation of a number of young men in these great centres of civilisation, with their attendant luxuries and vices, must prove a severe trial to the firmest principles and to the most rigid morality. Hence we cannot wonder if many of the *alumni* of our Profession, sent at once from the paternal home to the great Metropolis, forsake the straight and narrow path of rectitude, and deviate into the by-ways of dissipation. We hear annually, in the introductory lectures delivered at the opening of the Medical Schools, of the rewards held out to diligence and perseverance, and of the punishments which are attendant upon indolence and folly. But, while lamenting the money which is spent, the time which is wasted, the vices which are contracted, the opportunities which are lost, by many a student in his Metropolitan career, we think it is the duty of every well-wisher to our Profession to endeavour to trace out the source of such manifold evils, and, if possible, to suggest a remedy against their occurrence. Admitting that many of the errors to which we allude spring from the natural waywardness of youth, still an improved system might be introduced by the united efforts of the examining bodies, the teachers of the great schools, the Press, and the force of public opinion.

In the first place, it may be observed, that the discipline enjoined upon the Medical student is most lax; or, rather, that there exists no discipline at all. His father or his guardian *pays* for his admission to the lectures and the hospital practice; but he is at liberty to neglect both, if he think proper to do so. The competition of the Medical Schools is so great, and the profits of most of these establishments are so small, that the teachers are afraid to adopt any system of *surveillance* over their pupils, lest the strictness of the discipline should frighten them into other schools, where a greater laxity is permitted. Thus the science of Medicine is retarded, parents are deceived, teachers become careless, students are idle, and the public interests are seriously injured.

There is a remedy for this state of things which we would venture to suggest as being worthy the attention of the teachers of Medicine. Every student might be compelled, twice or thrice a-year, to pass a satisfactory examination before he is allowed to receive his certificate. Under the present system, the production of the signature of the teacher merely proves that the student has *paid* for the lectures; if he were compelled to pass these examinations, it would be proved that he had *profited* by them.

Surely the Examining Bodies of our Profession are unmindful of their duties in not making some effort in this direction. Already has the College of Surgeons received from numerous sources well-merited reproofs for the loose and unsatisfactory manner in which it determines the fitness of a candidate for a diploma in Surgery. The superficial man, just crammed by the grinder, and the diligent, hard-working student, pass the same *vivâ voce* examination of one hour; and after this very inadequate test of the incapacity of the one, and of the abilities of the other, they are probably both admitted as members of the College, and announced to the world as equal in point of merit.

This plan indirectly discourages industry, and, on the contrary, offers a positive encouragement to indolence. The student dismisses from his mind any apprehensions of an examination which the diligent and the idle may alike pass

with facility, and he readily looks forward to the services of the "grinder" to supply the want of that instruction which has been offered to him for years, but which he has neglected to receive. It is too notorious, that, from the limited nature of the examination at the College, and the limited time afforded for passing it, it is exceedingly easy to go through the ordeal, and any one with a moderate amount of assurance and six weeks' grinding may be pretty sure of his diploma.

It is quite in the power of the College of Surgeons to take the initiative in improving this state of things. The College is hampered by no Act of Parliament, and it is allowed to make such regulations as it may think proper for the improvement of the Profession. It is quite competent for it to insist upon a more regular and diligent attendance on the part of students at the lectures and hospital practice. It is quite competent for it to demand that the certificates of the teachers should prove that the student has profited by his attendance on lectures, and not merely that he has paid money to a Professor. It is quite competent for it to institute clinical lectures in all the schools, and to render attendance upon them compulsory upon all the students. It is quite competent for it to demand *some* proof, at least, of preliminary knowledge on the part of those who are entering upon the pursuit of medicine. It is not enough that the College should do this for the chosen few whom it designates "Fellows;" but it is incumbent upon it to respond to the just wishes of the Medical community, by so raising the tone of its examinations and the standard of education in all the schools, as to render its diploma a *real* mark of honour to its members, and a *real* testimonial of the possession of sound anatomical and surgical knowledge.

THE CHOLERA.

METROPOLIS.

Eleven cases of cholera were registered in the week ending December 17.

Cornwall.—The cholera has been making sad ravages among the inhabitants or Redruth, Cornwall, where the disease broke out with great virulence a few weeks since. The epidemic is confined chiefly to the dirtiest parts of the town, where the greatest want of sanitary regulations is apparent. The town has been divided into five districts, which undergo domiciliary inspection daily by competent medical officers. The returns to the 13th inst. report 80 fatal cases, mostly poor persons, and the disease was then slightly on the decline.

Scotland.—The cholera still continues to rage in Dundee; between the 8th and the 13th there were 37 new cases and 35 deaths; making the total since the outbreak of the epidemic 498 cases and 282 deaths. Three cases have occurred in Arbroath during the week; one case has been reported in Edinburgh; the disease has exhibited itself in Dalry, in Ayrshire; and at Faskine, near Airdrie, it has been very prevalent during the last week.

America.—The cholera was committing great ravages at New Orleans. 214 died in one day.

India.—The cholera has made its appearance in Bombay, and up to this date the deaths have been 275. As in England, so here, the majority of deaths occur in the most neglected districts; thus, at Omercarry, an undrained and particularly dirty village, more than two-thirds of the above number of deaths occurred. The disease appears steadily to increase.

We publish two more of Dr. Macloughlin's letters to the Registrar-General:—

"Sir,—In your Weekly Return of the 12th of November, a case of cholera without any premonitory symptoms is reported to have taken place at No. 17, Spring-gardens, Mile-end New Town, on the 10th November.

"I have been to the house, and I have seen the child's father, who informed me that his child had for three or four days before a bowel complaint, but that the child did not suffer; took her food as usual, was in good spirits; and, so far as he could see, had nothing the matter with her when she was sent to bed; that, about one o'clock, she began to have pain in her stomach, and then all the symptoms of cholera rapidly followed. Although medical assistance was soon obtained, the child soon ran into collapse.

"This case had, therefore, a premonitory diarrhœa for at least three days before cramps came on; and this is a well-marked case of the insidious advance of the disease—a painless diarrhœa, and having apparently so little effect on the child's general health, that the father did not remark any change in the child's health up to the moment the cramps, etc., came on; and, poor man! he was quite offended when I hinted that the child was ill when put to bed. It is such cases as this which too often throw the patient, his friends, and even the medical attendant, off their guard, and which lead them to suppose that the disease has begun only when the spasms, etc., have come on; whereas the patient's constitution may have been undermined for days or for weeks by a painless diarrhœa."

"In the Weekly of the 12th of November is a case of death from cholera in a child 8 years old, which took place on November 8, at No. 14, Devonshire-place, Lisson-grove, and reported a case of cholera without premonitory symptoms. I have seen the mother of this child, and she informs me, that she had another child ill with cholera, and that, therefore, she did not pay much attention all that day to this boy; that a few hours after the child with cholera had breathed his last, the boy 8 years old was seized with diarrhœa, that he was purged frequently, from about four o'clock in the morning till ten, when violent spasms, etc., came on, which continued till a short time before his death. There was here, therefore, premonitory diarrhœa for at least six hours.

"This poor woman lost in less than the week three children and her husband by cholera; and when I went to the house, I was told, that several persons belonging to the house were suffering from diarrhœa, but were gone out.

"I have the honour to be, Sir, your obedient servant,
"Dr. Macloughlin, M.D.,
"Honorary Member of the Royal Irish Academy.

"34, Bruton-street, Berkeley-square,
"London, Dec. 1, 1853."

REVIEWS.

Statistical Reports of the Sickness, Mortality, and Invaliding among the Troops in the United Kingdom, the Mediterranean, and British America; Prepared from the Records of the Army Medical Department and War Office Returns, presented in both Houses of Parliament by Command of Her Majesty. London. Fol. 1853.

This is a valuable contribution to scientific medicine. Between 1838 and 1841 four volumes of "Statistical Reports on the Sickness and Mortality in the British Army" were presented to Parliament. The present volume is intended to form a continuation of those Reports.

Shortly after the appearance of the first of the series of Reports referred to, the United States Government caused to be published a Statistical Report on the Sickness and Mortality in the Army of the United States; and subsequently a similar Report regarding the French Army quartered in their colonies was prepared.

The death of Mr. Marshall, Deputy Inspector-General of Hospitals, has thrown the labour hitherto performed by him on Dr. Balfour, and very ably has he executed his task. In the letter to the Secretary-at-War, which precedes the Report itself, Col. Tulloch and Dr. Balfour state—

"While the sphere of observation and comparison has been materially enlarged since the date of our report, various precautions have been adopted to insure greater accuracy in the returns which form the basis of our deductions, particularly in recording the amount of Force at each station, and every death which has taken place as well by other causes as by disease. The composition of the Force, so far as regards rank, age, and length of residence, has also been carefully noted, together with the amount of duty, extent of crime, and other circumstances by which the sickness and mortality are likely to have been affected. An attempt has also been made to ascertain the influence of the seasons on the health of the troops, by establishing a monthly record of the admissions into hospital and deaths from each of the principal classes of diseases."

And, again :—

"On this occasion our inquiries have not been restricted to the mortality among soldiers while serving; they have also been extended to the duration of life after leaving the Army. The information on this subject is derived from an extensive investigation into the mortality on the Pension List, undertaken by us in 1839, under the direction of Earl Grey, when Secretary at War."

The Report itself is divided into three parts. The first treats of the condition of the troops serving in the United Kingdom; the second of the health, etc., of those serving in the Mediterranean; the third of the health of those quartered in British America.

The first part comprises seven sections.

Section I. *On the Sickness and Mortality among Troops in the United Kingdom.*

Several changes of importance, materially affecting the condition of the soldier, have come into operation since the last Report was presented. These changes are, the introduction of good-conduct warrants, the formation of ball and racket courts, the establishment of libraries in the principal barracks, great improvement in the construction of the barracks themselves, addition to the pay of the best-conducted soldiers, the establishment of Savings'-banks, facilities for enabling the soldier to leave the service, limited enlistment, modifications in the penal code, and some improvement in diet.

The Dragoon Guards and Dragoons.—As the Dragoon Guards and Dragoons are, with few exceptions, constantly resident in the United Kingdom, they have been assumed in the present, as in previous Reports, as the best standard of the health of the army at home.

The admissions into hospital from disease of this corps, during the ten years over which this Report extends, have averaged 961 per 1000 of the strength annually. The mortality has been 12·4 per 1000. The deaths from suicide, murder, and accident have been $1\frac{2}{10}$ per 1000 of the mean strength annually, being the same as in the former Reports.

"This addition," the Reports remark, "makes the total mortality from all causes $13\frac{6}{10}$ per thousand annually, which will be found $1\frac{7}{10}$ per thousand more than is usual among a town population at the same period of life; no very great difference certainly, but still sufficient to show that, even in time of peace, the profession of a soldier is not conducive to health."—P. 5.

It appears that there is a slight difference in favour of Ireland as regards the mortality of these troops.

As to special diseases—

"The principal difference is to be found in fevers and diseases of the bowels, which have been less common since 1837, probably from the greater attention paid to providing increased space and better ventilation for the soldier in barracks, and from the absence of cholera, which, in 1832, 1833, and 1834, was preceded and accompanied by a general prevalence of diarrhœa."—P. 6.

A material increase in the admissions into hospital has arisen from venereal diseases, abscesses, and ulcers, and slight cutaneous affections. With reference to the mortality of the cavalry and a town population, at the same period of life, it would appear, that, excepting diseases of the lungs, it is, for each class of diseases included in the Registrar-General's Returns, nearly the same. The deaths from diseases of the lungs are greater among soldiers than civilians, in the proportion of 7·3 to 6·3. The ratio of deaths from accidents, violence, and suicide is almost the same among civil and military; thus negativing the conclusion in previous Reports as to the greater tendency to suicide in the army.

The Infantry of the Line.—The mortality in this class of troops is $4\frac{3}{10}$ per thousand higher than the mortality of the cavalry; that is, it is $17\frac{9}{10}$ per thousand of the strength annually.

"This higher mortality in infantry has been," the reports observe, "the subject of remark, not only in our own, but in the French and other armies, wherever extensive observations have been made on the subject; and it will be found to hold good, not only in this country, but in every foreign station where these two arms of the service are employed."

It appears that the mortality in corps which have returned for some time from tropical colonies is but little influenced by their previous service; the duration of life of pensioners above the age of 45 is much the same, whether their previous service was in tropical or temperate climates. The mortality then in the infantry of the line is exactly one-half more than in civil life; that of the latter being 11·9 per thousand, that of the former 17·9 per thousand.

It appears that the mortality of this class of troops is somewhat less in Ireland than it is in Great Britain.

"On comparing the influence of the same diseases in infantry and cavalry respectively, it will be seen, that, as regards admissions, the excess in the former is principally in the class of fevers, diseases of the lungs, of the eyes, of the skin, and venereal affections; while the latter have suffered in a greater proportion from diseases of the bowels, abscesses and ulcers, and wounds and injuries. Deaths by suicide, accidents, and violence, are much less frequent among the Infantry than the Cavalry. Ascertained suicides amount to $5\frac{8}{10}$ in every 10,000 of the strength annually; while in the Infantry they amounted only to $2\frac{2}{10}$ in the same number. This difference is probably the consequence, as suggested by the reporters, of many men of broken fortunes enlisting in the Cavalry."

Foot Guards.—The admissions into hospital of this class of troops is considerably lower, while the deaths from disease are much more numerous than in either the Infantry of the Line or the Cavalry.

The mortality in the Foot Guards is $20\frac{4}{10}$ per thousand of the mean strength annually, being $6\frac{8}{10}$ per thousand more than in the Dragoon Guards and Dragoons, and 2¼ per thousand more than in the Infantry. Suicide is remarkably infrequent among the Foot Guards.

The great mortality of the Foot Guards is due to diseases of the lungs;

"Indeed, the loss by them alone has been greater than by all diseases together among the civil population at the same period of life."

As to the cause of this fearful mortality from diseases of the lungs in the Foot Guards, the Reports say, it

"Must, we believe, be sought rather in a combination of circumstances than in one alone; the most prominent among these are,—defective barrack-accommodation; the great amount of night duty; the deteriorating influence of residence in a large town; and the greater facilities for, and temptation to, dissipation."—P. 14.

The great mortality of the Foot Guards is clearly connected, in some way, with their residence in the Metropolis; for,

"When regiments of the line were brought to London, their loss was still greater than that of the Foot Guards whom they replaced; and, conversely, when the Guards took the place of troops of the line abroad, the admissions and deaths were considerably below the average of the command."—P. 14.

The influence of hygienic conditions in determining the mortality among the troops is well shown by the following summary :—

Died Annually from Fever.

	Per 1000 of strength.
In Tower	$4\frac{1}{10}$
— Portman Barracks	$2\frac{2}{10}$
— Wellington Barracks..	$2\frac{6}{10}$
— St. George's Barracks	$1\frac{2}{10}$
— Detached Barracks	$1\frac{9}{10}$
— Windsor Barracks	$2\frac{8}{10}$
— Winchester Barracks..	$1\frac{9}{10}$—P. 15.

The Foot Guards have rarely more than three nights in bed; while other battalions doing duty in London have usually from four to five nights in bed.

The Household Cavalry.—The ratio of deaths per 1000 of strength, for this class of troops, is only 11·1, a rate not only lower than that of every other class of troops in the United Kingdom, but lower than that of a town population at the same periods of life. The Household Cavalry are better paid than the other troops, their barrack accommodation is more extensive, and they enjoy a considerable exemption from exposure on night duty.

"But there is another circumstance in some measure peculiar to this force, which operates still more in reducing the mortality, viz., the facility of discharging men of short service when they begin to exhibit traces of constitutional disease, or when it is ascertained that they are injuring their health, or bringing discredit on their corps by dissipation and irregularities."—P. 16.

The ratio of deaths from special classes of diseases is nearly the same as for the civil population at the same ages; not a single suicide has occurred in this force during the ten years under review, and only two from accidents of any kind.

Six pages are devoted to special diseases. There is little here sufficiently specific for scientific purposes. Of this the following abstract is evidence.

"Dropsies are a source of so little sickness and mortality at home that we shall content ourselves with stating, that the admissions among the Cavalry and Foot Guards have been only 1 per 1000; and, in the regiments of the line, 2 per 1000 of the strength annually; and that, from one-half to one-third of the cases terminated fatally."—P. 22.

Corporal Punishment.—In 1838, 10 men in every 1000 throughout the army suffered corporal punishment; in 1846, 4 per 1000. A corresponding alteration has taken place in the severity. In 1825, a man received 1200 lashes; since 1847, the maximum number that can be awarded is 50. Coetaneously with the reduction in the amount and frequency of corporal punishment was a diminution of the frequency of crime.

Section II.—*On the Extent of Invaliding among Troops Serving in the United Kingdom.*

Section III.—*On the Number Constantly Sick in Hospital among Troops Serving in the United Kingdom.*—These sections contain little of special interest. The data for drawing conclusions are very imperfect.

Section IV.—*On the Influence of Age on the Mortality of Troops Serving in the United Kingdom.*—The rate of mortality of soldiers under 20 years of age is low. On comparing the progressive increase of mortality in the army according to the advance of age with what is observed in civil life at the same periods, we find that, so far as concerns the Dragoon Guards and Dragoons under 35 years of age, there is a marked exception in favour of the civil population, while, after that age, the reverse is the case. This latter is probably due to men labouring under chronic diseases being discharged. On extending the comparison to the Infantry, the mortality at each of the three periods between 20 and 35 is nearly double that which prevails in civil life.

"The preceding results," the reporters observe, "would seem to justify the inference, that there must be some peculiarity in the condition of the soldier, not connected with his Profession, to which civilians are not exposed. What influence aggregation in masses, crowded barracks, night duty, and exposure on guard, may exercise, we are unable to determine, but the subject is one deserving careful investigation."—Pp. 32.

Section V. *On the Mortality among Officers in the United Kingdom.*—The materials for answering questions connected with this subject are wanting.

Section VI.—*On the Influence of Season in producing Sickness and Mortality among the Troops serving in Great Britain.* Tables to illustrate this subject are contained in the Report. The following are the conclusions arrived at:—

"The first feature of importance in this Table is the greater prevalence of fever between the months of January and June than during the rest of the year. This is the case, not only as regards the common continued type, but the intermittent also, presenting a striking contrast to the fevers of the Mediterranean and Canada, in which a remarkable increase will be found during the months of July, August, and September, as shown in a subsequent part of this Report.

"In bowel complaints, a great increase is observable between July and October, corresponding, in this respect, with the Mediterranean and North American commands.

"Pulmonic affections, in this country, are at their minimum between July and October; but the difference in the number under treatment at that period compared with the four coldest months, viz., from January to April, inclusive, is only 5 to 8.

"Ocular diseases are found to increase regularly with the increase of temperature; and may therefore be expected in warm latitudes to prove a source of very considerable inefficiency among troops, a conclusion justified by our (the reporters') subsequent investigations."—P. 34.

Section VII. *On the Mortality among the Pensioners Resident in the United Kingdom.*—This section contains a vast amount of highly-interesting matter. The length to which our notice has already extended forbids our following the greater part of it. The high rate of mortality of the Foot Guards has been maintained by the pensioners of that corps. "So far as can be ascertained, this was chiefly owing to the prevalence of consumption, which is so common and so fatal among these soldiers while serving." Taken as a whole, the mortality among pensioners is much less than could be expected, seeing the serious nature of the diseases for which many of them are discharged from service.

The mortality of the pensioners residing in some towns is much above the average. In Liverpool 71 per thousand die annually, while in Manchester and Birmingham the mortality is 54 per thousand only, and in West Wales it is as low as 39 per thousand.

Our space will not permit us to analyse the two other sections of the Report. Suffice to say, they contain much valuable statistical information regarding the health and diseases of our troops serving in the Mediterranean and British America. The whole reflects the highest credit on the reporters.

The Nature of Cholera Investigated. With a Supplemental Chapter on Treatment, addressed to Junior Practitioners. By John George French, F.R.C.S. Second Edition. Pp. 152. London. 1854.

This is one of the best treatises on Cholera which we have lately read; and, although we do not pledge ourselves to adopt all the views of this disease proposed by the author, we are bound to award him the merit due to a good practitioner and a philosophic writer. His theory of the nature of cholera is ingenious, and is argued with acuteness; his treatment consists chiefly in the moderate abstraction of blood, in the copious administration of cold water, and the exhibition of calomel. The illustrative cases are well reported, and the whole work will repay perusal. The fact that it has reached a second edition affords some evidence of its appreciation by the medical public.

PROGRESS OF MEDICAL SCIENCE.

SELECTIONS FROM FOREIGN JOURNALS.

PRACTICAL CONSIDERATIONS UPON RACHITIS AND ITS TREATMENT.

By NATALIS GUILLOT.

The author remarks that this disease, so common in our days, was not mentioned by the earlier writers until the year 1620. Some "discontented minds" have attributed it to the discovery of America; in other words, to the influence of the venereal disease, and the exaggerated use of coffee and sugar. M. Guillot does not participate in these views, but he affirms that it is a disease of individuals, and not of race. The cause is bad alimentation; and M. Jules Guerin has produced it by such means at will in young animals. An infant requires the milk of the mother, her cares, and warmth. The absence of these hygienic elements brings on rachitism. There is not a rachitic patient but who has been badly nourished, in this point of view, that thick pap, soup, or meat has been given prematurely in place of the mother's milk or the milk of the cow. In Normandy the nurses give infants bouillie and cider; in Burgundy, *pâté* and wine; at Paris, soup, vegetables, and meat; and the intestines bear such kind of food very badly. There ensue, consequently, serious disorders of the digestive organs, and deplorable arrest of nutrition. The buccal cavity becomes tender; the infants eat with voracity, and swallow fish's oil as they would swallow *eau sucrée*. The belly enlarges, and diarrhœa comes on, which may continue during the whole period of rachitism. To these symptoms may be added profuse perspiration, fever towards evening, and acceleration of pulse (150 1—80.) After the first year the rachitic patient is sad, silent, indifferent, and inert. If touched it cries, and cannot bear contradiction. Dentition is retarded; ossification is slow and imperfect; there is rarefaction of the osseous tissue, and deficiency of phosphate of lime. The fontanelles are long open, the head is voluminous, the face small. Guersant considers rachitism unfavourable to the invasion of phthisis; but, Guillot thinks that the rachitic infant of a tuberculous mother is equally exposed to the influence of heredity.

These functional and organic disturbances go on with increasing severity two, four, six, ten, or twelve years, and cure is effected after great deformity, by thickening and eburnation of the bones.

Dr. Guillot does not think that cod-liver oil or other remedies are of much avail. The child must be put upon milk diet, kept in a moderate temperature and pure air, and have the circulation kept up upon the surface by frictions.—(*La Presse Médicale Belge*, Dec. 11, 1853.)

MEDICAL CONGRESSES, ARRAS.

At the Medical Congress of Arras, M. Charlier proposed the operation of ovariotomy upon cows destined for fattening. The cow, deprived of her ovaries, is, to some degree, in the position of the bull deprived of his testicles. She becomes rapidly fatter upon the same amount of food as before sufficed to maintain her only in health. The operation is said to be easy of execution, and innocent in its results, having been safely performed by M. Charlier upon 200 beasts. If the operation of M. Charlier is followed by the consequences which he has announced, it must be confessed that he has rendered a great service to rural economy and agriculture!

M. Chatin laid before the Congress some of his ideas upon the development of goître. He has found iodine in the earth, in water, in plants, even in the atmosphere; but the last is doubted by some chemists. His analyses have made him conclude, that the absence of a little proportion of iodine in water determines the hypertrophy of the thyroid body. This doctrine, however, encounters severe opposition. M. Bertini, member of the Sardinian Commission appointed to investigate the causes of goître and of cretinism, replied by numerous and precise statistical documents; and M. Riboli observed, that cretins consume kitchen salt like other persons, and that this salt, generally impure, contains as much iodine as the greater number of the waters to which M. Chatin attributes the property of preventing the development of goître.

TUBINGEN.

M. Luschka, Professor of Anatomy at this University, and consequently the successor of Arnold, has discovered a new nerve-branch. It arises from the inferior maxillary nerve, either upon a level with, or a little below, the foramen ovale. It ascends to the foramen spinosum, and accompanies the arteria meningea media to the interior of the skull, where it quits the vessel, to terminate in the great wing of the sphenoid bone and the petrous portion of the temporal. It is, therefore, homologous with the filaments given off by the spinal nerves at the intervertebral foramina to the bodies of the vertebræ. It must not be confounded with the nerve filaments derived from the otic ganglion, which are lost upon the artery.

M. Krauss experimented with chloroform upon a person who had lost part of the skull-cap by accident. He noticed that the cerebral movements were suspended when the individual was under the influence of chloroformic narcotism. The absence of movement he considered due to diminished force of blood in the vessels, and consequently to diminution in the impulsive effort of the heart.—*Gazette Hebdom.* Dec. 9.

SIDERATION.

In speaking of sudden death caused by chloroform, not due to asphyxia or to the commonly received causes, the term "Sideration" has often been used during the discussions in France. The word is a bad one, and should be at once expelled from scientific language. It has had many meanings. In the time of Pliny it meant many affections of the vines or trees, due, it was supposed, to atmospheric causes. It also was applied to external lesions upon the human frame, for which (Plin. Hist. Nat., lib. xvii.) frictions with ass's urine were recommended. Authors who have since written applied the term to apoplexy, paralysis, gangrene, in short, to all terrible and unknown diseases, which were attributed to the influence of the stars. The latin word *sideratio* never has had any other meaning.—(*Op. cit.*)

COMPLETE OBLITERATION OF THE CANAL OF THE URETHRA.—NEW FORM OF PERINEAL URETHROTOMY.—CURE.

By M. MAISONNEUVE, Surgeon to the Hôpital Cochin.

M. Maisonneuve presented to the Academy a patient whom he had cured of complete obliteration of the canal of the urethra by means of the following mode of perineal urethrotomy, which the author considers to be new. The patient, aged 65, received a blow from the horn of a bull in the perineum; in consequence of which, retention of urine ensued, followed by vast urinary abscesses and sphacelus of the urethral walls and the integument. A cicatrix of the urethra, about an inch in length, produced complete obliteration of the canal; there were five fistulous passages immediately behind the stricture. M. Maisonneuve, being convinced that neither forced catheterism nor the operation of "*la boutonnière*" was applicable in the case, operated in the manner here described.

The patient having been put upon the back, as in the operation of lithotomy, with the thighs separated, the surgeon introduced a filiform bougie through the largest fistula into the bladder. Next, he passed a grooved catheter into the urethra, as far as the instrument would go. Then he made a deep incision along the median line of the perineum, from the urethral cul-de-sac indicated by the point of the catheter to the posterior part of the canal which contained the bougie. A sound was then introduced along the whole length of the canal, over which cicatrisation proceeded; and in two months the patient was well.—*La Presse Médicale de Bruxelles*, Nov. 27, 1853.

[We are at a loss to know what claim this operation possesses to the title of novelty. It is the revival of that old and dangerous form of urethrotomy which was followed by so many bad results. Mr. Syme, aware of its defects, has endeavoured to re-introduce it into surgery in a modified and improved form. Mr. Syme denies that any stricture is completely impermeable; he passes a small grooved sound through the urethra, and makes the perineal section upon the instrument; and he especially points out the dangers and condemns the practice of the older operation which M. Maisonneuve puts before the world, without allusion to Mr. Syme, as a "*nouveau procédé d'urétrotomie.*"—Ed.]

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

DOINGS IN THE NORTH.

Edinburgh, December, 1853.

MEDICO-CHIRURGICAL SOCIETY.

The Society met on Wednesday week. The first paper read was one by Dr. Scott, "On the Mineral Waters of Homburg." Dr. Scott had been visiting some of the mineral springs in Germany, and thought some observations he had made might be interesting to the members of the Society. He stated, that of the five springs in the vicinity of Homburg, some were much more frequented than others. The Elizabethan and Kaiser waters enjoyed a preference, above the rest, and he thought some of the others were unjustly neglected. The chief basis of the whole was muriate of soda, and muriate of lime was also present in considerable quantity, besides small proportions of muriate and carbonate of magnesia, iron, and sulphate of soda. The whole were impregnated with carbonic acid, and traces of iodine had been given in some of the analyses. Thus far the paper went on well; but when the author began to enumerate the diseases in which the several waters had been found useful, we could not help comparing the long list with an advertisement for Morrison's pills or Holloway's ointment; in short, they seemed a panacea for all the "ills that flesh is heir to."

The diet found most suitable came next, and strict injunctions that a medical man should always be consulted before using the mineral waters. When, further, the author went on to say, that, under some circumstances, the use of the Homburg waters was not only injurious, but absolutely dangerous, when not used judiciously, and gave, as an instance of this, that the celebrated Duke of Nassau had expired suddenly after emerging from a bath of these waters, the gravity of the Society could hardly be maintained. Mr. Syme afterwards remarked, that in his experience people had died suddenly in their beds, and perhaps the celebrated man's death might have arisen from another cause than the use of a bath of these potent waters; and as to the diet recommended by the Homburg physicians, he believed it consisted of such articles as would be prescribed by British physicians to their patients, without any reference to mineral waters.

Some conversation followed, in which Dr. Scott stated, in reply to a question from Dr. Douglas Maclagan, that hitherto bromine had not been detected in the Homburg waters, or, if so, in very small quantity with the iodine.

Dr. Simpson said, that patients with fibrous tumours of the uterus had frequently been sent to use the mineral waters of Germany, more particularly those of Kreuznach; but the benefit which was experienced had been attributed to the bromine of the waters. This had led to the use of bromide of potassium in this country in such cases; and, in Dr. Simpson's own practice, he had seen marked diminution in the size of fibrous tumours after its administration. These tumours had been stated to have a structure similar to that of the uterine walls; and he believed, if fatty degeneration could be

commenced in the composing fibres, as in the fibrous structure of the uterus after delivery, such tumours might be made to disappear. That such did occasionally take place, he thought he could affirm; and Dr. Locock had also seen fibrous tumours of the uterus disappear.

After this, a most interesting communication was read from Dr. Trail, of Arbroath, on Cholera.

Being local Medical Inspector to the Board of Health, he had seen every cholera case which had occurred in Arbroath, and had had ample opportunity of recording faithfully the progress of the epidemic in that town. The facts he ventured to place before the Society were recorded without bias in favour of contagionist or non-contagionist doctrines; and, although small in number, might furnish important data.

The first case occurred on the 24th of October, in the person of Mrs. M——, aged 55, residing in the outskirts of the town, in one of a row of newly-built cottages, well-ventilated and arranged. She was at Dundee; seeing some of her family ill with cholera two days before her attack, she died in twenty-four hours. The husband of this woman had also been in Dundee, was attacked the day after, and died in a few hours. Mrs. Christie, the daughter of the two preceding, living in the same row of cottages, had not been to Dundee, but had waited on her mother. She died in thirty hours.

A man living opposite the first couple was the fourth case. He had been repeatedly in the house of the third patient while ill; was attacked, but recovered.

A medical student, who had attended the preceding, and lived half-a-mile away, was attacked and died November 2nd. A son of Mrs. Christie, the third patient, was attacked, but recovered.

W. M——, son of the two first patients, was ill; recovered. Jane C——, a daughter of the third patient, was also attacked, but recovered.

Some of the later cases were attacked after being taken to a house of refuge in a healthy situation, and half a mile from their own home. It seems 10 of this family were attacked by cholera, 4 in Dundee and 6 in Arbroath, 7 of whom died; other members of the family had diarrhœa. Harriet Coile, a child brought from Dundee with diarrhœa two weeks before, was the next death from cholera. William Fraser, half brother to last, died a day or two after.

The 11th, 12th, 13th, and 14th cases were not discovered to have had any communication with infected patients.

Here followed a continued history similar to the preceding, of the remaining cases, which were somewhat difficult to follow. The summary was as follows: that in 30 days there were 26 cases—15 fatal; 8 recovered; the rest under treatement. Of these, 4 were imported from Dundee; 14 were known to have come in contact with infected persons. In the remaining 8 no such communication could be traced. In 5 cases the attacks supervened after removal to the house of refuge, but 1 only died. There were many cases of diarrhœa in the house besides these cholera patients. Dr. Trail thought, from this history of the spread of cholera in a limited district, important deductions might be drawn.

Four cases out of the number were probably imported from Dundee, where they were either exposed to the influence of contagion, or to some atmospheric or telluric cause of cholera; but six others belonging to the same group were attacked; consequently how are these to be accounted for? Had the choleraic atmosphere reached Arbroath from Dundee? If so, it must have arrived at the same time as the individuals just returned, and, caping over the intervening populous district, come precisely to their house and that of the daughter, Mrs. Christie, staying with these people, until those spared were removed to the house of refuge, following them here, and attacking new victims. There seemed to be nothing in the sanitary condition of the localities to favour the origin or spread of cholera; indeed, where the disease had been very fatal the people were respectable artizans, living in comfortable houses, and well supplied with good water. But to take an example, where the inhabitants might be exposed to noxious effluvia, this would not account for its history. In a row of six houses, all similarly situated, and equally exposed to the unfavourable influences of imperfect drainage, ash-pits, and tan-yards behind them, the corner houses only were invaded; and, while only one person in these escaped being attacked, no cases occurred in the centre ones. On the zymotic hypothesis this would be perfectly unaccountable; but on the hypothesis that the disease was introduced by communication with infected persons, it was easily explained.

Dr. Trail was not able to explain the occurrence of all the cases as produced from contagion; but the history, in those families where communication could be traced, he thought indubitable evidence of its contagious nature. He believed that sanitary measures were indispensable as a means of warding off these periodical visitations; but he also thought every care should be taken to prevent its spreading by contagion.

Mr. Tait, from Dunse, here gave some account of the progress of cholera in that town; several cases there, too, he thought, could be traced most unmistakeably to contagion.

Dr. Gairdner (who "seemed to be expected by the members of the Society to say something on this subject, and had brought a reference-book with him, that they might not be disappointed") had, during the last epidemic of cholera, collected much information from different Medical men who had made notes of the history of the cases coming under their notice. The evidence from these he believed to be irresistible as to the contagious nature of cholera. It affected not the same districts only, but the same localities as typhus fever; this might be saying nothing more than it attacked the poorest inhabitants, and those exposed to other causes of disease; but it was true also of the more favourable localities, where typhus had raged. In most cases, where one or two cases of cholera appeared, others might be traced as having had communication with these, as so the disease progressed radiating from these centres; and where a town was about to receive a visitation, it was found to approach its environs, often at several different aspects at the same time, before it broke out generally. Even in some towns where a report had been given that no importation could be traced, more close investigation had discovered some channel of communication. Such was the case at Dumfries, as elicited by correspondence in the *Medical Times*.

Dr. Begbie, disbelieving the contagious nature of cholera, remarked, that notwithstanding the great care of Dr. Trail, of Arbroath, specially directed to the subject, a large proportion of the cases were believed to have had no communication with infected persons; and from this fact he was inclined to regard the arrival of the epidemic influence at Arbroath at the same time as the people from Dundee, rather as a singular coincidence than as evidence of contagion. In Edinburgh, during a previous epidemic, he had been physician to the Castle-hill Cholera Hospital, and not a single medical attendant or nurse was affected with the disease. Dr. Bennett, espousing the same side of the question, believed we had sufficient evidence that contagion was not the cause of the propagation of cholera, in the singularity of its course, arising in the east, passing on determinedly westward, people not escaping its ravages who might shut themselves in walled cities to escape contagion,—not retracing its steps, but even crossing the Atlantic in its onward course, and repeating this at each visitation.

Dr. Alexander Wood thought it exceedingly strange that Dr. Bennett should endeavour to set aside the evidence of contagion by a statement which was notoriously incorrect, as might be proved by most who had carefully studied the history of the progress of cholera. A fact mentioned to him by a medical friend who had had charge of troops in India, seemed to favour the view, that cholera was actually more propagated by contagion in our own country than in India. That it was contagious, he thought the evidence furnished by Dr. Trail and Mr. Tait conclusive.

Some desultory conversation followed, in which Drs. Myrtle, Andrew Wood, and Gairdner took part.

The election of office-bearers followed, when Dr. Simpson was re-elected President; Drs. Combe, Taylor, and Pagan, Vice-Presidents; and Drs. Gairdner, Warburton, and Begbie, Secretaries.

QUACKERY.

I understand that the Council of the College of Surgeons here has lately met to consider what steps should be taken in regard to Dr. Cockburn, who has become partner with a notorious cancer-curer in London, named Pattison. Dr. Cockburn is a Fellow of the Royal College of Surgeons, Edinburgh, and has most respectable connexions in this city, being a son of Lord-Advocate Cockburn. I cannot possibly conceive how a man of his standing and pretensions should so utterly disregard the oaths he voluntarily took, when admitted a Fellow of the College, to uphold the dignity of his Profession. He has even gone so far as to send circulars to his various friends in justification of his misconduct, in some cases accompanied by lists of Dr. Pattison's wonderful cures of cancer.

The whole thing amounts to this, that, for the sake of a few paltry hundred pounds, he seems willing to sacrifice his standing among his former medical brethren, appear as a man who has tarnished his honour to the world, and completely cast aside those broad philanthropic principles universally acknowledged among medical men.

I think the course to be adopted by the College is quite clear, and that Dr. Cockburn's name should be removed from the roll of honourable Fellows. The Clause with regard to secret remedies provides for this. It is, however, hoped by his friends, that,

should such a course be adopted, his widow will not be excluded from the widows' fund.

[We expressed our views of this matter in a recent leading article. The above is the opinion of an Edinburgh correspondent. —Ed.]

MILLER *v.* SYME.

The Profession here seem becoming thoroughly tired of the scenes in which these two Professors have so frequently taken part; even those who, like myself, have generally been inclined to regard them, from time to time, as small comedies rather than more serious performances, begin to think they must have an end. One thing seems certain, that, unless they be quashed, not only will the object of the Medico-Chirurgical Society be defeated, (that of calm and instructive discussion,) but, each having relations with the University, this will suffer in consequence. I hardly know which of the two is most to blame,—Mr. Syme, with his constant disposition to fight, or Mr. Miller, who, perhaps, because he is a taller man, thinks it his constant duty to thwart these pugnacious propensities.

At the meeting of the Medico-Chirurgical, last month, when Mr. Syme read his paper, we believe Mr. Miller was on his legs at least six times; and although we by no means think he had the best of the battle, yet he seemed to leave the Society with the conviction of Scipio: "*Hôc die cum Hannibale benè et feliciter pugnavi.*" No comparison can be drawn between the two as practical surgeons: perhaps there is not a more intelligent surgeon in Great Britain than Mr. Syme; and I am only sorry he does not see that he has nothing to gain by such demonstrations, but must lose in his character as a gentleman among his brethren. The goodwill of other men is worth something, even to Mr. Syme.

By such scenes Mr. Miller thrives; the arena is where he appears to most advantage, and he knows the fighting propensities of Mr. Syme too well not to profit by them.

While writing, I have just heard of Professor Miller questioning, in his class, a diagnosis before published by Mr. Syme, and an open war is again expected. That Mr. Miller was wrong in bringing such a subject before his class, there can be no doubt; but it was partly provoked by one of those *little* pieces of egotism emanating from Mr. Syme, in a lecture, some time ago.

GENERAL CORRESPONDENCE.

BLACKBALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

Sir,—I should not deem it necessary to notice the subject of the recent ballot at the Royal Medical and Chirurgical Society, or the charge made against me by an anonymous Correspondent in your Journal of this day, had you not, in a leading article, adopted as true the erroneous assertions contained in the letter of "M.D. Londinensis." Your correspondent states, that myself and other Members of Council are said to have canvassed the Fellows against a candidate. In your remarks you have assumed the *on dit* of your Correspondent as a fact, and assert that these Members of Council descended from the Council-room with all the authority of office, and invited votes against a certain candidate. I desire to give, as far as regards myself, the most emphatic and positive contradiction to this statement; and I believe it equally untrue of Dr. Barker and Dr. Crawford. I interfered in no way with the election, beyond recording my own vote; and, as Secretary of the Society, whatever my opinions on the subject of a candidate's qualifications may be, I should consider it highly inconsistent with my office, even impolitic and derogatory, to seek personally, directly or indirectly, to influence the votes of the Fellows in any election whatever. I shall esteem it a favour if you will give publicity to this communication.

I am, &c. W. R. Basham.

17, Chester-street, Grosvenor-place, Dec. 17, 1853.

[We must observe, that our remarks were not founded on any anonymous statement, but were made after receiving letters from several Fellows of the Society, and one member of the Council. All agreed as to the fact of canvassing; and we are exceedingly glad that Dr. Basham, Dr. Barker, and Dr. Nairne have denied that so positively. Since writing the above we have also received a letter from Dr. M. Crawford, in which he requests us to publish his "unqualified denial to the statement that I have taken any part, direct or indirect, in soliciting votes, or of having exerted any influence at the late, or, I may add, any previous election of the Medico-Chirurgical Society. So utterly groundless is the charge, that I can strictly affirm, that prior to the election I have conversed with no one on the subject." We must also state, that we pay no attention to anonymous communications, and receive, in every case, the name of a writer, in confidence, as a pledge of his good faith, before publishing his letter; but cannot be considered responsible for either the statements or opinions of our Correspondents.—Ed.]

[To the Editor of the Medical Times and Gazette.]

Sir,—In the last Number of the *Medical Times and Gazette* is an editorial article, in which you appear to assume the correctness of, and comment upon, the statements of an anonymous Correspondent respecting the alleged conduct of certain members of the Council of the Medico-Chirurgical Society at a late ballot, when a graduate of the University of London was blackballed.

I request that you will insert in your Journal my unqualified denial of every part of these statements which has reference to me.

I am, &c. T. A. Barker.

71, Grosvenor-street, Dec. 19, 1853.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention has been drawn to an article, and a letter to which you refer in that article, in the *Medical Times and Gazette* of Dec. 16. You adopt a statement about me in the letter referred to, relating to the rejection of a Graduate of the University of London, on the evening of the last ballot for the election of Fellows at the Medical and Chirurgical Society. I give to that statement an unqualified denial. I am, &c.

Dec. 22, 1853, Robert Nairne.

44, Charles-street, Berkeley-square.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Dr. Copland, President.

The following Paper was read.—

AN ACCOUNT OF SEVENTEEN CASES OF PARTURITION IN WHICH CHLOROFORM WAS INHALED WITH PERNICIOUS EFFECTS.

By Dr. ROBERT LEE, F.R.S., etc., etc.

In the cases related, the injurious effects of the inhalation of chloroform were as follow:—In seven cases, insanity and great cerebral disturbance followed its exhibition. The use of the forceps was rendered necessary in five cases. In two, the contractions of the uterus were arrested, and the operation of craniotomy was performed. Peritonitis or phlebitis ensued in four cases. Epilepsy or dangerous fits of syncope supervened in two instances. Many analogous cases had been confided to the author by friends; and public rumour swelled the size of the chapter of accidents; but he wished merely to give accounts of those which had come under his own observation. The author strongly animadverted upon the levity and thoughtlessness which had accompanied the use of this subtle and dangerous poison. Soon after its discovery, before the amount of its power, and even its composition, had been fully understood, he had been horrified by the announcement of its application to midwifery, and he then prophesied that deplorable results would ensue,—a prognostication which experience had unhappily proved to be correct. It was natural that women, doomed to bring forth their young in pain and sorrow, should seek every means by which they might palliate the anguish they suffer; and instances related in which the process of parturition had been effected without pain, served to render nugatory the unwelcome admonitions of those who pointed to the evils that might occur. The author expressed his opinion, that the most serious effects which arose from the inhalation of this agent, were first, languid and inefficient uterine contractions; secondly, a greater susceptibility to the risks that arose from inflammation and fever. In spite of the fact, that grave and experienced physicians had expressed their concurrence with the author's views, yet the question whether chloroform should be inhaled had become almost extra-professional; as silly and ignorant women of fashion chose to set the example of using it, the cause of science and hu-

manity thus being in the hands of the most weak and frivolous portion of the community; and, as there was a systematic concealment of the truth by the physicians who used it, he feared that young and inexperienced mothers would still be lured to their destruction. In conclusion, the author expressed a hope that his essay might tend to rescue the Profession from the dominion of an ignominious and disgraceful practice.

Dr. Snow regretted that Dr. Lee had indulged in such severe remarks as those which occupied the concluding portion of his paper, more particularly as he felt great admiration for the talent displayed in the essay, and great respect for the honest and manly spirit that caused the author to attack anything which he considered injurious either to a patient under treatment, or to the cause of science generally. Dr. Lee certainly had related the history of several distressing cases; but, in his (Dr. Snow's) opinion, not one of the symptoms described could be referable to the exhibition of chloroform. Dr. Lee must have known that chloroform was a most volatile spirit, and that half an hour after its application no traces of it could be found in the system; and yet, in some of the cases related it was stated, that inflammatory action had arisen two or three, or even as much as fourteen days after labour. How could the evil effects described be laid, with any show of probability, to the noxious influence of chloroform? Some of the symptoms mentioned in the cases might be naturally referred to hysteria. Dr. Lee had stated, that the chloroform checked the uterine contractions; this statement Dr. Snow could contradict, as, in the many cases in which he had superintended its employment, he had continually felt the uterus contracting firmly. The amount of the spirit inhaled in obstetric practice was trifling, compared with that taken during surgical operations. One great benefit derived from its application was, that it tended to do away with the use of laudanum; and Dr. Lee ought to hail this fact with joy, inasmuch as the time that the former drug remained in the system was so short in comparison with the former. In conclusion, Dr. Snow expressed his opinion, that, notwithstanding the recorded cases of death having occurred from the use of chloroform, which now amounted altogether to about thirty-seven, it had been the means of saving many lives, by preventing nervous excitability consequent upon severe operations.

Dr. Gream, with great respect to the learning of the author of the paper, was of opinion that he had, in this, as in many other cases, preferred antiquated measures to modern discoveries, merely because the latter were modern; and had given a list of extreme cases. He entered into the question, as to whether uterine contraction was checked by the inhalation of chloroform; and stated, that when a large dose was given, it did so favourably when the patient was exhausted by a long and painful labour. He announced that he was only a recent convert to the practice of giving ether or chloroform in midwifery.

Dr. Merriman related a case where chloroform was administered during labour. Pain ceased, and he returned home for a short time. On being called again to see the patient, after a lapse of two hours, having been told that she was very ill, he was unable to find any trace of the child; and the systemic effect was so violent, that it was long before labour recommenced, the uterus having been temporarily paralysed. She never recovered from the effects of the narcotic, and was finally removed to a lunatic asylum. This case had so alarmed him, that he had never since given his assent to the employment of chloroform.

Dr. Chowne said, the subject had been so talked about publicly, that it had become extra-professional. He expatiated lengthily upon the history of chloroform, remarking that, in his opinion, it had been received as a professional remedy without sufficient inquiry having been made into its properties. He instanced as an example, the first check given to its unconditional application, which was owing to a death which had occurred when the patient was undergoing the operation of having a tooth removed. Disease of the heart having been discovered in that case, a rule was laid down that chloroform should not be administered when an ailment of that organ was existing. Dr. Chowne gave some more instances in illustration of his opinion, and finally referred to Dr. Merriman's patient, whom he had seen; and stated, that the ergot of rye had been administered after the chloroform, without having any action on the uterus.

Mr. Carter said, that seventeen cases on which to found a decided opinion whether chloroform was beneficial or otherwise in midwifery, were not enough. He had frequently used it himself with no evil results, except in two cases, in one of which the patient was in a very asthenical condition. In the other case, death ensued while the woman was under operation. He reminded Dr. Lee that it was frequently used in country practice.

Mr. Fergusson stated, that being engaged exclusively in surgical practice, he was unable to offer any opposition to Dr. Lee and his statements; yet he wished to know how it was, that these terrible results described, of insanity, phlebitis, and prolonged syncope, did not occur after the inhalation of chloroform during surgical operations. He considered that Dr. Chowne had not drawn a sufficient distinction between surgical and obstetrical practice, as regards the use of this narcotic. He could not understand how paralysis of the uterus could be caused by chloroform, when fæces and urine were often forcibly expelled when the patient was under its influence, thus showing that it does not destroy involuntary muscular action. He expressed his opinion, that our experience in England of the good or evil effects of chloroform was far too limited for a decided opinion to be given on the subject; and referred Dr. Lee to the extensive use that is made of it with beneficial results in the United States.

Dr. Lee, in reply, stated that there was a vast difference between the birth of a child and the extraction of a tooth, or a stone from the bladder, or any other surgical operation; the latter being dependent upon external manual action, the former being a work of nature, dependent upon nervous influence. The child is expelled from the uterus by regular contractions, and the exhibition of chloroform stops this action, as he had seen and as he had heard from competent persons, who had attended cases where it had been administered. Moreover, he wished to know what was the dose of the drug that should be used. It was a pretence, merely to sprinkle a few drops of the liquid upon a handkerchief, and hold it over a patient's nose,—a process which he designated as "chloroform à la Reine." And when the forceps were necessary, how could the Medical attendant apply them with any safety when the woman was lying writhing about on the bed in convulsions following the use of this deleterious compound? No,—woman was to bring forth her young in pain and with sorrow. This was a Divine ordinance, doubtless founded with a wise and merciful intention; and he considered that the continuance of the discreditable and cowardly practice of seeking relief from a necessary suffering, by resorting to such measures as he was combatting, would be fraught with danger to her, not only physically, but also morally.

The Society adjourned at the usual hour.

MEDICAL SOCIETY OF LONDON.

December 17, 1853.

Forbes Winslow, M.D., D.C.L., President, in the Chair.

Mr. Haynes Walton exhibited the lower jaw of a Caffre, aged 25, who was shot during the late war. It was remarkable from its large size, compact texture, great weight, and the vertical position of the ascending rami.

Dr. E. Smith related the particulars of a case in which the drinking of water, rendered impure by animal matter, appeared to have induced both primary and secondary mischief. The family, consisting of a man, wife, and two children, were poor, and lived in a flat neighbourhood. The water supplied to them was from an Artesian well, and, on the occasion referred to, had emitted a very disagreeable odour. Soon afterwards, in October, the whole family were seized with severe diarrhœa, which lasted nearly a week, and attention having been directed to the cistern, a plate, covered with the remains of white herrings, was seen at the bottom. The plate and herrings had been missed for about three weeks, and having been removed from the cistern, the diarrhœa ceased. The diarrhœa and its cause were, therefore, fairly connected. The children recovered, and remained well for about a month, until the mother having returned from a house in which a case of scarlet fever had occurred, and having also brought an article of child's clothing from that house, the elder child, aged 3, had a severe attack of fever on the same night. Convulsions of a very severe kind occurred on the following day, and on the third day, that is, within forty-eight hours, the rash of scarlatina appeared. There seemed to be no doubt as to the source of the contagion. On the sixth day of the rash, Dr. Smith saw the case for the first time, and observed that the body was covered with very large patches of urticaria. At the same time the scarlet fever eruption appeared in the younger child, aged 1, and progressed properly until the third morning following, when laryngitis set in, and she died at night. On this day, the tenth day of the eruption, the elder child was also seized with laryngitis, and died in forty-eight hours. The point of interest in these cases was whether the animal poison had left such a condition of the system (or blood) as eminently predisposed it to the attack of scarlet fever and the fatal laryngitis. If so, it could not be that of debility only, since the children had enjoyed an interval of good health of a month's duration. The avidity to seize upon the poison of scar-

latina, as shown by the sudden attack of fever; the readiness to be influenced by it, as shown by the violence of the fever, the occurrence of convulsions, and the unusually short period of incubation, seemed to lead to such an inference. Moreover, urticaria and laryngitis are not common complications of scarlatina; and as the latter followed the affection of another mucous membrane—that of the bowels—its occurrence appeared to corroborate the inference. Urticaria, as is well known, is commonly caused by eating fish.

Dr. Winn gave the particulars of a case of complete alopœcia, which had occurred in a man who had been addicted to the use of tobacco. He had attended the patient three years previously, and by treatment had succeeded in renewing the growth of the hair. The sexual functions were much weakened during the occurrence of the alopœcia, but the patient had not previously suffered from mental depression or nervous symptoms.

This case gave rise to a discussion as to the amount of injury induced by the free use of tobacco. Mr. Clark had met with an instance in which distressing nervous symptoms had occurred on the night after the use of tobacco without drinking. The same patient had also experienced a numbness of the fingers supplied by the ulnar nerve.

The President, Dr. Chowne, and Dr. Crisp, entered into the discussion, and were of opinion that the use of tobacco was not so injurious as had been represented. It is used very largely in America, and by the Chelsea and Greenwich pensioners, and yet nervous or other symptoms of disease had not been observed to follow. Sir William Somerville was of opinion, that it was altogether beneficial to old men who had lost their teeth; since, by promoting the free flow of saliva, it improved the digestion.

Dr. Mackenzie then read a paper

ON THE SOURCE OF HÆMORRHAGE IN PARTIAL SEPARATION OF THE PLACENTA.

The author pointed out that three different opinions prevailed at the present day respecting the anatomical source of hæmorrhage in cases of partial separation of the placenta; the first affirming that it was principally or wholly uterine; the second, that it was principally or wholly placental; the third, that it was both uterine and placental. He further directed attention to the fact, that puerperal uterine hæmorrhage, whether occurring in connexion with partial or entire separation of the placenta, was generally considered to be principally venous, and he quoted passages from the writings of Drs. Simpson, Radford, Murphy, and Lee, in support of this statement. On reflecting upon these circumstances, he was led to believe that some light might be thrown upon the question by ascertaining experimentally the source of hæmorrhage in an animal whose placenta, like that of the human female, was both decidual and fœtal. A pregnant bitch was accordingly obtained, which had nearly completed the full period of gestation; the uterus was opened, several placentæ were detached, and the following observations made. 1. On separating each placenta, it was found that blood flowed freely and continuously from the denuded uterine surface, increasing with the detachment, while none escaped from the detached portion of the placenta. 2. That the blood which escaped from the uterus was distinctly arterial. 3. On rupturing a placenta while still partially adherent to the uterus, that a small quantity of dark venous blood escaped from the torn part. Thus it would appear, that in the canine species, the source of hæmorrhage in cases in which the placenta is partially detached is exclusively the denuded uterine surface so long as the placenta is entire, that the hæmorrhage is of an arterial character, and that a small quantity of dark venous blood escapes from the placenta on being lacerated while still partially adherent to the uterus. The results of this experiment were not, however, deemed conclusive as to the source of hæmorrhage in cases of partial separation of the placenta in the human female, on account of the different distribution of the veins in the maternal portion of the canine and human placenta respectively. Their anatomical peculiarities were briefly pointed out; and in the early part of April, 1853, the author had an opportunity of performing a more decisive experiment with the assistance of Dr. Sharpey. In this, the hypogastric arteries of the uterus of a woman who had died of internal hæmorrhage during labour, and in whom the placenta was partially adherent, were injected with defibrinated blood, and the organ, as well as the vessels from whence the blood escaped, were carefully noted. It appeared, on injecting the hypogastric artery, that blood escaped freely from the torn utero-placental arteries on the surface of the uterus; that none escaped from the torn uterine veins, or from the detached portion of the placenta; and it was ascertained, that the blood was not injected with greater force than that of the heart acting under ordinary circumstances. The opposite hypogastric artery was next injected, with the following results:—The blood escaped freely from the torn utero-placental arteries on the surface of the uterus; none escaped from the torn utero-placental veins; while, in this case, a small quantity escaped from the detached portion of the placenta contiguous to that which was still adherent. Repeated injections led to no other results; while it was particularly remarked, that the torn utero-placental arteries on the surface of the uterus were free from any plugging previously to being injected. Two things were thus clearly shown from this experiment,—First, the readiness with which blood escaped from the torn utero-placental arteries when the hypogastrics were injected; and, secondly, that these arteries had not been plugged by any coagula during life. Such facts, coupled with the results of the previously related experiment, and taken in connexion with various clinical circumstances, appeared to the author to afford strong grounds for the belief that the principal source of hæmorrhage in cases of partial separation of the placenta was arterial rather than venous, and uterine rather than placental; and he proceeded to consider the data upon which the opposite opinion had been affirmed. In doing so he quoted the following passage from Dr. Simpson's writings, as containing a reference to the several grounds upon which the occurrence of arterial hæmorrhage has been denied in cases of partial separation of the placenta. "Uterine hæmorrhage, after separation of the placenta," says Dr. Simpson, "in any of the stages of labour is not arterial in its character, because the utero-placental arteries are so long and slender as to become readily closed; 1st, by the tonicity of their coats; 2nd, by contraction of the uterine fibres upon them; and, 3rd, principally by the changes in their tissues produced by the mechanical rupture of their coats, torn arteries being little, if at all, liable to bleed, and the placenta being separated by a true process of avulsion." With reference to the first statement, that uterine hæmorrhage, after separation of the placenta in any of the stages of labour, is not arterial in its character, the author observed, that, so far as he was aware, it was one which was not only unsupported by any evidence, but directly at variance with many observations which he and other medical men had made. He referred to cases in which he had distinctly observed that hæmorrhage occurring between the birth of the child and the complete separation of the placenta was of an arterial character; and he referred to the fact, that the blood which escaped from the uterus of the bitch when the placenta was detached was of a bright arterial colour. With regard to the second point affirmed, that arterial hæmorrhage from the uterus is prevented by the tonicity of the utero-placental arteries, he observed, that, while he believed this to be generally the case in a state of health and tranquillity of the circulation, that, under other circumstances, it might be doubted whether such was the fact. The third doctrine affirmed, that hæmorrhage from the utero-placental arteries is prevented by contraction of the uterine fibres upon these vessels as they pass through and amid the uterine structure, was, in the author's opinion, completely invalidated by the well-known fact, that there is often no direct relation between the degree of uterine contraction and the degree or tendency to uterine hæmorrhage; and he further appealed to the two following series of facts as being opposed to its correctness:—1st. That in several instances the placenta has been spontaneously or artificially separated from the uterus before the birth of the child, and, consequently, under circumstances in which contraction of the uterus could not take place without any hæmorrhage supervening; and secondly, that when it has been attached to the os and cervix uteri its separation has been effected, in many cases, without any particular hæmorrhage resulting, although it is affirmed by some anatomists that there are few or no contracting fibres in the structure of the os and cervix uteri. The last proposition affirmed, that hæmorrhage from the utero-placental arteries is prevented by the changes in their tissues produced by the mechanical rupture of their coats, torn arteries being little or at all liable to bleed; and the placenta being separated by a true process of avulsion, was completely negatived by the author's experiments upon the pregnant bitch, for on detaching the placenta from the uterus, and thereby lacerating or tearing through the utero-placental arteries, arterial hæmorrhage was actually observed to follow; that is to say, having separated the placenta by a true process of avulsion, and thereby having torn across the utero-placental arteries, it was demonstrated that such proceeding was not productive of those changes in their torn coats which are assumed to follow such operation, and by which, it is alleged, arterial hæmorrhage is prevented. Upon the whole, it appeared that two things were certain; first, that no necessary relation existed between the degree of hæmorrhage, and the degree of separation of the placenta; or, secondly, between the degree of hæmorrhage, and the degree of contraction of the uterus. Uterine hæmorrhage having been variously mo-

derate or excessive under similar degrees of separation of the placenta, and similarly moderate or excessive under the opposite conditions of relaxation and contraction of the uterus. Could it, then, be doubted, that the absence or disposition to uterine hæmorrhage depended, in many cases, upon other causes than the anatomical connexion of the placenta with the uterus on the one hand, or the contractile mechanism of this organ on the other? Or, further, that these were to be sought for in the occurrence of arterial hæmorrhage, and the varying conditions of the utero-placental arteries, as modified by the general condition, of the arterial system. Bearing in mind this view of the case, the author maintained, that we could best account for the phenomena of puerperal hæmorrhages. We could understand how it might happen, that the tonicity of the arterial system being great, uterine hæmorrhage would be prevented when the uterus was most released, and when, consequently, venous hæmorrhage would be most liable to occur—that, under the influence of morbid excitement of the heart and arteries, it might be profuse when the uterus was contracted, and when venous hæmorrhage would be most effectually prevented; and that it might vary, in different cases, with the same amount of separation of the placenta.

Dr. Crisp was of opinion, that, in cases of partial separation of the placenta, the hæmorrhage is not from the denuded uterus, but from the free portion of the placenta. He had been requested to see a case of Mr. Howell's, in which serious hæmorrhage had followed delivery, and, on examination, observed a portion of partially adherent placenta projecting from the os uteri, and was assured, from the touch, that the blood flowed from that structure. The placenta was entirely removed, and the hæmorrhage ceased. He thought that abnormal position of the placenta frequently led to hæmorrhage, and that the latter is quite independent of an enfeebled state of system. He attached but little importance to the experiments of Dr. Mackenzie.

Dr. Winn, on the other hand, believed that similar experiments performed on animals would ultimately set the question at rest, and, while agreeing in the author's results so far as to affirm that hæmorrhage proceeds from the uterus, he differed with him in believing that the immediate source is the uterine sinuses, and not the uterine arteries. He thought that the distinction between the colour of arterial and venous blood, is sometimes liable to fallacy, since it is possible that the state of extreme nervous excitement of a patient in labour might render the venous blood of a more florid colour. A friend of his had observed, that on drawing blood from the arm of a patient labouring under pneumonia the colour was quite florid.

Dr. Murphy was quite confident, from his own experience, that, whatever may be the immediate source of hæmorrhage in these cases, the flow of blood ceases on the entire removal of the placenta. He thought it important to separate these practical facts from any theories. He then referred to the two classes of opinions; the one, held by a section whom he termed the Protectionists, that it proceeds from the uterus; and the other, supported by the Reformers, that it flows from the placenta; and believed both to have built their theories upon hypothesis, and not upon experiment. He congratulated the author on having taken a first step in the required direction, and advised him to repeat his experiments again and again. He, however, cautioned him to bear in mind the great difference which exists between vital and dead structures, since, after death, the parts lose their tonicity, and any plugs which may have once been formed remain, and prevent the passage of the injection; but, in the living structures, any new flow of blood may detach the plugs, and permit the vessels to pour out blood anew. The author had referred to Dr. Gooch's case, in which no hæmorrhage occurred, although the uterus remained of large size; and thought that so exceptional a circumstance could not support the deduction—that, therefore, the contraction of the uterus exercised no influence over the flow of blood.

Mr. Clark had assisted the author in his experiments, and bore testimony to the truthfulness of his descriptions, and the fairness of his deductions. He illustrated the latter by referring to those cases of post-partum hæmorrhage in which the flow of blood begins long after the placenta has been expelled; and also by stating that, as the direction of the current is from the placenta to the uterine sinuses, the latter can supply but little, if any, blood in such cases.

Mr. Streeter entered largely into the theoretical part of the discussion, and more particularly into the anatomical characters of the vessels of the uterus and placenta. He had paid great attention to these structures, and, ten years ago, had appended a comprehensive note to Moreau's plate exhibiting these anatomical characters. He reminded the Fellows that a venous sinus nearly encircles the placenta on its margin, and that the long tortuous utero-placental arteries having entered the cavernous structure of the placenta, and having lost all their coats but the inner one, terminate finally in this sinus through the direct medium of three or four large deciduous veins. These facts are exhibited in Moreau's plate, and in a preparation in Middlesex Hospital, and have generally been misapprehended by even profound anatomists. He believed that the tortuosity of these arteries tends directly to the arrest of hæmorrhage. If a placenta be so far detached, that the flow of blood into it is greatly enfeebled, a clot will be found to form upon the free portion; but where the greater part remains attached, such may not always be the case. Such, also, had been the case in the author's experiments on the human uterus. As to experiments on the lower animals, he thought that the quadrumana should be selected, on account of the similarity of their utero-placental structure to that of woman; but that such experiments on bitches would be worthless. He then addressed himself to the practical part of the subject, and affirmed, that continued and steady pressure is the best remedy. The clot is not fully formed in less than three hours; and as, during that period, the hæmorrhage may recur, it is not safe to leave the patient very soon after delivery. When blood poisoning follows parturition, it is from a softening of the fibrin in the veins referred to.

Dr. Snow Beck was prepared to defend each of the author's opinions seriatim; but stated, that the author's facts might be admitted and referred to apart from his deductions. He did not think that the uterine veins could be the sources of hæmorrhage, and had met with several cases of partially detached placenta, in which the hæmorrhage did not cease on perfect separation of that organ. He also had met with a case so far resembling one mentioned by the author, that the colour of the blood was distinctly florid, and the source, as he believed, arterial, and the hæmorrhage in that case diminished or increased with the state of contractility of the organ. He would make a distinction between the contractility of the uterus as a whole, and that of the walls of the organ, and believed that the flow of blood through the vessels is rather due to the latter circumstance. This state is induced when the uterus is manipulated either within or without; and in those instances in which the hæmorrhage was arrested on detachment of the placenta, the arrest might have been due solely to the contraction induced by the manipulation.

Dr. Mackenzie replied, that he could not agree with Dr. Winn as to the very small size of the utero-placental arteries, for, in the case he had referred to, they were at least of moderate calibre, and certainly the streams of blood which poured from them when the hypogastrics were injected were of a very formidable character; nor did his observation respecting the similarity between the colour of arterial and venous blood, when the circulation was greatly excited, apply to his cases, because, in them, this excitement did not exist, and, in the one, dark, venous-looking blood was observed to flow from the uterus mixed with arterial. Mr. Streeter had referred to the tortuosity of the uterine arteries as being a barrier to arterial hæmorrhage; but this did not prevent the occurrence of arterial hæmorrhage in the bitch when the utero-placental arteries were torn across. He also replied to the observations of Dr. Crisp, Dr. Murphy, and Mr. Clark.

At the next meeting of the Society, on Saturday, January 7, 1854, a paper will be read by Dr. Fuller "On the Excretions as Guides to the Administration of Remedies in Rheumatism and Rheumatic Gout." The next Physiological Meeting will be held on Monday, January 9, when Mr. Richardson will read a paper on "The Process of Calorification in Animal Bodies."

NORTH LONDON MEDICAL SOCIETY.

December 14.

Charles Tunaley, F.R.C.S., Vice-President, in the Chair.

Mr. Erichsen related the particulars of a case of hip-disease in which he had recently excised the upper end of the femur, and removed a small portion of the acetabulum. Drawings of the case and the excised portions of bone were exhibited. The patient, a lad of 16, had suffered from the disease for eight years. He was reduced to the lowest stage of emaciation and hectic, but had improved materially since the operation, which was performed a month ago, and the case promised a very favourable issue.

In reply to an inquiry of the President, Mr. Erichsen stated that the case arose from injury, and not from constitutional disease; after which

Mr. Erichsen read a detailed account of a case in which he had recently successfully extracted a large ovarian tumour from a lady 65 years of age. The tumour, which was principally solid, and weighed about sixteen pounds, was removed by the long incision. The patient made an excellent recovery, not having had a bad symptom. Mr. Erichsen stated, that so far as the surgical management of these cases was concerned, he thought the principal points deserving attention were to proportion the length of the incisions to the magnitude of the tumour, to diminish this in size by tapping, after the abdomen had been opened, and, in ligaturing the pedicle, to take care that the peritoneal investment of this root was dissected off along the line of application of the ligature. In this way the risk of peritonitis was lessened very materially. He also advised that the stump of the pedicle should be well drawn out through the lower part of the line of incision, and fixed there by twisting its ligature round the hare-lip pins, by which he recommended this part of the incision to be closed. Mr. Erichsen then proceeded to discuss the general question as to the propriety of extracting ovarian tumours, and, after pointing out the serious and often rapidly fatal character of this disease, the inutility of medical treatment and the dangers of tapping, expressed his opinion, that the operation was a sound and legitimate one in those cases in which the growth had begun seriously to interfere with the comfort of existence and the healthy action of the abdominal organs, the patient wasting and suffering much discomfort from her size, with difficulty of breathing, repeated vomiting, and gastric irritation. In these cases he saw no chance of giving the patient any effectual relief, except by the ablation of the tumour, which statistics showed could be done with success in nearly two cases out of three. He next proceeded to discuss the difficulties of the operation, which were rather of a medical than of a surgical character, consisting in the diagnosis of the existence of such adhesions as would prevent the removal of the growth, or in the difficulty that occasionally occurred of discriminating between ovarian and other kinds of abdominal tumour that did not admit of extirpation.

Dr. Greenhalgh, after eulogising Mr. Erichsen's paper, related the case of a young woman, twenty-one years of age, who, after being struck over the region of the left ovary, presented symptoms of ovaritis which yielded to calomel and opium, leeches, etc. Some time after recovery from the acute symptoms, a swelling about the size of an orange was detected in the iliac fossa, which continued to increase, and appeared, by its pressure, to interfere increasingly with the development of three children borne during the ensuing seven years. It was pronounced by skilled practitioners to be ovarian, and a fit case for removal. After her last confinement she sank from exhaustion, and the tumour was found to be a kidney, the subject of cerebriform disease, weighing twenty-seven pounds. After relating a case of successful ovariotomy, and adverting to the treatment required after operation, he concluded by giving it as his opinion that, in certain cases, not only was the operation justifiable, but imperatively called for.

Mr. Tunaley narrated a case of a lady, 26 years of age, mother of two children, who, seven months after her last confinement, consulted him respecting a swelling in the right iliac region, which he pronounced to be ovarian. So strong a conviction of pregnancy existed in the minds of the patient and her friends that no mode of treatment was permitted, and, in September, 1853, Mr. Tunaley was told the patient was near her confinement. At this time, beyond the size, no symptom of pregnancy existed, and the unimpregnated womb was pressed firmly down by the tumour. Numerous opinions were now sought, and the diagnosis confirmed by all until the end of October, when one gentleman pronounced her seven and a-half months advanced in pregnancy, and, at the end of one month, reiterated this opinion. On this account no measures were even yet permitted. On the 4th inst., Mr. Tunaley was summoned to the labour, and, on examination, discovered that a fœtus, some two months old, was discharged ex utero. Three days after this miscarriage, the patient was as well as usual; no difference existed in the size of the abdomen; peritonitis set in; and, on the seventh day, the patient sank. At the *post-mortem*, a multilocular ovarian tumour, weighing forty pounds, was found. Mr. Adams gave an analysis of the contents, which Mr. Tunaley presented to the Society, together with the preparations of the tumour and the fœtus.

Dr. Ballard read an elaborate analysis of a large number of cases of ovarian disease, and deduced a favourable opinion in favour of ovariotomy.

Mr. Part concurred in the previous opinions of the value of Mr. Erichsen's paper, and thought, in denuding the stump of its peritoneal covering, he had avoided a very frequent source of danger. His experience of the progress of these cases after tapping coincided with that expressed by previous speakers. Mr. Part related a case in which the cyst, after being twice tapped, rapidly filled with fetid gas, which interrupted, by the distension it occasioned, all the functions of the abdominal viscera.

After some further conversation, Mr. Erichsen replied.

MEDICAL NEWS.

Cambridge University.—The Regius Professor of Physic will commence the course of lectures on Pathology on Monday, January 30, at ten a.m., at the Anatomical Schools, and will continue to lecture every Monday, Wednesday, and Friday, during the remainder of the term, at the same hour.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 16th inst. :—

Baxter, Henry Elmhirst, Tickhill, Yorkshire.
Ewington, Wm. Frederick, New Zealand.
Favell, William Fisher, Sheffield.
Harvey, Andrew, Penzance Cornwall.
Heron, William, St. Andrew-street, Dublin.
Holden, John Fearne, Hull, Yorkshire.
O'Donnell, Francis, Ballingarry, County Tipperary.
Penny, James Champion, Fulham.
Punch, James Golden, Cork.
Terry, Thomas, Bath.
Scobell, George Richard, Henley-on-Thames.
Ticehurst, Wm. Duke Tidd, Hon. E. I. C. S., Bombay.
Worthington, Richard Jukes, Llancaiach, Glamorganshire.

The following gentlemen were admitted members on the 21st instant :—

Butler, Ebenezer Robert, Woolwich.
Dykes, George Samuel, Hull.
Graham, Henry William, Hon. E. I. C. S., Bengal.
Merryweather, Henry Collins, London.
M'Intyre, Patrick, Bury St. Edmunds.
Roberts, Edmund Humphrey, Ucheldre-park, Holyhead.
Stevenson, Frederick, Loughborough.
Willett, Matthew, Bristol.

APPOINTMENTS.

Medical.—Dr. T. R. Mitchell has been appointed Surgeon to the Sailors' Home, Liverpool.

Naval.—Assistant-Surgeon William G. Hill (1853), to the Saracen, brig, at Devonport.

Military.—8th Regiment of Light Dragoons: Surgeon George Anderson, from the 12th Light Dragoons, to be Surgeon, vice Foaker, who exchanges. 12th Light Dragoons: Surgeon George Northon Foaker, from the 8th Light Dragoons, to be Surgeon, vice Anderson, who exchanges. Hospital Staff: John Coote Ovens, Gent., to be Assistant Surgeon to the Forces, vice Mackenzie, deceased. John Halyburton Ross, M.B., to be Assistant-Surgeon to the Forces, vice Matthew, deceased.

Militia.—1st Devon: Henry Thomas Hartnoll, to be Assistant-Surgeon. Hampshire Regt.: Leonard Aust Lawrence, to be Assistant-Surgeon.

DEATHS.

Shanks.—At Hobart Town, Van Diemen's Land, on the 28th of August, Dr. Archibald Shanks, Deputy-Inspector General of Army Hospitals, and Principal Medical Officer in the Colony.

Macwhirter.—At his house, 50, Moray-place, Edinburgh, Dec. 13, Dr. John Macwhirter, late of the Hon. East India Company's Medical Service, Bengal.

Rawes.—Dec. 14, at 29, Eastbourne-terrace, Hyde-park, W. Rawes, Esq., M.D., in the 69th year of his age.

Trant.—Dec. 14, at his residence, 5, Kennington-oval, Nicholas Trant, Esq., Surgeon, late of County-terrace, New Kent-road, in his 43rd year.

Naval.—Portsmouth, Dec. 15.—The Basilisk, 6, steam-sloop, returned to Spithead this morning after eight months' absence in the fishery waters on the North American Station. Her Assistant-Surgeon, Mr. Stephens, had been sent to Bermuda to assist in tending the sick with yellow fever at that place. Surgeon Wilkinson, of the 76th Regiment, on sick leave, came home in the Basilisk.

King's College.—A large meeting of the past and present Medical students of this Institution was held on Friday, 16th December, for the purpose of presenting a testimonial to Dr. Todd, on the occasion of his resigning the Professorship of Physiology, after having held it for upwards of seventeen years. Professor Fergusson having taken the chair, made some excellent introductory remarks previous to calling on Mr. William Palmer, one of the present students of the College, to present the testimonial, which this gentleman then did, begging Dr. Todd's acceptance

of a valuable silver tea-kettle and a silver salver, as a mark of the great respect and esteem entertained for him by all who had ever had the pleasure of being his pupils. Dr. Todd replied in a speech, which gave rise to vehement cheering; and the meeting having been addressed by Dr. Miller, Dr. Brinton, and others, the proceedings terminated by the passing of votes of thanks to the Chairman, and to Dr. Tanner, the treasurer of the fund.

THE COMPULSORY VACCINATION ACT. — The following Memorial has been kindly forwarded to us by Dr. Aikenhead:—To the Honourable the Commissioners of the Poor-law of England and Wales, the Memorial of the undersigned Medical Practitioners resident within the limits of the Chorlton Union, respectfully showeth: — That experience has already demonstrated the Compulsory Vaccination Act to be an inefficient measure, since, while it requires Medical Practitioners to furnish duplicate certificates of successful vaccination, it contains no provision for remunerating them for the trouble such certificates must occasion. Neither has the Act any power to enforce the production of these duplicates, this object being only attainable by an indictment for misdemeanour. The adoption of this course would render the measure still more odious both to the Profession and to the public, and would further tend to defeat the objects contemplated by its promoters. That, in the opinion of your Memorialists, all the purposes of the Act would be attained by appointing each qualified practitioner a vaccinator, and by paying him for every duplicate certificate of successful vaccination. That, while the adoption of this plan would encourage the younger practitioners to vaccinate the children of the poor, it would, by its recognition of the just claim of the Profession to remuneration for its labour, lead all classes of its members to co-operate heartily in giving effect to the Act, and thus make the practice of vaccination universal. [Here follow forty-three names, constituting six-sevenths of the whole Profession within the union, exclusive of the present district vaccinators.]

PHARMACY IN PARIS.—A report from the Minister of Public Instruction recommends the suppression of the Chair of Medical Chemistry left vacant by the death of M. Orfila, and the substitution for it of a Chair of Pharmacy, as being of more general utility. An imperial decree approves of the recommendation of the report, creates the Chair of Pharmacy so proposed, and appoints to the new Chair, thus established, Dr. Soubeiran, Professor at the Superior School of Pharmacy of Paris.

YELLOW FEVER has ceased its ravages to a considerable extent in Demerara.

MALARIA AND ITS EFFECTS. — In the second week in November last, the festivities annually celebrated in connexion with the Cowbridge Hunt took place as usual. The race ball had passed off with great brilliancy. In a few days, however, the greatest consternation was occasioned by the circumstance, that several ladies and gentlemen who had been present were attacked by a fever of a most obstinate and dangerous character, the symptoms of which, it is stated, are precisely similar to those of the epidemic fearfully celebrated as the "Croydon fever." The number of the sufferers is variously reported from twenty to forty; and it is asserted, that this distressing affliction has been occasioned by the accidental breaking into an old drain during some alterations carried on in the immediate vicinity of the ball-room, and which, it is said, had not been opened for upwards of twenty years. The servants of the inn and other inmates of the house have been attacked with the distressing malady.—*Swansea Herald.*

PROCURING ABORTION.—At the Assizes (Northern Circuit), Joseph Moore was charged with having administered savin to Mary Fielding, with intent to procure abortion. It appeared that the prosecutrix discovered that she was pregnant, and made this known to the prisoner. The prosecutrix, at the prisoner's request, went to a woman named Simpson, and from her obtained a bottle containing oil of savin; she also, at prisoner's request, visited a Dr. Wilhelm, at Halifax, who went by the name of the "Baron von Prediger," and from him received some medicine, and had a lotion administered with a syringe. The prosecutrix submitted to take these medicines because the prisoner told her that no harm would happen to her; that he had had three children by a girl at Portsmouth, and they had been disposed of without doing her any harm. At first she refused, but eventually went to see Dr. Wilhelm, when something she took, which, on the part of the prosecution, was said to be oil of savin, made her very ill, but did not procure abortion. For the defence, Dr. Wilhelm gave evidence that the prisoner was labouring under disease, and that the prosecutrix consulted him for the same cause, and that he administered to her proper medicines to cure the disease under which she was labouring; that he did not know she was pregnant, as she did not tell him. The jury found the prisoner guilty.

MERCURIAL POISONING BY WORM LOZENGES.—On Friday last, an inquest was held in Lambeth on the body of Miss Emma Goodman, a lady 46 years of age. Three weeks before her death, she sent to Mr. Ball, a chemist, 77, St. George's-road, for six worm lozenges, for which she paid three halfpence. She took one a-night for four nights in succession; and, about three days after, her tongue and gums became dreadfully swollen. Medical aid was procured, and medicines were administered; but she died on Tuesday last. Dr. Humble, who attended the deceased, said, the lozenges were composed of calomel, and that the deceased had died from mercurial poison. If there was one thing more dangerous than another, it was taking calomel in the shape of a lozenge. It having been proved that Mr. Ball gave no instructions with the lozenges, the Coroner and jury commented on his conduct, and a verdict of "Accidental Poisoning" was recorded.

MORTALITY NOTABILIA.—In the week that ended on Saturday the total number of deaths registered in London was 1358. Increased coldness of the weather has acted unfavourably on the public health during recent weeks, and the present return shows that its effect, an advanced rate of mortality, has not abated. In the ten weeks corresponding to the last week of the years 1843-52, the average number of deaths was 1210, which, if raised in proportion to increase of population, becomes 1331. The 1358 deaths of last week show an excess of 27 on the calculated amount. Zymotic diseases are, in the aggregate, scarcely more fatal than usual, but the mortality of hooping cough is high. 64 children having died from it. Small-pox was fatal in only 3 cases, measles in 39, scarlatina in 33, croup in 10, typhus in 56, diarrhœa in 27. Fatal cases arising from diseases of the respiratory organs amount to 319, while the corrected average of ten corresponding weeks is 299. In this class bronchitis was most fatal, numbering 163; pneumonia carried off 121 persons, nearly all children, asthma 20, laryngitis 4. The deaths from phthisis were 144.

Births.—Last week the births of 771 boys and 786 girls, in all 1557 children, were registered in London. In the eight corresponding weeks of the years 1845-52 the average number was 1413.

Meteorology.—At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·512 in. The mean temperature of the week was 32·7°, which is 7·3° below the average of the same week in 38 years. On Friday, "a painfully cold day," the mean daily temperature fell 13° below the average of the same day; and on four other days it was 8° or 9° below it. The mean dew-point temperature was 29·4°. The wind blew for the most part from the north-east. Horizontal movement of air, 525 miles; rain, 0·12 in.; electricity, positive and tension strong; volleys of sparks shown while snow was falling.

DEATHS *in the Metropolis for the week ending Saturday, December* 17, 1853.

CAUSES OF DEATH.	DEC. 17. 0	15	60	All Ages.	Sum of Ten Weeks.
ALL CAUSES	638	388	311	1358	12104
SPECIFIED CAUSES	636	387	311	1336	12036
1. Zymotic (or Epidemic, Endemic, and Contagious) Diseases ...	205	46	17	268	2673
SPORADIC DISEASES:					
2. Dropsy, Cancer, and other Diseases of uncertain or variable seat ...	5	17	30	52	473
3. Tubercular Diseases	68	118	12	198	1758
4. Diseases of the Brain, Spinal Marrow, Nerves, and Senses ...	71	38	41	151	1322
5. Diseases of the Heart and Blood-vessels	...	27	20	47	410
6. Diseases of the Lungs and of the other Organs of Respiration ...	169	66	84	319	2720
7. Diseases of the Stomach, Liver, and other Organs of Digestion...	28	25	12	65	558
8. Diseases of the Kidneys, etc. ...	2	12	8	22	108
9. Childbirth, Diseases of the Uterus	...	6	...	6	124
10. Rheumatism Diseases of the Bones, Joints, etc.	4	3	1	8	85
11. Diseases of the Skin, Cellular Tissue, etc.	...	2	1	3	13
12. Malformations	...	...	1	1	30
13. Premature Birth and Debility ...	46	4	1	51	248
14. Atrophy	19	...	10	29	200
15. Age	...	...	70	70	656
16. Sudden	3	6	2	12	168
17. Violence, Privation, Cold, and Intemperance	16	17	1	34	490
CAUSES NOT SPECIFIED	2	1	...	22	68

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BOOKS RECEIVED.

The Physicians', Surgeons', and General Practitioners' Visiting List, Diary, and Almanack. London; Smith.
Handbook of Inorganic Analysis. By Wöhler. Edited by Hofmann. London: Walton and Maberly
The Diseases of the Heart and the Aorta. By William Stokes, M.D. Dublin: Hodges and Smith.
Band of Hope Almanack.
The Critic. No. 305.
The Odontalgist. By J. Paterson Clarke, M.A. London: John Churchill. 1854.
Medico-Legal Observations upon Infantile Leucorrhœa. By W. R. Wilde, F.R.C.S. London: John Churchill. 1854.
Guy's Hospital Reports. Vol. VIII. Part II. London: John Churchill. 1853.

TO CORRESPONDENTS.

[To the Editor of the Medical Times and Gazette.]

SIR,—As some of the Author's doggerel verses on *Homœopathy* were inserted last year, in that corner for all questionable productions, "Notices to Correspondents," it is hoped that the Editor will not show himself so deficient in poetical taste as to reject the enclosed lines, which the writer thinks are of a *practical* character.

THE MICROSCOPIST'S DREAM.

One night I sleepy went to bed,
Histology was in my head,
And soon I dreamt I heard a cry;
A Microscope came running by,
When suddenly it made a stand
Like soldier, ready at command;

And, much to my surprise and awe,
It 'gan to speak with lifted claw,
And told me plainly all I saw,
In *fancy*, on the night before.

"Those things, it said, of caudate shape
Are made by squeezing fibres flat;
And cells, *you* think, of nuclei full,
Are only granules on the wall!
Cells plastic, compound, and the globules,
Are all deceitful as air-bubbles!
The large blood-discs (so called) in *spleen*,
Are only layers of albumen!

"For how could capillary small,
Carry big globules, cell, and all?
Hereafter these queer plates will be
Patterns for carpet factory!
But I've a fact, that will disclose
The prejudice of some of those
Who through me gaze.

"Last night, a lady, with bright eye,
Said she her lover did espy;
When parson looked with fervour warm,
He saw at once two sleeves of lawn;
And alderman, with civic myrtle,
Thought he could behold a turtle;
But, after all, to crown my tale,
The thing was just as like a whale!"

Now I'm awake, though strange it seem,
I ask myself *was* this a dream?

I am, etc. E. C.

Parliament-street, Dec. 17, 1853.

[To the Editor of the Medical Times and Gazette.]

SIR,—Will some of the authorities connected with Guy's Hospital explain why the late Astley Cooper prize on the Spleen, awarded in July last, is not visible? According to the will of the late Sir A. Cooper, the Prize Essay, with the preparations and drawings, are to be deposited in the library or museum, and are to be "the exclusive property of the Hospital."

Dec. 10, 1853. I am, &c. INQUIRER.

Mr. W. Parker has forwarded us a copy of a letter from Mr. Gilbert Cotton, of Barnstaple, stating that Mr. Hope, who was surgeon of the ship Dolphin in 1825, treated 264 cases of cholera, every one of which recovered by the following mixture:—Nitrous acid 1 drachm, (not nitric, which he says failed,) tincture of opium 40 minims, in peppermint water or camphor mixture. A fourth part to be taken every three or four hours. Mr. Parker remarks on the similarity of this to the Austrian remedy, analysed by Mr. Herapath. We can only say, we do not believe that the 264 cases were cases of cholera.

Dr. W. D. Adams.—1. Yes, by a licence from the London College of Physicians. Many practise without the licence. 2. Yes. The powers of the Apothecaries' Company can only be exercised when a medical man dispenses medicine.

[To the Editor of the Medical Times and Gazette.]

SIR,—I beg to enclose you a letter I received from the clerk to the Rye Guardians, the latter part of which will show, that in addition to the visits the Medical Officers of Unions are obliged to pay after vaccinating any child, filling up two certificates, besides keeping a book called "Return of Cases of Vaccination," we are also expected to prosecute those parties who do not comply with the new law—and all this is to be done, as in my case, for the handsome fee of 1s 6d.

The facts of the case are these:—I vaccinated a child aged 10 weeks, on November 13, and, as he was not brought to my surgery on the eighth day, I sent the parents a message, warning them of the risk they were running, and telling them to send the child up the next morning, which they did not choose to do. I then wrote to the Board about it, as I had asked one of the guardians previously to whom I should complain; he answered, "the Board." I did so, and the enclosed letter was the result.

I am, &c. E. F. SANKEY,
Beckley, Sussex. Surgeon No. 2 District, Rye Union.

"In reference to the other part of your letter, as to the Guardians 'inflicting a fine' on a parent for not attending with her child for your inspection, I beg to state, that the Guardians have no power, in their official capacity, to compel such attendance, or to take proceedings for the fine to be inflicted by the magistrates; but it is competent for any person of their own motion to institute such proceedings

"I am, Sir, your obedient servant,
"H. E. PAINE, Superintendent-Registrar.

"E. F. Sankey, Esq., Beckley."

[To the Editor of the Medical Times and Gazette.]

SIR.—In your report of my speech at the last meeting of the Physiological Society, it is stated, "that I introduced the poison of the viper into the mouth." Such a mode of introduction, I need scarcely add, would be useless, as in the higher animals the poison may be introduced in this manner with impunity. The poison was inserted under the skin of the mouth, and other parts of the toad and snake (now alive), and into the bodies of several insects; but the experiment was inconclusive, (as I stated at the Society on a former occasion,) for this reason, I did not first destroy a small animal with it, such as a mouse or a bird. I am now prosecuting these experiments, and if it should turn out hereafter that the venom of the poisonous serpents exerts but little or no deleterious influence upon some, or all, of the invertebrate animals, the fact may lead, I think, to practical good. I am, &c. EDWARDS CRISP, M.D.

21, Parliament-street, Dec. 17, 1853.

George Gibson, Esq.—The question is so purely personal, that we had rather not enter into it.

Dr Neale's Paper shall be inserted as soon as possible in the new volume.

Dr. Fearnside.—The paper has been received, but we have not had time to read it as yet.

Dr. Parker's interesting paper shall be published shortly.

Mr. Lizars' letter shall also appear very soon.

A Subscriber.—The Leyden degree may be very respectable for a native of Leyden; but, when our countrymen take foreign degrees, the inference naturally is, that they could not obtain one in their own islands; so that the possessor gains rather discredit than honour by his purchase.

Dr. O'Brien Collins, Cape of Good Hope, suggests, that *yeast* should be tried in the treatment of diabetes.

Nemo very properly draws attention to the necessity which exists for the better warming, ventilation, and drainage, of Dissecting-rooms.

Mr. Cleveland's case shall appear.

Dr. Crane.—The paper is an interesting one, and shall be published.

Dr. Merriman.—We are sorry that we have not space for the letter on Chloroform this week. The postscript since received shall be added.

Thomas Stainthorpe, Esq.—The delay has been unavoidable, but the paper shall appear.

Dr. Seaton Reid.—The letter shall be published, and we shall be glad to hear the results of the quarantine system at Belfast.

St. John Edwards, Esq.—The case shall appear in the new Volume.

R. Boyd, Esq.—It is only under very peculiar circumstances that we can admit letters replying to the statements of other journals.

Samuel Knaggs, Esq.—We shall take an early opportunity of expressing our views on the subject.

George Robb, Esq —Appointments in the East India Company's service can only be obtained by application to the Directors; but very shortly they will be thrown open to competition, upon a plan which has not yet been decided on.

A First Year's Man.—Read Mr. Adams's late work on the prostate gland.

In Dubiis.—April, 1854. Dr. Steggall.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is now known to all, that many cases have occurred in which immediate death was produced by the inhalation of ʒj. of chloroform. I have grounds for suspecting that this subtle and dangerous poison was administered to the Queen of Portugal during her last calamitous accouchement. It would further the best interests of science and humanity if positive information could be procured upon this subject; and it is not improbable that some of your numerous Correspondents may be acquainted with the fact. I am, &c. A. B.

[Our Correspondent refers also to another rumour, which we know to be incorrect.—ED.]

COMMUNICATIONS have been received from—

Dr. NEALE, Ombersley; Mr. BRODHURST; Dr. COGSWELL; Dr. E. SMITH; Dr. E. CRISP; Mr. COUSINS; JOHN SMITH, Esq.; J. B. SCRIVEN, Esq., Burmah; Dr. PARKES; Dr. TANNER; SECRETARY OF THE ROYAL INSTITUTION; J. STRINGFIELD, Esq.; Dr. AIKENHEAD; W. M. CULPEPER, Esq.; W. F. CLEVELAND, Esq; Dr. RAMSBOTHAM; Dr. HOFMANN; Dr. MAYO; E. C.; INQUIRER; Mr. W PARKER; Dr. CRANE; Dr. W. D. ADAMS; Mr. GEORGE GIBSON; Dr. FEARNSIDE; Dr. PARKER; Mr. LIZARS; A SUBSCRIBER; NEMO; Dr. CRANE; Dr. MERRIMAN; Mr. STAINTHORPE; Dr. SEATON REID; Mr. ST. JOHN EDWARDS; A FIRST YEAR'S MAN; IN DUBIIS; A COUNTY ASYLUM MEDICAL OFFICER; JAMES DIXON, Esq.; Mr. LAWRENCE; Mr. JAMES; Mr. HORNIDGE; Mr. SUMMERS; JOHN IRVINE, Esq.; Mr. T. R. WILLIS; CHIRURGUS; etc., etc.

ORIGINAL LECTURES.

A COURSE OF LECTURES ON ORGANIC CHEMISTRY,

DELIVERED IN THE

Laboratory of the Royal Institution of Great Britain.

By DR. A. W. HOFMANN, F.R.S.

Professor at the Royal College of Chemistry.

Lecture XVI.

ETHER.

Gentlemen,—You have already become acquainted with two products which are generated by the action of sulphuric acid upon alcohol, namely, with sulphovinic acid and olefiant gas. A third product of this reaction, equally interesting for its chemical characters, for the remarkable circumstances under which it is formed, and for its extensive applications in medicine and in the arts, remains still to be discussed. I allude to ether and the process of etherification.

I have mentioned that a mixture of one part of alcohol and two parts of sulphuric acid gives rise to the formation of sulphovinic acid, the temperature of the liquid rising generally to 100° C. (212° F.), in consequence of the reaction. If this liquid be heated to ebullition, decomposition ensues, and an extremely volatile body distils over, and condenses in the receiver in the form of a remarkably mobile transparent liquid, which, being lighter than water, floats upon it without mixing with it. It possesses a pungent odour, and is highly inflammable. This body is *ether*, frequently called sulphuric ether, on account of sulphuric acid being used in its preparation; the latter term is, however, unfortunate, inasmuch as it is likely to lead to the erroneous impression that this substance contains sulphuric acid.

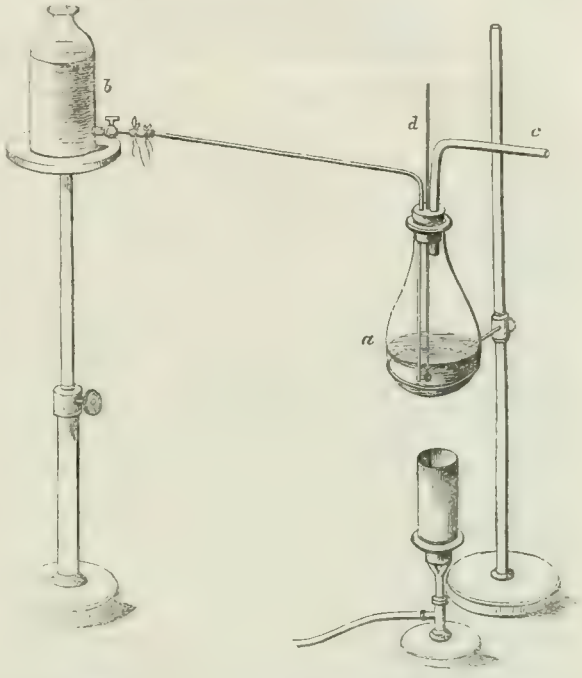
The simplest atomic expression of ether is the formula,

$$C_4 \quad H_5 \quad O;$$

which shows that there is a close relation between this substance, on the one hand, and alcohol and olefiant gas on the other hand. Ether stands midway between these two bodies. We have indeed

Alcohol . . .	$C_4 H_6 O_2$	$= C_4 H_5 O, HO$	$= C_4 H_4 + 2\,HO$
Ether	$C_4 H_5 O$	$=$	$C_4 H_4 + HO$
Olefiant gas	$C_4 H_4$		

A glance at these formulæ shows you that alcohol and ether may be viewed as compounds of olefiant gas respectively with 1 and 2 equivalents of water, or that the pre-existence of ether may be assumed in alcohol, which would accordingly become a hydrated ether; and, in fact, both these views have been long entertained and advocated by different Schools of Chemistry. Whichever of these views be taken, the formation of ether is assumed to be due to an elimination of the elements of water from the molecule of alcohol. But here the same difficulty presents itself which I pointed out in the case of olefiant gas; it is impossible to explain this separation by the attraction which sulphuric acid possesses for water; for experiment shows that the water which is eliminated in the formation of ether does not combine with the sulphuric acid used in this process of etherification. The proportions of sulphuric acid and alcohol which are used in the preparation of sulphovinic acid by no means yield the largest amount of ether. It has been found by experience that the most convenient proportions for the production of ether are, 3 parts of sulphuric acid, of 1·89 spec. grav., and 2 parts of alcohol, of 0·83 spec. grav. This mixture, when submitted to distillation, yields a distillate which consists of two layers, the lower one being water containing a small quantity of ether, the upper one consisting of ether which retains traces of water; both layers contain, moreover, a small amount of alcohol. The residuum in the retort consists of sulphuric acid slightly coloured by its action on impurities which are invariably present in the alcohol. This experiment clearly shows that that portion of the water which separates from the alcohol does not combine with the sulphuric acid. But it can be shown without difficulty, that not a particle of this water enters into combination with the sulphuric acid.



The apparatus before you illustrates the etherification of alcohol by the so-called continuous ether process. The flask *a* contains a mixture which is used for making sulphovinic acid, (1 part of *absolute* alcohol and 8 parts of concentrated sulphuric acid). It is closed with a cork, provided with three holes, through which are fitted a tube, communicating with the glass reservoir *b*, containing a known quantity of absolute alcohol, a thermometer *c*, and a delivery tube *d*, which is connected with an appropriate cooling apparatus, by means of which the ether-vapour, which will rise from the mixture, is condensed. The liquid in the flask is now heated until the temperature rises to 140° C. (284° F.), when a slow stream of alcohol is supplied from the reservoir, which, by means of a stop-cock, must be so regulated that the temperature of 140° remains as near as possible stationary; etherification rapidly sets in, and if proper care be taken to condense the whole of the product of distillation, the mixture of water and ether collected in the receiver will be found exactly equal to the amount of alcohol which has flowed out of the reservoirs during the operation; in fact, if the water and alcohol were to be recombined, they would produce exactly the same quantity of absolute alcohol which has been consumed during the experiment.

The operation which I have described to you, reminds you of the analogous preparation of olefiant gas(a). In both reactions, the alcohol splits into carbon-compounds and water, without a trace of water combining with the sulphuric acid which is present, and which is evidently the cause of decomposition. The manner in which the sulphuric acts in these processes, and especially in etherification, has been a favourite subject of speculation.

(a) Lecture XV.

An important part has been attributed to the formation of sulphovinic acid, which is a substance of great instability, and readily decomposable into ether and common sulphuric acid. However, all the explanations hitherto given were found unsatisfactory, so that many chemists contented themselves with assuming in these processes a peculiar force, which, as I have stated, was designated as "catalysis." It was said that the formation of ether was due to a catalytic action, and that sulphuric acid in this process acted by its presence only.

Our notions regarding the formation of ether have assumed a new shape, and acquired a high degree of precision, by the observation of a new re-action, in which ether is formed,—an observation which was made several years ago by Dr. Williamson, and which, in the hands of this chemist, has become the key of etherification. However, before entering more fully into this subject, it is desirable that you should be acquainted with the leading characters of ether.

Ether, as obtained by the process which I have described, is never perfectly pure. The small quantity of alcohol, which it contains, is readily separated by water. It almost invariably happens that a trifling portion of sulphuric acid is carried over mechanically during the process of distillation, and that sulphurous acid is produced by the presence of foreign substances in the alcohol. The crude ether contains, moreover, small quantities of a complex substance, known by the name of "oil of wine." This body, traces of which, in consequence of a secondary re-action, are invariably produced during the process of etherification, consists of two hydrocarbons, of very unequal volatility, the properties and composition of which are but imperfectly understood. It is formed in rather larger quantity if the distillation of the ether-mixture in the ordinary ether process be carried too far, or if in this continuous process a given quantity of sulphuric acid be allowed to convert too large a quantity of alcohol. Treatment of the crude ether with milk of lime and rectification in the water-bath separate the acid-products, the oil of wine, and nearly all the alcohol. But the ether thus obtained still contains water, from which it is separated by allowing it to stand over fused chloride of calcium if traces of alcohol be still present; or over anhydrous lime, if the alcohol have been removed by shaking with water. A final rectification yields the ether in a state of perfect purity.

Thus prepared, ether is a colourless transparent liquid, of a very penetrating odour, and a sweetish burning taste. It has no action upon vegetable colours. It is much lighter than water, with which it does not mix; its specific gravity being at 0° C (32° Fah.) 0·736. Ether is extremely volatile; its boiling point being 35·5 C (96° Fah.) at the normal pressure of the atmosphere. The vapour of ether is very dense, (specific gravity of the vapour 2·58 C,) and exceedingly inflammable. The flame of ether is rather luminous, and deposits much carbon on cold surfaces. Mixtures of ether vapour with atmospheric air are highly explosive, and have frequently given rise to frightful accidents. When cooled far below the freezing point of water, ether solidifies at 44 Fah. (47·2 C;) it crystallizes in white masses. Ether, although it does not mix with water, is nevertheless dissolved to a certain extent in this liquid; 1 part of ether requires 9 parts of water for solution. On the other hand, ether takes up about 1-36th of its weight of water. With alcohol ether mixes in all proportions. Ether is one of the most important solvents, both in scientific researches, and in the operations of practical chemistry. It dissolves sulphur (?), phosphorus (?), iodine, bromine, but the latter two substances rapidly induce a series of metamorphoses. Of compound inorganic substances but few are soluble in ether. One of the most familiar cases is the solubility of sesquichloride of iron; ether withdraws a certain quantity of this salt from its aqueous solution; this ethereal iron solution is used in medicine. Ether dissolves a great many organic bodies, especially those which are either free from oxygen, or which contain but a small quantity of this element. It is the solvent for fatty substances, resin, etherial oils, essential oils (?), etc. Ether is rapidly altered by the action of the air; it becomes gradually acid, owing to the formation of acetic acid. The acetification of ether takes place more rapidly in the presence of alkaline substances.

The physiological effects of ether vapour are very well known. Inhaled, this substance produces a sort of intoxication, and even stupor, which, if the ether vapour be administered in sufficient quantity, is accompanied by perfect insensibility, so that surgical operations may be performed in this state without the slightest inconvenience to the patient. The use of ether vapour, in which the anæsthetic properties were first recognised, has, however, now been entirely superseded by that of chloroform.

The formula $C_4 H_5 O$, by which we have represented the composition of ether, is that which hitherto was universally received. This formula establishes, as you have seen, a very simple relation between ether and alcohol, the substance from which the former is derived, and likewise a perfect analogy between ether and chloride, bromide, and iodide of ethyl, ether becoming, in fact, oxide of ethyl; and it is the simplicity of these relations which will be always adduced in favour of the common ether-formula. Nevertheless, doubts were entertained regarding the correctness of this formula at a comparatively early period. These doubts did not relate to the proportion in which the elements are united, which is established by numerous concordant analogies; but to whether the molecule of ether is more accurately represented by the formula $C_4 H_5 O$, which is the simplest atomic expression, or by a multiple of it. Since ether directly combines with very few substances only, we may avail ourselves of the method of controlling formulæ which I described to you on a former occasion,(a) and which consists in determining the combining volume of the substance under examination. This, as I likewise pointed out to you at that time, is obtained by dividing the equivalent (*i. e.*, the combining number representing the formula) by the specific gravity of the vapour, both referred to hydrogen, as unity. The quotient thus obtained is 1, which represents the combining volume of ether ($C_4 H_5 O$). The determination of the combining number then confirms the common ether formula; for, although the cases in which the equivalents of compounds correspond to two volumes of vapour, are by far the most frequent, there are, nevertheless, many substances,—water and sulphuretted hydrogen, for instance,—the combining volume of which experience has shown to be equal to 1. If we were to double the formula of ether,—if we were to represent the molecule of this substance by the expression

$$C_8 H_{10} O_2$$

this formula would correspond to the volume of vapour, and ether would then exhibit the combining volume which is most frequently, it might almost be said universally, observed among organic compounds. A change of the ether formula, for the mere sake of furthering this uniformity of combining volumes, which, after all, would be by no means complete, could scarcely be justified, especially since, with a change of this kind, the simple relation between alcohol and ether would, apparently at least, cease to exist. Nevertheless, two French chemists, Messrs. Gerhardt and Laurent, starting on the general conception, that chemical formulæ, in order to be comparable, should represent quantities of the different compounds, which, when converted into vapour, would all occupy the same space, have long advocated that the ether formula should be doubled, and that the alcohol molecule being expressed by

$$C_4 H_6 O_2$$

the ether-molecule should be represented by the formula

$$C_8 H_{10} O_2.$$

This notation, which was not countenanced by the majority of chemists, has of late received considerable support by the researches of Professor Williamson, who, as I have mentioned already, has pointed out a new mode of etherification, to which I have now to direct your attention.

In one of the preceding lectures (b), I have mentioned among the derivatives of alcohol two substances, which were described under the names of *potassium-alcohol*, and *iodide of ethyl;* the former being produced simply by the substitution of one equivalent of potassium for one equivalent of hydrogen in alcohol; the latter owing its formation to a somewhat more complicated process. These two substances exert a powerful reaction upon each other. If iodide of ethyl be dissolved in potassium-alcohol, the liquid deposits, on gently warming, abundant crystals of iodide of potassium, a considerable proportion of ether being formed at the same time, which may be separated by distillation. A

(a) Lecture V. (b) Lecture XIV.

glance at the formulæ of iodide of ethyl and potassium-alcohol will account for this re-action:—

$$\underbrace{C_4 H_5 I}_{\text{Iodide of Ethyl.}} + \underbrace{C_4 (H_5 K) O_2}_{\text{Potassium-Alcohol.}} = \underbrace{K I}_{\text{Iodide of Potassium.}} + \underbrace{C_4 (H_5 C_4 H_5) O_2}_{\text{Ether.}}$$

It is evident that the potassium of the potassium alcohol is separated in the form of iodide of potassium, and that the place which it occupied is now filled by ethyl. So far everything is perfectly intelligible; but the question still remains, whether, in this re-action, one or two ether-molecules are formed; in fact, whether the change is represented by the equation—

$$C_4 H_5 I + C_4 H_5 O_2 = K I + C_8 H_{10} O_2$$

or by the equation—

$$C_4 H_5 I + C_4 H_5 K O_2 = K I + 2 C_4 H_5 O$$

There are, however, very powerful arguments in favour of the former of these views.

I have already mentioned repeatedly, that alcohol and its derivatives are types of a considerable number of groups of similar families.

In one of the subsequent Lectures, I shall have to bring under your notice a family of compounds generally designated as the methyl series, which, in every respect, imitates the alcohol group with which we have become acquainted. The head of this family is an alcohol—the methyl-alcohol—a substance found among the products of the destructive distillation of wood, which is perfectly analogous to the alcohol, *par excellence*, or ethyl-alcohol. When treated with potassium, this alcohol furnishes a potassium compound. The action of acids gives rise to the formation of a series of sulphovinic acids. Distillation with hydrochloric acid, or treatment with phosphorus on the one hand, and bromine or iodine on the other, produces a corresponding chloride, bromide, and iodide of methyl. The only chemical difference between ethyl and methyl-alcohol lies in the composition of the two substances, methyl-alcohol containing $C_2 H_4 O_2$; while ethyl-alcohol, as we have seen, is represented by the formula $C_4 H_6 O_2$; the same elementary difference, of course, prevails in all the derivatives of the two alcohols.

	Ethyl Series.	Methyl Series.
Alcohols	$C_4 H_6 O_2$	$C_2 H_4 O_2$
Potassium alcohols	$C_4 (H_5 K) O_2$	$C_2 (H_3 K) O_2$
Sulphovinic acid	$C_4 H_6 2SO_4$	$C_2 H_4 2SO_4$
Chloride	$C_4 H_5 Cl$	$C_2 H_3 Cl$
Bromide	$C_4 H_5 Br$	$C_2 H_3 Br$
Iodide	$C_4 H_5 I$	$C_2 H_3 I$

The perfect parallelism becomes even more evident if we assume in the methyl series a compound radical analogous to ethyl; a radical containing $C_2 H_3$ (Me), to which we give the name of methyl. We then have,—

Ethyl Alcohol. Hydrated oxide of ethyl	EO	HO	MeO	HO	Methyl alcohol. Hydrated oxide of methyl.
Ethyl potassium alcohol	EO	KO	MeO	KO	Methyl potassium alcohol.
Ethyl sulpho-vinic acid.	ESO_4	HSO_4	$MeSO_4$	HSO_4	Methyl sulpho-vinic acid.
Chloride of ethyl	E	Cl	Me	Cl	Chloride of methyl
Bromide of ethyl	E	Br	Me	Br	Bromide of methyl
Iodide of ethyl	E	I	Me	I	Iodide of methyl

The action of concentrated sulphuric acid upon methyl alcohol produces, also, a substance which is analogous to ether. This body, which, at the common temperature, is gaseous, must be expressed by the formula, $C_2 H_3 O$ or $C_4 H_6 O_2$, according as we assume $C_4 H_5 O$, or $C_8 H_{10} O_2$, for ether. The same body is formed by the action of iodide of methyl upon potassium methyl alcohol.

The question now suggests itself, What will take place if iodide of ethyl be made to act upon the potassium alcohol of the methyl series, or, *vice versâ*, iodide of methyl upon the ordinary potassium alcohol? Will this reaction produce two separate molecules, one of ethyl ether, and one of methyl ether? thus,—

$$\underbrace{Me\ I}_{\text{Iodide of methyl.}} + \underbrace{EO\ KO}_{\text{Potassium-alcohol.}} = \underbrace{KI}_{\text{Iodide of potassium.}} + \underbrace{EO}_{\text{Ethyl-ether.}} + \underbrace{MeO}_{\text{Methyl-ether.}}$$

Or will it produce one molecule only, a molecule containing at the same time ethyl and methyl, thus—

$$\underbrace{Me\ I}_{\text{Iodide of methyl.}} + \underbrace{EO\ KO}_{\text{Potassium-alcohol.}} = \underbrace{KI}_{\text{Iodide of potassium.}} + \underbrace{(El, Mel)}_{\text{Ethyl-methyl ether.}}$$

Experiment has decided in favour of the latter reaction. If a mixture of potassium-alcohol and iodide of methyl be submitted to distillation, care being taken to cool the products which are evolved by a frigorific mixture, a fragrant, extremely volatile substance is obtained, the boiling point of which is at 13° C. (56° F.) Like ether, this substance is insoluble in water, and exceedingly inflammable. Not a trace of methyl-ether or ordinary (ethyl) ether is produced in this reaction.

The simplest atomic expression for the new ether-compound is the formula

$$C_3 H_4 O,$$

which represents one volume of vapour; but if we admit that the substance still contains the molecules of methyl and ethyl—and it would be difficult to imagine that these molecules have been broken up in its formation—it becomes necessary to double the formula, and to represent the new body by

$$C_6 H_8 O_2 = C_2 H_3 O, C_4 H_4 O,$$

representing two volumes of vapour, whence the name methyl-ethyl-ether may be given to it.

The existence of this intermediate ether—and I may add, that several similar substances have lately been discovered—renders it very probable that the common formula of methyl-ether and of ethyl-ether have likewise to be doubled, and that the molecules of these bodies likewise correspond to two volumes of vapour.

Methyl-ether.
$$C_4 H_6 O_2 = C_2 H_3 O, C_2 H_3 O = MeO, MeO$$

Methyl-ethyl ether.
$$C_6 H_8 O_2 = C_2 H_3 O, C_4 H_5 O = MeO, EO$$

Ethyl-ether.
$$C_8 H_{10} O_2 = C_4 H_5 O, C_4 H_5 O = EO, EO$$

The ethers thus cease to be analogous to chloride, bromide, and iodide of ethyl, and become simple substitution-products of alcohol, being ordinary alcohol in which one equivalent of hydrogen is replaced by one equivalent of ethyl.

Alcohol. . . EO, HO
Ether . . . EO, EO

The formation of ether by the action of iodide of ethyl upon potassium-alcohol throws much light upon the ordinary process of etherification. We may assume that the formation of ether in this reaction depends upon a series of changes which takes place between the sulpho-vinic acid and alcohol. The first action of alcohol on sulphuric acid produces sulpho-vinic acid.

$$\underbrace{2HS\ O_4}_{\text{Sulphuric acid.}} + \underbrace{EO, HO}_{\text{Alcohol.}} = \underbrace{HS\ O_4\ ESO_4}_{\text{Sulphovinic acid}} + \underbrace{2HO}_{\text{Water.}}$$

One equivalent of hydrogen in two equivalents of sulphuric acid being replaced by ethyl. The sulphovinic acid coming in contact with a second alcohol-molecule, loses its ethyl again, which becomes substituted for the hydrogen in alcohol, ether being formed, and sulphuric acid reproduced thus—

$$\underbrace{HSO_4\ ESO_4}_{\text{Sulphovinic acid.}} + \underbrace{EO, HO}_{\text{Alcohol.}} = \underbrace{EO\ EO}_{\text{Ether.}} + \underbrace{2HSO_4}_{\text{Sulphuric acid.}}$$

The sulphuric acid being, of course, capable of reproducing again sulphovinic acid, of forming ether, and of being liberated again in order to pass once more through the same series of changes. You will perceive that the assumption of these interchanges accounts in a most happy manner both for the simultaneous evolution of ether and water, and the conversion of immense quantities of alcohol into ether by a comparatively small amount of sulphuric acid—facts which had hitherto remained unexplained.

ORIGINAL COMMUNICATIONS.

ARMY MEDICAL REPORTS

No. XIV.

REMARKS ON THE QUARTERLY RETURN OF SICK OF H.M. FORCES SERVING IN THE BOMBAY PRESIDENCY FROM JULY 1 TO SEPTEMBER 30, 1853.

By JOHN HALL, M.D.
Deputy Inspector-General of H.M. Hospitals.

During the present quarter, there has been an increase of sickness under the head of "fever" and that of "diseases of the stomach and bowels," chiefly in the 10th Hussars at Kirkee, and in the 78th Highlanders at Poona.

In the 8th Foot at Deesa there has also been an increase of sickness from the same complaints; but in the 64th, at Kurrachee, in Scinde, the sick list, though heavy, has remained the same as last quarter, and there has been a decrease of two-thirds in the mortality. The 83rd, both at Kurrachee and Hyderabad, in Scinde, has enjoyed an unusual share of good health during the whole quarter, as has the 86th, at Poona.

The following abstract will show at one view the amount of sickness and mortality in each corps during the quarter; and, to facilitate comparison, I have added the totals of the preceding quarter, as well as a summary of the same, or September quarter of the year for the five preceding years.

Abstract of Admissions and Deaths under the leading Classes of Diseases at the different Stations in the Command occupied by Her Majesty's Troops during the Quarter.

Stations	Kirkee, Deccan.		Deesa, Guzerat.		Kurrachee, Scinde.				Hyderabad, Scinde.		Poonah, Deccan.				Total.		Total for the Quarter ending June 30, 1853.	
Corps	10th Hussars.		8th Foot.		64th Foot.		83rd head quarters.		83rd Rt. Wing.		78th Foot.		86th Foot.					
Strength	675		976		978		535		438		955		925		5482		5548	
Classes of Disease.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.	Admitted.	Died.
Febrile Complaints	309	2	177	1	667	2	143	...	74	...	347	1	166	...	1883	6	1610	2
Eruptive Fevers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1
Diseases of the Brain and Nervous System	...	...	9	1	12	...	9	1	2	1	4	...	7	1	43	4	55	1
Ditto Lungs	10	...	18	...	21	...	30	...	2	1	14	...	13	...	108	1	104	4
Ditto Heart and Circulating System	5	...	9	...	...	...	3	1	...	...	4	...	3	...	24	1	26	1
Ditto Liver and Spleen	7	...	37	...	31	...	15	...	1	...	67	1	20	1	178	2	180	3
Ditto Stomach and Bowels	68	...	67	1	33	...	43	...	12	1	79	1	56	...	358	3	286	5
Cholera Epidemica	8	6	...	...	...	...	...	...	...	...	...	...	1	...	9	6	1	...
Dropsies	...	...	...	...	1	...	2	...	...	...	...	...	...	...	3	...	5	1
Rheumatic Affections	12	...	26	...	20	...	10	...	14	...	23	...	20	...	125	...	170	...
Venereal ditto	34	...	39	...	90	...	32	...	9	...	59	...	38	...	301	...	300	...
Abscesses and Ulcers	42	...	16	...	20	...	15	...	4	...	18	...	16	...	131	...	185	...
Wounds and Injuries	26	...	12	...	14	...	9	...	6	...	22	...	12	...	101	...	113	...
Punished	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...
Diseases of the Eyes	3	...	25	...	6	...	3	...	1	...	28	...	2	...	68	...	34	...
Ditto Skin	1	...	1	...	...	...	1	...	3	...	3	...	1	...	10	...	16	...
All other Diseases	6	...	20	...	16	...	9	...	3	...	7	...	18	1	79	1	115	2
Total	531	8	456	3	931	2	324	2	131	3	675	3	373	3	3421	24	...	...
Total for the Quarter ending 30th June, 1853	347	...	358	4	992	6	364	2	236	2	519	3	390	3	...	...	3206	20
Ratio of Admissions to Strength per 1000	786·666		467·213		951·942		605·607		299·086		706 806		403·243		624·042		...	
Ditto ditto for the Quarter ending 30th June, 1858	506·569		364·562		981·206		677·839		535·147		538·940		419·806		...		577·865	
Ratio of Deaths to strength per 1000	11·851		3·073		2·044		3 738		6·849		3·141		3·243		4·377		...	
Ditto, ditto for the Quarter ending 30th June, 1853	...		4 073		5 934		3·724		4·535		3·115		3·229		...		3·604	

Abstract of the Sickness and Mortality in Her Majesty's Regiments serving in the Bombay Presidency for the September Quarter during the following Years:—

September Qr.	Number of Admissions.	Number of Deaths	Ratio per 1000 of Admissions to Strength.	Ratio per 1000 of Deaths to Strength.
1848	3080	45	497·	7·27
1849	4223	144	508·	17·
1850	2671	78	452·	13·
1851	2716	49	470·74	8·472
1852	2739	51	481·455	8·966
Total	15,429	367	2409·195	54·708
Mean of the five years.	3085·8	73·4	481·839	10·941

The most marked sickness has taken place in the 10th Hussars at Kirkee; and not only the sickness, but the mortality also, has been greater in that corps than in any other in the Presidency during the quarter.

In July, fever of a periodic character made its appearance; and from that period up to the end of the quarter, the attacks continued to increase both in frequency and severity; and in September they amounted to just double what they had been in June. In September, during some close, oppressive weather, cholera made its appearance among the sick in hospital, and of seven who were attacked while under treatment for periodic fever, six proved rapidly fatal. The symptoms of cholera generally came on at the expected period of the cold stage of fever; indeed, they may be said to have usurped its place; and of all those who were so attacked, the collapse was immediate and complete, and medical treatment failed, in every instance, in producing re action. Fortunately, the disease did not extend to the men in barracks; and only one case occurred in the Poona Cantonment. It is difficult to assign any cause for this outbreak of cholera in the hospital of the 10th Hussars, as the building is well placed, properly ventilated, and was not over-crowded at the time; besides which, the attacks were not confined to any one particular ward; so that the exciting agent, whatever it may have been, was general in its application, and cannot fairly be traced to any peculiar local cause within the hospital itself. The disease appeared to be induced, in one or two instances, by men attending to their sick comrades; and, whatever may be said of the non-contagious character of cholera, there is strong reason to presume, that it has the power of self-propagation,—as not only was the disease apparently brought on in the men of the 10th by attending on their sick comrades in hospital; but in the only case which occurred in the Poona cantonment, the sub-

ject of it, a man of the 86th Regiment, lost his wife from cholera while he was under treatment in hospital for another complaint. His child also took the complaint, but recovered. After the death of his wife, the man obtained permission to leave hospital to see after his child, and collect his wife's property in their room in the patcherie. The second day he returned to hospital again, and in the course of the following night he was attacked with violent symptoms of spasmodic cholera, and nearly fell a victim to the disease. We have now been free from this fearful disease for more than a month, and I hope it will not return. But it has made its appearance in Bombay within the last few days, and I am not quite free from apprehension about the projected concentration of troops here at the end of this month, for instruction drill. However, there is no use in anticipating evil, and we must hope for the best.

The 64th (the Surgeon remarks) have improved much in health of late, by being allowed to send detachments of their sick and weakly men to Fort Menora, for the benefit of sea-air. Their invalids have reached Colaba; and, as the 1st Division of the Regiment leaves Kurrachee for Belgaum about the 8th or 10th instant, I hope, at the end of the present quarter to hear a still better account of them, as Belgaum is considered the healthiest and pleasantest station for Europeans in the whole Presidency.

The 78th, too, are beginning to shake off the unhealthy look the men acquired by their long residence at Bombay and Aden; and I dare say by the end of the present cold weather, they will have still further improved in appearance. Catarrhal ophthalmia made its appearance among the women and children of this corps, and thirty of the men contracted the disease; but the complaint was remarkably mild, and yielded readily to medical treatment.

Hooping cough made its appearance among the children of the 86th at Poona, and seems to be running rapidly through the whole of them; but the disease is generally mild in this climate. So numerous, however, were the attacks at first, that the female hospital was quite unequal to their accommodation, and I had to procure authority for their occupying two vacant barrack-rooms; and I am happy to say that the disease is now rapidly disappearing.

Poona, Nov. 5, 1853.

AN ACCOUNT OF FIVE CASES OF AMPUTATION AT THE ANKLE-JOINT, AFTER THE METHOD OF MR. SYME. WITH OBSERVATIONS.

By SAMUEL HADWEN, M.R.C.S., L.S.A.

(Concluded from page 650.)

Operations of all kinds with the knife are proofs of the imperfection of surgery. The accomplishment of a cure without having recourse to cutting instruments is the first object of the surgeon. When this cannot be done, and a mutilating operation, or death, becomes the stern alternative, the surgeon has still a serious point to settle. It is a point of deep interest to the patient, and should never be lost sight of by the operator. It should be a simple rule "never to remove more of the body at an operation than necessity renders imperative." I am of opinion this is a rule which, even in these days of surgical conservatism, is not always sufficiently borne in mind. Amputation directly below the knee was long held to be the rule whenever required in the leg; it is now confessed, the longer the stump the better for the patient. Another fact has long been acknowledged, viz., the nearer to the trunk we amputate the greater the danger. Let these two axioms be taken together, and the result is, as I have said, "never mutilate beyond the urgent necessity of the case." If the longer the stump the better for the patient, and the further the site of the incision from the trunk the smaller the danger, then amputation at the ankle-joint should be better than amputation in the lower third of the leg.

When we take into consideration the nature of the surfaces which are required to be united, and the extent of those surfaces, no one acquainted with these things will be surprised that a longer period should be necessary in order to obtain a sound and serviceable stump after removal of the foot at the ankle than in the lower third of the leg. If the eligibility of either practice could be reduced to a question of time, then there would, it might be said, be an end of the question. But that is not the question. Were that the case, then the practitioner who cuts off a man's arm because it requires a longer time and greater trouble(a) to save the member by excision of the diseased elbow-joint is practically a sound surgeon. But this I deny. Surgery repudiates such outrageous and erroneous doctrines. He who lops the compound broken limb which, by time, and trouble, and proper skill might have been saved, may flatter himself that he has made an offering to the presiding deity of his art, but he never was more mistaken. The true spirit of surgery is treated with contempt, and a manifest injustice is done at the shrine of ignorance or vanity. An injustice, the disheartening consequence and miseries of which are to be a life long endurance, not on the part of the culprit, (there might be justice in that,) but his mutilated victim! No; surgery owns no such followers. He who considers the gaining of time and the saving of trouble a compensation for the loss of a limb, may deem himself a surgeon, but he makes a grand mistake. Surgery disowns him. His true position is in a lower grade of the community. It is not the ability to mutilate on scientific principles which constitutes a surgeon. The nice and discriminating judgment which steps in to determine when the salvation of life, or the only hope of a cure, demands so great asacrifice, must be considered the first and coping principle in surgery, as well as the highest boast of the surgeon. Amputation at the ankle-joint is no more a question of time or trouble than any other amputation. It is this:—"Will the patient be a more useful member of society after this operation than after amputation of the leg?" That is the question. My experience leads me to suppose that he will be. Before 1848 it was usual with me to amputate in the lower part of the leg for incurable diseases of the ankle; and excellent stumps by the flap operation resulted; but it is my impression, that they were not so useful as those in which the plantar cushion has been preserved. No period of time, however long, no amount of trouble, however great, can with justice be made a set-off against the duty of restoring an afflicted fellow-creature as near as may be to his former state of usefulness. It is not enough that we carry him safely through a perilous calamity, glad to save life at any rate. Our anxiety should also have reference to his state after recovery, so that he may fall back again upon his own resources, disabled in the least possible manner by his loss.

Case 1.—Joseph Checkley, aged 16, labourer's son, was admitted on the 10th of April, 1848, with diseased ankle-joint of four years' duration, not preceded by injury. Five months ago, he was seen by a "bone-setter," who handled the foot roughly, and caused him a great deal of pain. Since this occurrence, he has been much worse. Two months after this improper usage, a considerable discharge of matter took place at the inner side of the joint, where several sores and sinuses now exist. A probe introduced at any one of the holes passed to the joint, where diseased bone could be perceived. The outline of the ankle was greatly disfigured by tumefaction. He kept his bed, and attention was paid to his health. The operation was performed on the 27th. It was necessary to dissect from the flap some thin pieces of the case of the calcaneum, which, owing to the unsound state of the bone, became detached.

He went on very well until the 2nd of May, when the leg below the knee was attacked with erysipelas, which gradually extended up the thigh. Ten days after this, troublesome diarrhœa set in; notwithstanding the stump improved. The diarrhœa was soon checked; and before the end of the third week, the erysipelas subsided.

On the 18th, a collection of matter on the back of the stump was let out. From this time, under a generous diet, quinine, wine, and opium, he steadily improved. After the first three or four dressings, water applications and poultices were chiefly used. He left the hospital on the 29th of June in good health, and the stump healed, with the exception of a small superficial sore, which soon afterwards cicatrized.

Case 2.—William Coulson, aged 24, farmer's servant, admitted the 21st of August, 1848, for the fourth time. His first admission took place on the 20th of July, 1845, on

(a) An instance in which these foul motives were alleged for this barbarous act has recently come to my knowledge.

account of inflammation of the left ankle-joint,—the consequence of a slight accident, and the subsequent rough treatment of a "bone-setter." By rest, the use of leeches, and calomel and opium taken until the gums were sore, the state of the joint was very much improved; and on the 3rd of the following August, he was discharged cured. In September, 1847, and May, 1848, he obtained re-admission and relief, but no permanent good.

The integument all round the articulation was now in a diseased and very discoloured state. Upon the outer side were three ulcerations leading into the joint, and on the inner a large hole, from which there was considerable discharge. There was also a collection of matter on this side the joint, which, by incision near the tendo-Achillis, was discharged to the amount of several ounces. After ten days' rest in bed, soothing applications to the limb, and attention to the health, he was considered fit for the operation, which was performed on the 31st. The flap mortified, and was found completely detached in the poultice on the 11th of September. The stump was covered with healthy granulations. On the 15th of December he was made an out-patient, the stump having nearly skinned over. He came in again on the 22nd of January, 1849, the cicatrix having ulcerated, and an abscess formed at the back of the stump. It was evidently hopeless to attempt to get a good stump; I, therefore, on the 1st of February, amputated by double flap in the lower third of the leg, and he made a rapid and safe recovery.

Case 3.—Thomas Hobson, aged 33, stone-mason, was admitted April 16, 1849. In August, 1845, he sprained, as he thinks, some part of his left foot. He placed himself under the management of a "bone-setter," after whose treatment inflammation and abscesses arose in the neighbourhood of the cuneiform bones. He obtained admission into this hospital, and diseased bone was detected. After some weeks he left of his own accord. In January, 1848, he became a patient in St. George's Hospital, London, where Mr. Cutler in the following March removed, while the patient was under the influence of choloroform, some diseased bone. The wound did not close. In the following October he was again received into the Lincoln Hospital. At this time there was such extensive disease of the external tarsal and metatarsal bones, that I advised the removal of the external half of the foot. This was done on the 15th, while he was perfectly insensible from the effects of chloroform. Union of the integumental flaps quickly followed, except a small opening in the middle of the cicatrix, which still communicated with carious bone. I made several attempts to remove this by means of gouges, opening up the skin, and detaching all the dead bone I could find. Foiled in these attempts, which I persevered in from a desire to save the remaining portion of the foot if possible, he left for a period on account of his health, and returned in an improved condition on the date at the head of the case, viz., the 16th of April. Upon the 18th, having consulted with my colleagues, we deemed it desirable to remove all the remaining portion of the foot, which was accordingly done forthwith. He made a favourable recovery, in the course of which matter was let out at the back of the stump, and a sinus which followed was brought into a healing state by seton, and closed. He was discharged cured on the 19th of July.

Case 4. — Thomas Hallam, aged 18, farmer's son, of scrofulous habit, and looking very delicate, was admitted on the 8th of July, 1850, with diseased ankle-joint and bones of the tarsus, of six months' standing. The exciting cause of the complaint is not known. There were numerous sores, with fungous granulations, about the left ankle, all communicating with diseased bone, and yielding a very free discharge. He kept his bed, and took quinine, and meat, and beer; soothing applications were made to the affected part.

13th.—Amputation performed; a considerable amount of tuberculous deposit had to be cleared away with care, both from the surface of the flap as well as from the anterior aspect of the stump, and the sac of an abscess had also to be dissected out. The whole of the soft parts surrounding the joint were infiltrated with scrofulous matter, and sinuses burrowed about beneath the skin in various directions. The operation was followed by no unfavourable symptom except a rapid pulse,—180 in a minute, which, after three days, gradually subsided, and, before the end of the first week, his general health had very much improved. The report on the 26th, before the end of the first fortnight from the operation, is, "Stump nearly healed. A trifling discharge from a small sinus on the anterior aspect." He continued to take quinine and an extra allowance of meat and porter. The sinus was laid open, and healed; and a second forming, was treated in the same manner with the same result. The cure was retarded by these sinuses, but his health continued to improve in a very satisfactory manner. He was discharged cured on the 28th of October.

Case 5.—George Porter, aged 13, labourer's son, a very unhealthy, scrofulous-looking lad, was admitted on the 16th of February, 1852, on account of disease of the bones of the left foot. The disease has existed for the last year, and came on without apparent cause. He kept his bed; the part was blistered, and he was relieved and discharged on the 17th of May. On the 16th of the following August he returned, with all his symptoms aggravated. The swelling has extended over the whole foot and ankle, which are misshapen and of monstrous size; there has been great discharge of matter, and there are several openings, all communicating with dead bone.

September the 17th the operation was performed. The diseased state of the soft parts was such that it was impossible to escape a long sinus running up the leg. This was cut across, and after the removal of the foot the portion remaining above the incision was laid open. The skin was attenuated and discoloured in the whole of the course taken by the knife. He made, however, a satisfactory recovery. The only remarkable circumstance which occurred after the operation deserving notice, was the great rapidity of the pulse, which, for a considerable time, was 180 in a minute; but this gradually came down, and he was discharged, on the 5th of November, with the stump healed, except a small superficial sore, which soon afterwards skinned over.

On the 20th of December he presented himself for inspection with an excellent stump, which continues the same at the present time.

Lincoln, Sept. 8, 1853.

NEW INVENTIONS.

DESCRIPTION OF A NEW SPLINT.

INVENTED BY

CHARLES JOHN GIBB, M.R.C.S.E.

House-Surgeon to the Newcastle Infirmary, Lecturer on Anatomy and Physiology in the College of Medicine in connexion with the University of Durham, etc.

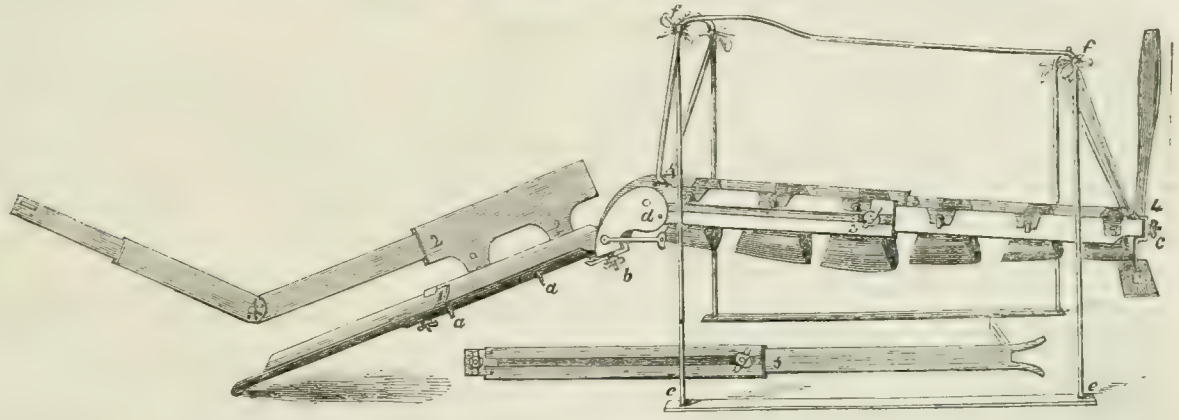
[Communicated to the Newcastle and Gateshead Pathological Society, April 14, 1853.]

About a year ago a circumstance occurred which led me to believe that a splint, *simple in principle, and capable of adaptation to all fractures of the extremities, and to any size of patient*, was a great desideratum, and, if invented, would be more especially a boon to the general practitioner. The fact was suggested to me in the following manner:—I was requested by a medical friend in the country to order for him a large-sized splint, such as, in my opinion, would be most suitable for a bad case of compound fracture of the leg, at that time under his care. He had found it almost impossible to keep the bones in apposition when the limb was placed on an ordinary fracture-bed; and, the profuse discharge necessitating daily dressing, was effected with no small degree of trouble and inconvenience. The long straight splint was inapplicable; and, as extension was required to keep the bones in apposition, short splints were likewise useless.

The patient was a very tall man, and upon reflection, it occurred to me to be a very foolish proceeding for a country surgeon to order an expensive splint of so large a size, that, considering also the special nature of the splint, it would probably be inapplicable to any case of fracture he might again have to treat during his professional career,—unless, indeed, he was in extensive mining or other practice productive of accidents.

Under the influence of these feelings the idea struck me that it might be possible to invent for my friend a splint, suitable for the case in point, and one which would, at the same time, be capable of adjustment to the fractured limb of any other patient he might afterwards have to treat. I accordingly proceeded to make a model in sheet lead, which served as a pattern for the instrument-maker. Since that time I have still further followed out the idea; and after many trials, and considerable alterations of the original model, consequent upon suggestions arising during the extensive use of it for a period of now nearly a year, I have invented a splint which, I believe, will be found, in general practice, capable of almost universal application in fractures of the limbs. The principle of the whole splint is that of the simple slide. Each part is made of pieces of sheet iron, which slide alongside of, or within each other, and can be fixed at any required length by a finger-screw. The various parts are designed in such a manner, as, when fitted together in different ways, to form a splint of varying size, suitable to the limb of a child or a man, and in shape combine all the advantages of various sizes of the long straight, Liston's, McIntyre's, and Greenhow's double incline splints, for the lower extremity, or of small straight or angular splints, for the upper extremity.

The complete Splint, pulled out to its largest size.



The woodcuts will make the description clearer: they are on the scale of about an inch and a half to the foot. The splint consists, as will be seen, of a thigh-piece (1); lateral thigh and side-piece (2); two leg-pieces (3 3); a foot-piece (4); an additional slide-piece (5); and a sling cradle. When required for use, the *thigh-piece* (1) can be shortened or lengthened to the size of the patient's limb by relaxing the finger-screw seen at its under aspect, and pulling out or pushing in the one slide-piece upon the other; and can be narrowed or made broader by shifting one or other of the holes seen in the lateral thigh and side-piece (2) on to the projecting male screws (*a a*), seen at the under surface of either side of the thigh-piece, and fixing it there by the corresponding female finger-screws. The *lateral thigh and side-piece* (2), as is evident, may be fixed on either side of the thigh-piece to suit a fracture of either limb; can be made of any required length, to extend to the short ribs of the patient for the purposes of counter extension, having two slits above for the ends of the perineal band; and the one half may be placed at any angle with the other to suit the various bends of the body at the hip joint, by alterations in the spring-catch, which locks the joint seen at its centre.

The required length for the leg can be secured by alterations effected in the position of the slides of the *leg-pieces* (3 3), by loosening the finger-screws, near to the figures (3 3); and the breadth by similar alterations in the the screws and slides at *b* and *c*. The joint (*d*), seen in the right hand leg-piece at the knee, is to allow of the flexing and extending of the knee; and the spring-catch, seen a little below the letter (*d*), is used to fix the joint by placing the catch in the small hole in front of the letter (*d*), which there locks into corresponding holes in the other part of the leg-piece, entering into the composition of the joint.

The form and size of each piece of the splint have been most carefully determined by experimental observation, in order that the whole of the splint may be capable of being accurately adjusted, to suit the limbs of children or men, and the requirements of their varied fractures and dislocations.

As seen in the preceding woodcut, the splint resembles the fracture-bed of Mr. Greenhow, and is more especially adapted for the treatment of bad cases of compound or complicated fractures or dislocations of the leg, ankle, or thigh. Several of such cases have already been most successfully treated upon it.

The interval between the leg-pieces is filled up by strips of bandage or india-rubber sheeting, as seen in the cut; one or more can be removed to allow of the dressing of the wound of a compound fracture, without disturbing the position of the limb in the slightest. This is found an immense advantage over the ordinary splints in the treatment of cases where the wound is large or extends round the limb; for by no other contrivance is it possible to cleanse and dress the wound, without considerable disturbance of the bandages, splints, and even of the limb itself, with consequent rubbing together or displacement of the ends of the bones, and accompanying pain and ill-effects to the patient.

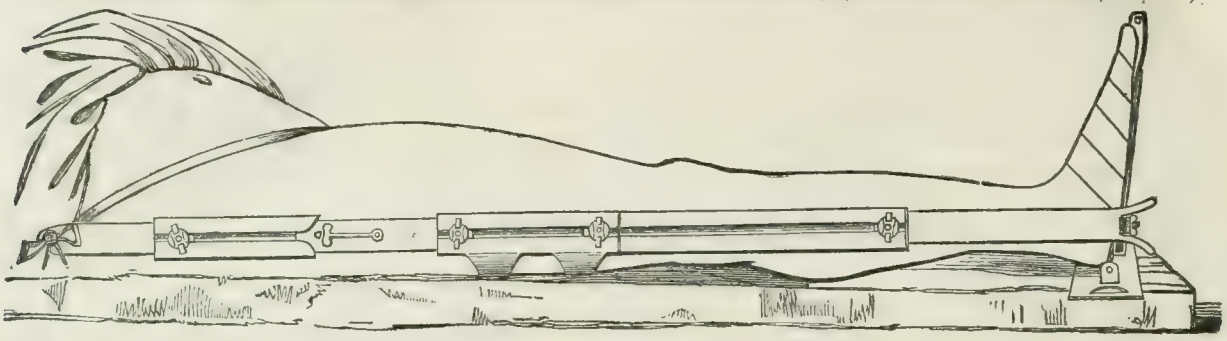
The limb lies most securely upon the splint, as upon all others, when the cushions or paddings are thin; and where there is a compound fracture of the leg, it is by far the best plan to support the wounded part of the limb simply on the strips of bandage, as the dressing can be effected daily, or oftener, if necessary, with the most perfect ease, by simply withdrawing the pieces of bandage and thus exposing the whole circumference of the limb.

A scoop, placed under the splint at the injured part, will also receive the discharge escaping from beneath the dressings through the intervals between the strips of bandage, thus preserving the bed and clothes clean and wholesome even in the worst case.

When the foot of the patient is securely fixed to the foot-piece, any amount of extension can be made by loosening the finger-screws at (3 3), fixing the thigh-part of the splint to which the perineal band is affixed (for the purpose of counter extension) and drawing out the slides of the leg-pieces by traction at the foot, and thus extending the leg. When the requisite extension is made, the whole can be securely fixed by again tightening the grasp of the screws. In my original splint the extension was effected by a suitable extending-screw attached to the foot-piece; but I found in practice, that it complicated, added greatly to the expense, and offered no compensating advantages over that already described, so that I abandoned it, as well as some other screws which were fixed to the slides at *b* and *c*, for the purpose of expanding or contracting the breadth of the fracture-bed between the leg-pieces (3 3), and I now retain the simple slide motion at these parts.

The great, but actually little understood advantages of the sling posture, are secured by suspending the splint in the accompanying cradle. The form of the cradle portrayed in the cut is not quite that which I now use. It is capable of being taken to pieces, like the whole of the splint, by loosening the screws at *f f*, and removing the cross-bar, and as a joint exists at *e e*, the whole can be folded up into a convenient form; indeed, the whole splint and cradle can be wrapped up into a comparatively small parcel portable on the front of the saddle, or under the arm to any distance without inconvenience.

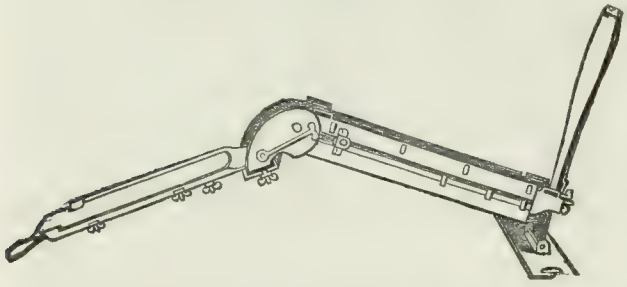
A long straight Splint, formed by joining the lateral Thigh and Leg slides together (which can be used with or without the foot-piece.)



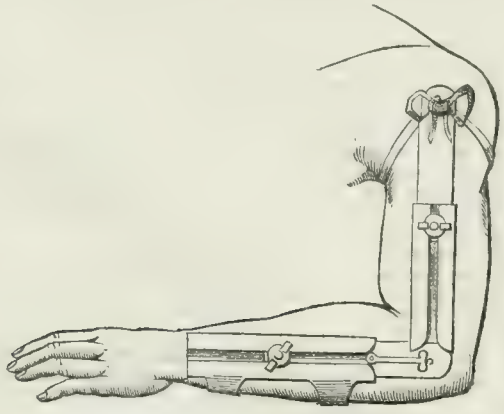
The additional slide-piece (5) (seen in the first cut) can be used alone, or united with the foot-piece, (4) in fractures or dislocations about the leg. It can also be attached to the lateral thigh and side-piece (2), and thus forms a convenient long straight splint, applicable to fractures of the thigh, &c. The preceding woodcut illustrates the splint formed by the junction of the parts mentioned, and with regard to size will fit any limb, and may be used entire or in parts.

When the lateral thigh and side-piece is removed from the complete splint to form the long straight splint seen in the preceding cut, the resulting splint resembles in all respects the common Liston's or Mc Intyre's double-incline plane fracture-beds, and may be used for all the purposes for which these are suitable, having also the additional advantages of being capable of exact adjustment to the size of any limb, with moveable pieces of bandage at the back of the leg, to enable the surgeon to inspect and dress all parts of a limb with compound or other fractures, and the ability to hang it in a sling-cradle, if necessary.

The following cut shows this portion of the splint reduced to its smallest size, the scale being the same as in the others, and that when the complete splint is deprived of the lateral thigh-piece and cradle, a splint is formed similar to Liston's or Mc Intyre's.



The next cut exhibits the lateral thigh and side-piece applied to the arm, where it is applicable as a splint to any fracture of the humerus or elbow-joints. In practice it has been found useful in those fractures, and has the advantage of being capable of allowing extension to be made to the limb.



I may add that the expense of the whole splint with the cradle is scarcely greater than Liston's ordinary splint, and has been spoken of to me in the highest terms by several of my medical friends who have used it. They report that it fulfils all the ends for which it was invented; namely, simplicity of principle, and capability of adaptation to all fractures of the extremities, or to any size of patient.

At a future opportunity I will introduce it in connexion with several interesting cases, usually found most difficult to manage, and in which it has proved an efficient instrument of cure.

THE LONDON
PRACTICE OF MEDICINE AND SURGERY.

KING'S COLLEGE HOSPITAL.

LARGE SEBACEOUS CYST UNDER THE TONGUE.—EXCISION.—RECOVERY.

[Under the care of Mr. BOWMAN.]

We have lately seen at the hospitals several examples of ranula in which the tumour had attained unusually large dimensions. In two it was so large as to project upwards into the mouth, inconveniently displacing the tongue, and downwards so as to form a prominent tumour under the jaw. In most, the plan of cutting away as large a portion as easily practicable of the front wall of the cyst, evacuating its contents, and then smearing the interior freely with the solid nitrate of silver, was found effectual. In two, however, the sac refilled, and in one of these the introduction of a seton proved successful; the other is not yet cured, though its dimensions have been very much reduced. The case to which we have now to allude, however much resembling ranula in its situation, etc., was one of a totally different nature, and an example of a very much rarer form of disease. It was also remarkable, from the large size which the tumour had attained.

Mary Ann Johnson, a pale, weakly-looking girl, aged 18, was admitted under Mr. Bowman's care, on account of a tumour in the mouth the size of a small orange. She stated that she had first known of its existence about six years previously, and that it had been ever since gradually increasing. Its size had now become very inconvenient, as it impeded swallowing, mastication, and speech; it had also, of late, been liable to attacks of pricking pain. Beneath the jaw, the globular prominence of the tumour was considerable, and it projected upwards into the mouth, exactly in the median line, as a large rounded mass, displacing the tongue. Its appearance was exactly similar to that of an ordinary ranula, but on touching it no fluctuation could be detected; it felt soft and doughy, like fat; the mucous membrane could also be lifted up from over it, and the ducts of the salivary glands appeared quite normal. The whole tumour was quite moveable, and seemed to have but little connexion with the surrounding parts.

After the patient had been under observation in the hospital for a few days, Mr. Bowman made an exploratory puncture into the swelling from the mouth. A quantity of greyish-white matter, of the consistence of soft mortar, having escaped, and made evident the real nature of the disease, Mr. Bowman at once proceeded to extirpate the cyst. Having slit it freely open, and emptied out its contents, the removal of the tough and elastic capsule in which they had been contained was easily effected, the cyst being drawn forwards, and its connexions separated, by means of a director.

The wound healed in a short time, and without any disagreeable consequences.

The contents of the cyst were carefully examined by the microscope, and found to consist of epithelial scales, more or less

withered, and containing fat granules, with much molecular matter soluble in ether, free oil globules, and numerous plates of cholesterine. There were no hairs. It is not improbable but that some of the highly refractive particles, which looked like oil, were, in reality, calcareous; since it is well known that, under the microscope, the appearances of the two are most deceptively similar. The matter under examination was very gritty to the touch, much less greasy than that usually obtained from similar cysts beneath the scalp, resembling moist mortar more nearly than lard.

There is in the Museum of St. Bartholomew's Hospital a specimen of a sebaceous tumour removed from under the tongue, but none, as far as we are aware, in that of the Royal College of Surgeons. It is a situation in which they are undoubtedly very rare. When there produced, they are, in all probability, abnormal cyst formations from the first, and not mere dilatations of any naturally existing structure. By a process of hasty reasoning on the fact, that frequently there is a little black point to be found in the skin covering sebaceous tumours, through which, by pressure, their contents may be forced out, Sir Astley Cooper arrived at the conclusion, that these tumours are always accumulations of natural secretion within obstructed gland-ducts; and this doctrine is, we believe, the one generally received at the present day. That it is true only of a small proportion of such tumours, has, however, been well shown by Mr. South, in a note to his "Chelius's Surgery, (Vol. II., p. 699;) and his opinion is supported by Mr. Paget, in his "Lectures on Surgical Pathology." There can, indeed, be scarcely any doubt that, in a majority of instances, these tumours have no orifices, that they are of the autogenous class, and diseased productions *ab initio*. They are usually complete sacs, with walls of fibrin, of uniform thickness, and not in any way resembling the structure of a follicle. They adhere very slightly to the skin and surrounding parts; and, if allowed to ulcerate, or opened without extirpation, they do not behave as the ordinary follicular cysts, but go on re-secreting, or form troublesome sores, until the whole cyst-wall has been removed or thrown off. It is interesting to note, that, although the theory of origin has been erroneous, the practice as arrived at empirically has been correct. If they were mere dilatations, to evacuate the contents by puncture or otherwise would be all that was necessary; on the contrary, however, every surgeon knows that such a plan always fails, and that it is absolutely essential to remove the whole cyst.

For an interesting case, illustrative of the process by which these cysts occasionally become solid, we may refer to the *Medical Times and Gazette*, for February 12, page 159.

GUY'S HOSPITAL.

FIBRO-CELLULAR TUMOUR IN THE SCROTUM—EXCISION—RECOVERY.

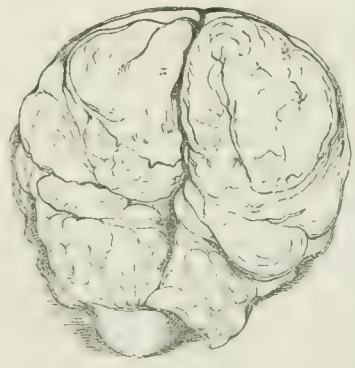
[Under the care of Mr. HILTON.]

Samuel Jopson, aged 30, a farm-labourer, living at Woodham, in Essex, was admitted on Dec. 22, 1852, on account of a large solid tumour in the scrotum. He stated, that six years previously,

he had, for the first time, noticed a small lump in the left groin, in the situation according to his description of the external abdominal ring. It was then about the size of a hazel-nut, and, during the following years, it gradually increased, and descended lower in the scrotum. At the end of five years it was at large as a hen's egg. Excepting much aching in the testicle, especially after exercise, its growth had been unattended by pain. He had, until within a few weeks, continued at work, and had not, in any respect, lost health. The inconvenience of the weight of the mass, and the aching which it had caused by pressure on the testicle, had latterly obliged him to keep in the recumbent posture, and, since doing so, he thought that he had lost some flesh. He was, however, still stout, and of a florid and robust appearance. As far as he knew there existed in his family no tendency to malignant or other peculiar forms of disease. The tumour was nearly the size of two fists, oval, and of a well defined smooth outline. On its upper and anterior surface was a large round out-growth attached to it by a broad base. The sensation given to the finger in all parts was that of a firm solid tumour. As shown in the appended sketch, it filled the scrotum lying before the cord, and had the testicle either behind it, or to the outer side. The skin did not adhere to it in any part, and the testicle might easily be felt as detached from it, and moveable around it to a certain extent.

On Dec. 20, Mr. Hilton removed the whole tumour by a longitudinal incision in front of the scrotum. It was found to possess but few attachments to surrounding parts, excepting that it adhered so firmly to the tunica vaginalis, that a portion of that membrane had to be removed with it. Several small vessels required ligature, and the edges of the wound were afterwards brought into apposition by sutures and plaster.

During the first few days the wound did not proceed so favourably as could have been wished. No union by first intention took place, and the edges of the incision, which involved almost the entire length of the scrotum, gaped widely. About a fortnight afterwards, when the whole was granulating and in a healthy condition, Mr. Hilton performed a small plastic operation in order to cover the testis, which lay exposed in the middle of the wound. Having made a short incision in the skin on either side, he separated it from the subcutaneous cellular tissue, and brought the flaps together by means of sutures, in such a manner that the testicle was concealed in a sort of pouch. After this, the healing process proceeded rapidly, and was quite complete on the 21st of January, a few days after which the man was permitted to return home.



Examination of the Tumour.—The woodcut here given will afford a good idea of the general contour of the tumour. It was encapsuled in a thin, dense membrane, which dipped into its structure between the lobes. Mr. Hilton sent the mass, while in a recent state, to the College of Surgeons, for Professor Quekett's examination. From the report of the latter gentleman we extract the following:—"It consisted of a series of lobules, the uppermost one of which was about two inches and a-half in diameter, and composed of a semi-transparent substance like firm jelly; the other lobes were made up principally of firm adipose tissue of two kinds, one transparent, the other opaque. When examined microscopically, the soft lobe of the tumour was found to be made up of a mass of cells containing oil globules of various sizes, interspersed with very delicate fibrous tissue, among which might be observed some elongated fibre-forming cells. Recently formed blood-vessels were present in all parts of the mass, but were most plentiful in those parts where the fibrous tissue had been most developed. Of the lower lobe of the tumour the more opaque parts consisted of adipose tissue and circular globules of oil, of all varieties in size. The more transparent portions, however, consisted of globules of oil and fine minute fibres, arranged in precisely the same manner as those above described in softer lobe. The smallest lobules were surrounded by fibro-cellular membrane. When portions of the transparent part of the tumour were treated with acetic acid, they immediately became opaque, and assumed a minutely granular appearance."

Microscopic characters from Professor Quekett's sketch. *a* Elongating cells; *b* clusters of oil and fat molecules.

Although the occurrence of tumours of the same character as

the above in the scrotum is very rare, yet surgical records contain descriptions of several such. Mr. Paget has described two which fell under his own notice, and alludes to a few others. Mr. Curling, in his work on the Testis, mentions two instances of "fibrous" tumour within the scrotum, one of which was excised by Mr. Fergusson, at King's College. If neglected, they sometimes grow to an enormous size, and become very inconvenient; they have, however, nothing of a malignant character. They appear, as far as the few on record may be taken as evidence, to be most common in adult or advanced life.

An exception, however, to the last remark, occurred in a patient on whom Mr. Hilton operated in 1846. The child was in this instance only eight months old, and the tumour, which had attained the size of half a nutmeg, had existed nearly from birth. It was situated in the right side of the scrotum, and in front of the cord. Mr. Hilton informs us that its section was opaque, firm, and fibrous looking, but no microscopic examination was made. Together with drawings, the tumour is preserved in Guy's Hospital Museum. The infant recovered well, and the disease did not return.

Fibro-cellular tumours may contain variable amounts of fat and of oily material; and, notwithstanding the large proportion of these elements found in the case above described, there can be no question as to its correct reference to that group. Its general features coincide well with the excellent description of them given by Mr. Paget, in his "Lectures on Surgical Pathology."

THE LONDON HOSPITAL.

CUT THROAT, WITH DIVISION OF THE THYRO-HYOID MEMBRANE.—CLOSURE OF THE WOUND BY SUTURES.—RECOVERY.

[Under the care of Mr. CURLING.]

The following case illustrates so forcibly the advantages sometimes derived from stitching up incised wounds of the deep parts in the throat that we should not be justified in neglecting to connect with its publication a few cautionary words. The practice alluded to is a very ticklish one, and should perhaps never be adopted excepting under peculiar circumstances, and when the patient, as in an hospital, can be for some days afterwards kept within immediate reach of surgical assistance. Mr. Liston has insisted strongly on the dangers which are run when such wounds are closed; that the blood, or other discharge, may pass internally, and either as a clot directly obstruct the glottis, or, having gradually trickled down the trachea, and collected in the bronchi, cause death by suffocation. The symptoms of danger usually come on very suddenly, and the fatal event is only to be averted by either performing tracheotomy or at once removing the sutures. The assertion, however, made by some surgeons, that sutures are unnecessary because wounds of this kind generally close if left to themselves, must be disproved by the observation of most who have had large experience, as it is further by the existence of an essay by Velpeau on "broncho-plastique" operations for their closure when become fistulous. It must, too, be admitted, that patients do occasionally die from the escape of blood into the air passages, even in cases in which the wound has not been closed. Perhaps the rule of practice should be, that where the parts are readily rendered quiet, and got into approximation by duly arranging the position of the patient, it is better not to use sutures; but in others, such as the following, there can be little doubt as to the propriety of the practice.

Nathaniel Mobbs, a wine-porter, aged 33, was brought to the hospital, on August 24, having just previously murdered his wife by cutting her throat, and attempted to destroy himself by the same means. The gash inflicted was very large, and had bled profusely; the policeman, who brought him in a cab, had, however, succeeded in arresting the hæmorrhage by cramming a handkerchief into the wound. On admission, the case was at once attended to by Mr. Debenham, the house-surgeon then on duty. On removing the handkerchief the blood spurted fiercely from a large artery, (apparently the superior thyroid,) which, with several smaller ones, was accordingly at once tied. The external wound was now seen to be between five and six inches in length; by one cut the body of the thyroid cartilage had been deeply incised; and by a second the thyro-hyoid membrane with the epiglottis had been divided as far back as the thyro-hyoidean ligaments, the knife having swept close along the upper border of the thyroid cartilage. The man was breathing with great difficulty and a loud noise through the large gaping wound, and at each respiration the larynx worked up and down with extreme violence. As soon, therefore, as the bleeding had been effectually arrested, Mr. Debenham proceeded to bring the parts together, and having failed in his attempts by arranging the position of the patient to quiet their spasmodic movements, and the man's life appearing to be in immediate danger, he determined to close the wound. Three interrupted sutures were accordingly passed into the upper edge of the thyroid cartilage, and made to connect it with the fibrous investment of the hyoid bone. This brought the edges into close apposition, and the relief afforded to the breathing was so immediate and complete, that it was thought safe without further delay to close the external wound.

For the first twenty-four hours, the man was made to keep ice constantly in his mouth, which served the double purpose of obviating any tendency to bleeding, and of alleviating the troublesome thirst from which he suffered. With the exception of a rather sharp attack of bronchitis, attended with copious expectoration, his after progress was uninterruptedly good. The sutures answered their purpose admirably, and the parts connected by them united without trouble. The external wound was, at the end of three weeks, excepting one small sinus, quite healed. One of the sutures ulcerated into the pharynx, and was brought up by coughing; the other two came away in the discharge externally.

This man was executed, at the Old Bailey, three months after the attempted suicide. Under the direction of Mr. Macmurdo, the surgeon to the gaol, a careful dissection of the parts concerned in the injury was subsequently made. Reparation had been so complete, that external to the larynx no trace of scar could be found. In the interior, however, was a linear cicatrix in the mucous membrane, exactly corresponding with the supposed length of incision. The coaptation of parts had been most perfect.

THE PROVINCIAL PRACTICE OF MEDICINE AND SURGERY.

WINCHESTER COUNTY HOSPITAL.

LACERATED WOUND OF LUNG PRODUCED BY CONCUSSION, WITHOUT ANY CORRESPONDING EXTERNAL INJURY.

(Reported by JOHN L. JARDINE, Esq., House Surgeon.)

William Johnson, aged 14, was admitted one evening, suffering from the effects of an accident. He had been climbing a tree, but, missing his hold, had fallen to the ground, from a height of about twenty feet. On admission, one hour after, he complained of severe pain in the right shoulder, principally along the spine of the scapula. He was extremely restless, throwing himself about violently, and could scarcely be kept in bed, so that the extent of the injury could not be so satisfactorily ascertained as was desirable. Movement of the scapula, however, greatly increased the pain along its spine, so that it was thought possible that it might be fractured. No injury or displacement of the clavicle could be detected. There was no wound or bruise to be seen in any part. He had pain in the right mammary region on pressure, and when breathing deeply, but no crepitus could be felt. It was thought, however, that fracture of the ribs might exist, which his great restlessness prevented us from detecting, and a bandage was, therefore, applied round the chest. The breathing was not hurried, and the pulse was moderately good. There was no cough or expectoration. There was indeed nothing particularly noticeable in him except the extreme pain of the shoulder, and the restlessness. He hada little drink, which he immediately vomited. He afterwards became rather more quiet for a time.

Two hours subsequently, the nurse noticed a sudden change in him, and at once sent for the House Surgeon. On going to him, it was evident that he was dying, apparently from hæmorrhage. Face pale, almost bloodless; extremities cold; pulse scarcely appreciable at the wrist; and the pain now referred to the right side of the chest entirely. The breathing was gasping, but not much quickened. He was perfectly sensible, and complained of the bandage being very tight. This was immediately cut off, and a small quantity of brandy and water administered. The state of collapse increased, and he died in little more than a quarter of an hour.

Post-mortem Examination Twelve Hours after Death.—No appearance of any external injury. The scapula was uninjured; but the clavicle was fractured close to its scapular extremity, with scarcely any displacement. No ribs were broken. When the sternum was raised, the right pleura was seen distended; and on making a small opening into its cavity, a puff of air escaped, followed by a quantity of bloody serum. The opening was then enlarged, and about three pints of clot and serum were found effused into the cavity of the pleura. There were numerous old adhesions over nearly the whole right pleural surface, with the exception

of a portion at the outer part of the lower lobe, at which place there was a rent in the pulmonary pleura of two inches long. This laceration extended into the substance of the lung for nearly four inches, going downwards to its phrenic surface, and it was of course from this that the hæmorrhage had taken place. The heart was slightly pushed over to the left. There was no other injury discovered, and all other organs appeared healthy.

I have not been able to find any record of a similar case for reference, but the following appears to me to be the most probable explanation of the occurrence,—that the shoulder and right mammary region must have come almost flat on the ground, so that the scapula and arm were forced backwards, receiving the first shock and producing fracture of the clavicle, while the ribs sustaining only part of the force of the fall escaped fracture, but were driven inwards, causing sudden concussion of the contents of the chest. Had the lung and pleura been in a healthy state, they would have been able to diffuse the force of the blow over a large extent, by the gliding motion between the pleural surfaces, and perhaps would thus have escaped any serious injury; but being bound down by firm adhesions, the whole force was expended on the part struck, and the extensive rupture sustained was the consequence.

The First Number of the New Volume of the MEDICAL TIMES AND GAZETTE *will be published on Saturday, Jan. 7,—and will contain a Course of*

CLINICAL LECTURES ON FEVER,

delivered in the Meath Hospital, Dublin, by WILLIAM STOKES, M.D., M.R.I.A., *Regius Professor of Physic in the University of Dublin.*

CLINICAL LECTURES ON SURGERY,

to be delivered at St. George's Hospital during the present Session, by CÆSAR HAWKINS, ESQ., F.R.S., *President of the Royal College of Surgeons.*

A continuation of the

CLINICAL LECTURES ON RENAL DISORDERS

IN RELATION TO DISORDERS OF THE STOMACH, AND TO OTHER ACUTE AND CHRONIC DISEASES.

By H. BENCE JONES, M.D., F.R.S., *Physician to St. George's Hospital.*

Six Lectures on the

FUNCTIONAL DISORDERS OF THE STOMACH.

By GEORGE BUDD, M.D., F.R.S., *Physician to King's College Hospital.*

Six Lectures

ON MALFORMATIONS OF THE HEART.

By T. B. PEACOCK, M.D., *Assistant-Physician to St. Thomas's Hospital.*

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CLINICAL REPORTS ON PRACTICAL MIDWIFERY.

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Many Original Communications of great value are also prepared. The extracts from the Official Reports of the Army and Navy Medical Departments will be continued. The Reports of London and Provincial Hospital Practice will be extended. The proceedings at the principal Medical Societies regularly reported. Selections from Foreign Journals will appear weekly, with Editorial Articles, Reviews, Foreign, Provincial, and General Correspondence, and Medical News.

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Medical Times & Gazette.

SATURDAY, DECEMBER 31, 1853.

PRACTICAL EXAMINATIONS AT THE UNIVERSITY OF LONDON.

A week or two since, we alluded in terms of commendation to the new features lately introduced into the examination for medical degrees at the University of London. The subject is of so much importance in its relation to medical education, that it appears advisable to recur to it now that the examinations for the degrees of M.B. and M.D. have just concluded.

The candidate having passed the matriculation examination, embracing a searching ordeal in classics, mathematics, and physical science, is subjected in due time to his first examination in Anatomy, Physiology, Chemistry, Materia Medica, and Botany. After two years' further study, he has another trial to pass in Comparative Anatomy, Medicine, Surgery, Midwifery, and Forensic Medicine, besides a practical examination in clinical medicine. This completes the examination for the degree of M.B. If he wish to proceed to the degree of M.D., he must have completed his twenty-third year, and have spent two years, after having passed the M.B. examination, in further attendance on clinical or practical medicine in a recognised hospital. The candidate is then required to prove by examination that he is acquainted with the outlines of mental philosophy, and is further tested in his practical knowledge by written and oral examinations on practical Medicine, as well as by reporting on the cases of patients in the wards of an hospital.

The new features to which we have previously briefly adverted consist in the practical tests to which the candidates are now subjected. Instead of merely writing answers to a series of printed questions, or of replying to a string of verbal interrogations, the student is required, in addition to the former written and oral examination, to give evidence of his practical knowledge at the bedside. He is there obliged to make a diagnosis by means of palpation, percussion, and auscultation, as well as by the more ordinary rational methods, and to return to the Examiners in writing the results of his investigations. On the occasion of the late examinations for the M.B. and the M.D. degree, a number of patients were collected, and were chosen from such cases as exhibited the best marked features of internal and external diseases. Of the latter class of maladies, the skin diseases are, of course, the most prominent, and these were supplied from one of the hospitals for the relief of cutaneous affections.

Not only is the candidate required to make use of such evidence as may be gained by the unaided senses of

touch, hearing, and sight; but he is also provided with microscopes and chemical re-agents for the examination of morbid products. He is not confined to the examination of such fluids as the patients under his eye may present, but he has placed before him a number of specimens of urine, obtained from many sources, to illustrate the various forms of urinary disease, as albuminuria, diabetes, oxaluria, etc.; and it is only by the aid of the microscope and of chemistry that he is enabled to distinguish their different varieties.

It is evident that the Senate and the Examiners are doing their utmost to render the degrees of the University of London objects of ambition to the candidates, and testimonials of honour to those who hold them. The curriculum of the University is now, we think, nearly complete, as it embraces a knowledge, both practical and theoretical, of all those branches of science which are necessary to the student and practitioner of Medicine.

REVIEWS.

On Diseases of the Rectum. By James Syme, F.R.S.E., Professor of Clinical Surgery in the University of Edinburgh, etc. 8vo, pp. 133. Third Edition. Edinburgh. 1854.

This is but little more than a reprint of the second edition of Mr. Syme's well-known work. Indeed, in the preface, the author says that he has little "to add or to alter." We need only say, therefore, that the chief points in the book are the exposition of the views of M. Ribes as to the position of the internal orifice in fistula in ano, the necessity of including this orifice in the incision when operating to effect a cure, and the inexpediency of cutting beyond. The proper use of the ligature in the treatment of internal hæmorrhoids, the necessity for checking bleeding from the rectum, the dependence of prolapsus on hæmorrhoidal disease, the treatment of the different varieties of rectal polypus, the limitation of all strictures of the rectum to within two inches of the orifice, the relief of spasmodic stricture by the division of the external or subcutaneous sphincter, and the cure of fissure of the anus by an incision hardly extending beyond the mucous membrane, are all insisted on, as in the former edition. No mention whatever is made of that very common affection, ulceration of the rectum; nor of those more obscure neuralgic affections which are somewhat less commonly met with. These we consider serious omissions; and would suggest, that, if not added hereafter, the title should be amended, and appear as "Observations on *Some* of the Diseases of the Rectum."

The Physicians', Surgeons', and General Practitioners' Visiting List, Diary, Almanack, and Book of Engagements for 1854.

This is the well-known work published by Mr. Smith, of Long Acre, and drawn up on a plan furnished by Mr. Seymour Haden. The price has been reduced by omitting the "Companion," and a useful addition has been made by admitting a list of the Insurance offices which pay medical referees. It forms a very convenient pocket and note-book; and we can easily see, that to those Practitioners who do not charge for medicine, it might serve also for day-book and ledger, even with a considerable number of patients.

The Laws of Cholera. Reprinted from the *Times*, with an Introduction and Supplementary Matter. London. 1853. 8vo. Pp. 91.

When the very able papers which compose this little work appeared in the *Times*, we showed our estimation of their value by making very full extracts, which were printed in our weekly accounts of the progress of the cholera. Those extracts will, doubtless, induce many of our readers to wish for the whole series of papers, and we are very glad to see them collected in a neat and portable form.

PROVINCIAL CORRESPONDENCE.

SCOTLAND.

Edinburgh, December, 1853.

The following circular has been issued with reference to Dr. Cockburn's recent circulars and his partnership with an unlicensed person:—

"Edinburgh, December 20, 1853.

"Sir,—You are desired to attend a meeting of the Royal College of Surgeons, in their Hall, upon Friday, the 30th day of December, at one o'clock. "James P. Macaulay,

"Officer.

"BUSINESS.

"The President's motion to adopt the following, in place of the laws Nos. 15 and 16, Chap. 4.

"'SPECIAL LAWS APPLICABLE TO FELLOWS.

"'No Fellow of the College shall keep an open shop for the sale of drugs or other merchandise.

"'No Fellow of the College shall allow his name to be connected with advertisements or publications of an indelicate or immoral nature.

"'No Fellow of the College shall practise by the use of or according to any secret remedy or method of treatment; nor shall allow his name to be connected with advertisements for the sale of any secret remedy, or for practice by the use of any secret remedy or method of treatment; nor shall connect himself in partnership or otherways, nor continue in connexion with any person practising by means of, or advertising the sale of, any secret remedy.

"No Fellow of the College shall be guilty of any deception or other immorality in the practice of his profession, nor shall in any other way conduct himself inconsistently with the honour and decorum which become a member of the College.'"

GENERAL CORRESPONDENCE.

BLACKBALLING AT THE MEDICAL AND CHIRURGICAL SOCIETY.

[To the Editor of the Medical Times and Gazette.]

Sir,—In the Number of the *Medical Times and Gazette* for December 17, it is stated, that some members of the Council of the Royal Medical and Chirurgical Society "descended," upon the occasion of a recent election, from the Council-room to canvass against a particular candidate.

As Secretary to the Society, and as one of the three members of Council appointed to superintend the ballot, I can give the most unqualified denial to the charge. To my certain knowledge, no remark escaped the lips of either of the two scrutineers, or of myself, bearing even indirectly upon the qualifications of the candidates; and I cannot recall any conversation, save that of the most general character.

I should not have troubled you with this communication, but, as several Fellows, and "one member of Council," have, from your remarks in the last Number of the Journal, made the charge of "canvassing" public, I take this opportunity of stating with equal publicity, that, as regards the proceedings at the ballot, it is wholly without foundation. I am, &c.

Queen-square, December 23, 1853. Holmes Coote.

A CASE OF PUERPERAL FEVER.

[To the Editor of the Medical Times and Gazette.]

Sir,—Having been for many years a constant reader of your Journal, I have rarely seen in it a communication on puerperal fever. Are such cases so rare or uninteresting as to be thought unworthy of record? Are its causes so mysterious as not to be understood, or its treatment so empirical or unsuccessful, as to deter the Practitioner from publishing? Is its appearance periodical? Does the accoucheur dread a temporary injury to his practice, fearing the reports of its communicability among his patients? Does this keep him silent? It is known such reasons as the latter have been assigned, but they are incompatible with Professional science and duty. May I be allowed to publish the following case in the *Medical Times and Gazette*, and be permitted at the end to add a few remarks?

On the 7th of February, Mrs. E. W., aged 25, a tall, well-pro-

portioned woman, of florid complexion, dark brown hair, and blue eyes, and a native of Herts, was taken with the premonitory symptoms of labour at 10 a.m., and was delivered at 11½ p m. on the following day of a fine male child. The presentation was natural, but the funis was twisted twice round the child's neck. The patient, before delivery measured thirty-eight inches round the umbilicus, and twenty-seven inches after. The secretions were natural, her nipples were stubborn in coming forward, her milk flowed on the second day, and the patient did pretty well until the fourth day, when she complained of chills, thirst, and pain in the loins. Ordered oleum ricini. The next day she was sleepless, pulse 90, tongue furred, slight pain by pressure over the uterus, which was well contracted. To take calomel and colocynth with saline aperients. The following day her symptoms were aggravated; no appetite; skin dry; breathing 20 per minute; pulse 120; eyes brilliant and glossy; darting pains in the pelvis; urine acid, micturates well; abdomen tympanitic, two inches larger round, with pain in the groin and Scarpa's triangle; lochia light coloured, offensive, and acid; bowels costive. To take hyd. chlor. gr. iij., and pulv. Doveri gr. v., every four hours, with effervescing aperient draughts. Her appearance being critical, I sought the advice of Mr. J. B. Brown. Mustard cataplasms were ordered over the region of the uterus; repeat the powders with draughts composed of sp. ether. chloric. ɱxxxx., and succ. limon. ʒss., aq. cinnam. ʒi., every four hours, and three grains of crude opium and four of calomel at bedtime; to drink iced beverages and milk diet. The next day, in addition to the preceding symptoms, the lochia was a yellowish green and offensive; the milk suppressed, countenance anxious, flush over the malar bone, pupil dilated, pulse 108; is free from pain; unpleasant dreams; feels sick, and ejects the milk. To repeat the medicines, and I ordered the vagina to be injected with a lotion composed of ʒiij. of chlorate of potash to ʒxiij. aq.; chloride of lime to be placed about the room, and the child to be kept from the breast. Stools were dark. To take at bedtime ϑi. of Dover's powder. The following day there was an improvement in most of her symptoms; two inches less round the abdomen; gums a little tender. Omit the calomel, and rep. alia. On the ninth day, she was very feeble and weak; pulse 120; the mouth to be washed out with alum-water and five grains of sesquicarbonate of ammonia and ʒj. of decoction of bark every four hours, and take beef-tea every two hours. On the next day, she was much better; skin moist; pain less; pulse 108; tongue cleaner, etc. Repeat the medicines and injections, etc.

In the next three days she improved greatly, with little pain, slight cough; pulse 100; gums less tender; milk flowing in the breasts; lochia nearly natural; feels giddy and faint, and has a "hissing sound in her ears." To continue the draughts; take two glasses of port-wine a-day, and omit the injections; and, the bowels being costive, to take two colocynth pills.

She now gradually improved in health and strength. On the 17th day her medicines were changed to iron and quinine three times a-day; on the 19th day an alkaline sanguineous discharge flowed from the vagina, assimilating the catamenia. Three days after it ceased; and she was convalescent with her child. Four weeks after the 19th day she menstruated while suckling.

The drainage in this patient's house was exceedingly defective, and the contents of the water-closets were rarely carried off by proper currents of water; the smell was very disagreeable and offensive throughout the whole house, and the patient had been subjected to the inhalation of this unhealthy effluvium for some months prior to her labour; and this circumstance might have rendered her system peculiarly susceptible to the puerperal morbid influence.

The increased violence in the symptoms, and the fatality occurring in puerperal epidemics, as well as cholera, can be traced to defective drainage. During the time this patient was ill, two other cases of a similar nature in the same district were under the care of other practitioners; there were, also, simultaneously, cases of diarrhœa in children, and erysipelatous inflammations of a phlegmonous character in adults raging in the neighbourhood. I have now (October) under my charge cases of diarrhœa, and a case of inflammatory fever after parturition, in the same locality, between Edgeware-road and Bryanstone-square. The Sanitary Commission would do well to inspect the drainage and the water-closets of the houses in this district.

This was a case of primipara, and her labour, dating from the premonitory signs, was of thirty-seven hours' duration. She had "a good time," and her strength was unimpaired throughout. Nothing particular occurred to lead one to suspect an untoward condition until after the third day; on the fourth her symptoms were suspicious, and on the sixth and following days her state became decided. The great aim throughout the treatment was to prevent further purulent absorption; that it had occurred to some extent there is no doubt, and that the lymphatics and peritoneum were inflamed to a circumscribed extent in the hypogastric region in the above case is obvious. The hypogastric, spermatic, internal and external iliacs, with the sacral plexus, from the acute pain in those parts, were doubtless imbued with the poison, and that there was a purulent discharge from the uterus is certain, as I detected it in the lochia.

The remedies were intended to suppress purulent absorption, extending as much as possible; so chloric ether, lemon-juice, calomel, and opium, with chlorate of potash injections (and chloride of lime about the room), were given in the hope of mitigating the evil.

The patient was a strong and athletic woman, yet venesection, which has been much lauded in the onset of puerperal fever, was not resorted to.

On testing the lochia, and finding the discharge acid instead of alkaline, (which is the natural state,) I was induced to make a further search, when I discovered pus.

The mother of this patient was in constant attendance upon her; she had a slight scratch upon her finger made with a pin, and this finger came in contact with the patient's napkins, upon which was the morbid lochia, and the consequence was very severe erysipelatous inflammation, extending to the shoulder. "Is there any relationship between erysipelas and puerperal fever?" is a question often asked; the above is an answer.

About six weeks after my patient recovered from the puerperal fever, she had an abscess in her left breast; she is now quite well, and has never had any deposits of matter since.

W. H. Borham.

Cambridge-terrace, Hyde park, Dec., 1853.

SALINE TREATMENT OF ASIATIC CHOLERA.

[To the Editor of the Medical Times and Gazette.]

Sir,—May I crave space in your Journal for a short reply to Dr. Turley's—of Worcester—notice of my letter that appeared in the *Medical Times and Gazette* of November 12, in which I showed the failure of Dr. Stevens' plan of treating Asiatic cholera, when tried by me in the Belfast Hospital in the epidemic of 1849.

Dr. Turley commences his notice of my letter by "emphatically denying that any one of Dr. Reid's cases was treated on the plan promulgated by Dr. Stevens;" because I conjoined with the salines either opium or stimulants, with the use of which Dr. Turley is surprised I "did not kill them all," as it appears Dr. Stevens has at all times "strongly inveighed" against their use.

Now, the best means of ascertaining what Dr. Stevens' plan really is, must be from the contents of the Case-books of the Infirmary, in which he had recorded the remedies used in the treatment of his patients; and I therefore invite Dr. Turley to refer to your Journal of the 13th of August, page 171, where he will see, among some curious statistics, a report of two of the cases treated by Dr. Stevens in the Infirmary of the Coldbath-fields Prison; and will find, that they became so steadily worse under the persevering administration of salines alone, that he was obliged to come to the rescue with "hot brandy-and-water," and succeeded in saving the life of one.

In reply, therefore, to the emphatic denial of Dr. Turley, quoted before, I have to inform him, that on this recorded practice of Dr. Stevens—that is, associating stimulants alone with salines—four of my patients were treated; and I presume there is no doubt that "hot brandy-and-water" was a stimulant. The particulars of these cases will be found in connexion with those whose ages are marked 32, 24, 70, and 45, in my first and second groups, and where it will be seen that not one recovered. I hope Dr. Turley will now see that I did not fail for "want of information on the saline method of Dr. Stevens' treatment."

In the other patients, opium alone, or with whiskey as a stimulant, was joined to the salines; but that these could have exercised any injurious influence over the result, is what, I believe, few who have been engaged in the treatment of genuine cholera will be disposed to admit. In fact, it so happens, that opium, the other remedy with which Dr. Turley accuses me to have been killing my patients, was the only means associated with salines in the treatment of the four patients who recovered, they being at no time so ill as to require stimulation. The amount of opium given as a dose varied from two to four grains, and it was not repeated without the usual precautions. The amount of whiskey given depended chiefly on its retention or rejection by the stomach, and varied from four to twenty ounces.

I believe that many lives might be saved during the epidemic that has commenced in this country, were other practitioners to present to the Profession the results of their trial of Dr. Stevens'

saline treatment in the year 1849, provided they arranged their cases under some such groups of symptoms, etc., as I have done, and thereby enable their readers to form a correct opinion of the state that each patient was in when the treatment was commenced. It cannot but be expected, that when this plan of treatment is confidently announced as having saved the lives of 461 out of 465 persons, ill with Asiatic cholera, many would be disposed—as I was—to give it a fair trial, while few would have the courage, or perhaps take the trouble of communicating to the Profession their disappointment in the results.

In this reply, I have studiously avoided imitating the offensive tone pervading Dr. Turley's letter, believing that no personal feeling should be allowed a place in a matter which to my mind involves the lives of many of our fellow-creatures; nor do I feel that I am called on to notice his lamentations over the ignorance of the physiologists and Profession of this country, leaving each to defend himself when the application becomes more personal.

I am, &c. J. Seaton Reid, M.D.
Physician to the Belfast Hospital for the Treatment of Contagious Disease.

Belfast, December 16, 1853.

[We are bound to admit a concise rejoinder from Dr. Turley; but there this correspondence must cease.—Ed.]

MEDICAL NEWS.

Royal College of Physicians.—At the usual quarterly meeting of the Comitia Majora, held on Thursday, December 22, the following gentlemen, having passed the necessary examinations for diploma, were admitted members of the College:—

Barnes, Dr., Devonshire-square.
Clark, Dr., Montague-place, Russell-square.
Roscow, Dr., Sumner-place, Onslow-square.

Royal College of Surgeons.—The following gentlemen having undergone the necessary examinations for the diploma were admitted members of the College at the meeting of the Court of Examiners on the 23rd inst.:—

Baylis, Augustus William, Frederick-st., Albany-st.
Harden, Henry, Wrington, Somerset.
Hubbard, Henry William, Bury St. Edmunds.
Lawrence, James Trevor, Whitehall-place.
Partridge, William Peyton, Birmingham.
Peatson, Joseph Chadwick, Manchester.
Plowman, William Taunton, Brook-st., Grosvenor-sq.
Waddington, Edward, Saltash, Devon.
Willis, John Hopkins, Plymouth, Devon.

Professor Quekett commences his course of Histological Lectures in the new theatre of the College of Surgeons on Wednesday, Jan. 11. Subject: "On the Mucous Membrane."

Apothecaries' Hall.—The names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 15, 1853:—

Allnutt, Joseph Fenn, Portsea.
Collinge, James, Whalley, near Clitheroe.
Denton, Edward Rawson, Leicester.
Hume, John, North Shields.
Lawson, George, Forest-hill.
Nicholson, Emilius Rowley, Lichfield, Staffordshire.
Powell, Frank, Chichester.
Raymond, Henry Hunter, Cirencester.
Thompson, Robert Farrer, Darlington, Durham.

APPOINTMENTS.

Medical.—Mr. J. L. Lizars, of Edinburgh, has just been appointed student in human and comparative anatomy to the Royal College of Surgeons, in the vacancy occasioned by the resignation of Mr. J. H. Sylvester.

Naval.—Surgeon James Bankier, M.D. (1834), to the Monarch, 84, guardship of ordinary, at Sheerness. Assistant-Surgeons: George V. M'Donogh (1849), recently additional of the Cumberland, 70, flagship on the North America and West Indies station, to the Cressy; C. D. M'Carthy (1853), to the Cressy; John Andrews (b.), M.D. (1843), from the Minden, storeship at Hongkong, to the Royal Hospital, Plymouth; Arthur M'Cluro (1843), recently serving in the Banshee, when serving as a mail-packet on the Mediterranean station, to the Impregnable flagship at Devonport; Narcissus C. Hatherly (1845), from the Royal Hospital, Plymouth, to be Assistant-Surgeon to the Plymouth division of the Royal Marines; Richard P. Chapman (1845), from the Impregnable, 104, flagship at Devonport, to the Banshee mail-packet, fitting at Woolwich for the Mediterranean station.

Sanitary.—The Queen has been pleased to direct letters patent to be passed under the Great Seal, constituting and appointing Joseph Burnley Hume, Esq., barrister-at-law; John Simon, Esq.; and John Frederic Bateman, Esq., to be Her Majesty's Commissioners for inquiring into the causes which have led to and have aggravated the late outbreak of cholera at Newcastle-upon-Tyne, Gateshead, and Tynemouth.

DEATH.

Gillkrest.—Dec. 25, at 1, St. Alban's-place, Dr. James Gillkrest, Inspector-General of Army Hospitals, and Corresponding Member of the National Academy of Medicine of France. This veteran officer entered the Medical Department of the Army in 1801, and served in the West Indies with the expedition under Sir Thomas Trigge. As surgeon of the 43rd throughout the Peninsular war, he was present with the Light Division at various affairs of outposts and minor actions, such as Sabugal and the Coa; besides the battles of Vimiera, Corunna, Busaco, Fuentes d'Onor, Salamanca, Vittoria, the Pyrenees, Nivelle, Nive, and Toulouse, the siege of Ciudad Rodrigo, and storming of St. Sebastian (as Medical Officer to the volunteers from the Light Division). For these services Dr. Gillkrest received a medal with twelve clasps. On the close of that war in 1814, he embarked with his regiment for America, and served in the affairs which terminated with the fruitless assault of the American intrenchments below New Orleans. In 1815, his regiment rejoined the army under the Duke on the advance to Paris. In 1827, he accompanied the expedition to Portugal under Sir W. Clinton. In 1828, he served in Gibraltar during the yellow fever epidemic of that year, and was shortly after promoted to the rank of Deputy-Inspector, and placed on half pay. In Paris, during the three days of July, 1830, he gave the benefit of his mature experience as a military surgeon to the wounded of both parties. In 1832, during the prevalence of cholera in London, he was indefatigable in his exertions among the poor, and, in a series of letters to the *Times*, gave a graphic sketch of the progress of that epidemic. In 1833, he was recalled to active service as principal Medical Officer at Gibraltar, where his experience in cholera became again available during its prevalence in that garrison in 1834.—*Times*.

Royal Institution.—Professor Faraday Lectures on Voltaic Electricity, on Tuesday, January 3; Thursday, January 5; Saturday, January 7, at three o'clock.

Epidemiological Society.—At the Meeting of this Society to be held on Monday, January 2, 1854, Dr. Finch, of the Hon. East India Company's Service, will read a paper "On the Prevalence and Mortality of Cholera in the Indian Army."

Mortality Notabilia.—In the week that ended on Saturday, 1399 deaths were registered in the Metropolitan districts. The increase arises from two causes: the rate of mortality has been raised by the coldness of the weather; and more than a due proportion of inquests are included in the Return, such cases having accumulated during the quarter without the Coroner's signature, which is necessary to complete the registration. In the ten corresponding weeks of the years 1843-52, the average number of deaths was 1124, which, if raised in proportion to increase of population, becomes 1236.

TO CORRESPONDENTS.

Mr. Windsor's paper on "A New Operation for Ununited Fractures" is in type.

X. Y. Z. should state which classical and mathematical examination he inquires about. He had better write to the Secretary of the Hall or University for information.

Students will find a table of comparative measurements in our last Student's Number, which will give him the information he requires.

R. S. B., Ulverston.—We cannot answer the question.

Thos. Brown, Esq.—Is the son to practise as a general practitioner? If so, the former plan is to be recommended.

Mr. Alexander Brown's letter shall be inserted: but we have not room for it this week.

T. P. Heslop, Esq.—The report and case shall appear early in the new volume.

Mr. W. Parker's letter was acknowledged in our paper of December 24.

Mr. Jardine is informed that his conjecture is correct. No alterations will be made excepting in cases introduced as parts of series.

W. W.—The instrument for injecting nævus with the perchloride of iron figured in our last, was made for Mr. Forster by Mr. Bigg, of St. Thomas', street.

COMMUNICATIONS have been received from—

Dr. Lyon Playfair; Henry Cole, Esq.; E. Cousins, Esq.; Dr. Bryson; Sir J. Eardley Wilmot; Dr. Taylor; J. S. Buckingham, Esq.; Dr. Collier; Dr. Stokes; W. R. Wilde, Esq.; Dr. Quain; John Coghlan, Esq.; Dr. Franks, Leamington; Dr. Crane; M. M., Victoria, Hong-Kong Clunder Coomar Dey; Dr. Spence; Dr. Hofmann; Students; X. Y. Z.; R. S. B.; T. Brown, Esq.; Mr. A. Brown; T. P. Heslop, Esq.; Mr. W. Parker; John West, Esq.; John Lambert, Esq.; Arthur Shetton, Esq.; Robert W. Gillespie, Esq.; Thomas Phelps, Esq.; Dr. Budd; Dr. M'William; etc.

INDEX.

A

Abortion case, the Clapham, 52, 67
....., procuring, 101, 149, 295, 337, 361, 491, 669
Abraham, Dr., death of, 77
Abscess, 241, 373, 394
....., chronic, in the thigh, 269
....., scrofulous ovarian, 241
Academy, the Royal, 543
Acid, sulphuric, in diarrhœa, 512
Aconite, accidental poisoning by, 543
Aconitum napellus, 555
Acute disease of the articulations, 379
Adams, Fennell v., 335
Adams, J., Esq., F.R.C.S., Removal of the sequestrum of the entire shaft of the left tibia; anchylosis of the ankle-joint, 106
Advertisements, demoralising, 581
Agar, Dr., Death of, 643
Albert-park, Finsbury, 481, 504, 567
....., Prince, 77
Albuminuria, 90
Alderson, J., M.D., review, 69
Alison, S. S., M.D., review, 458
Amaurosis, 166
Amputation, 487, 675
....., cases of, at St. George's Hospital, 527
..... at the ankle-joint, 649
..... of the leg, 109
..... thigh, 105
Anæsthesia, paraplegic, 601
Anchylosis, 106
Aneurism, 98, 199, 280, 450, 475, 499, 500, 501, 560, 563, 579, 609, 629, 648
....., per chloride of iron in, 276
....., false, 124
....., thoracic, 489
Aorta, structure of the, 72
Aortic valves, diseased, 436
Apothecaries' Company, successful prosecution by the, 399
..... Hall, 24, 50, 77, 100, 127, 152, 178, 204, 229, 254, 280, 336, 361, 386, 517, 542, 567, 616, 684
....., rules and regulations, 291
Appointments, 24, 50, 77, 101, 127, 152, 178, 204, 229, 254, 280, 314, 336, 361, 386, 413, 439, 465, 491, 517, 543, 567, 591, 616, 643, 668, 684
..... in India, 24, 178
Arago, M., 413, 491
....., death of, 386

ARMY MEDICAL REPORTS—

I. Extracts from a Report on a Recent Epidemic of Remittent Fever, at Prome, Burmah. By M. W. Murphy, Esq., Assistant-Surgeon, 7
II. Case of Rupture of the Bladder. By Dr. J. W. Chambers, Surgeon 35th, 59
III. Case of Amputation of the Thigh; Subsequent Ligature of the Femoral, and then of the External Iliac, on account of Secondary Hæmorrhage. By John Mitchell, M.D., 105
IV. Remarks on the Diseases of the British Troops in Burmah. By J. R. Taylor, Esq., and James Stewart, Esq., 161
V. Extracts from a Report on the Advantages, in a Medical and Military Point of View, of ascertaining the Bodily Weight of Soldiers on their Admission and Discharge from Hospital. By Arthur S. Thomson, M.D., Surgeon 58th, 237
VI. Reports upon the Exhausting Apparatus of Dr. Junod. By Drs. Maclean, Scott, Dartnell, and Forrest, 258
VII. Extracts from the Annual Report on the Health of the Troops serving in Ceylon from April 1, 1850, to March 31, 1851. By Dr. Cameron, Surgeon 57th, 365
VIII. Extracts from the Annual Report of Sick of Her Majesty's 86th Regiment. By Alexander Thom, Esq., 417
IX. Extracts from Reports on the Cholera and Small-pox in the Island of Ceylon in 1852. By Andrew Fergusson, M.D.—History of an Epidemic Influenza which prevailed at Auckland, New Zealand, during the Months of January and February, 1853. By Arthur S. Thomson, M.D., 495
X. On the Treatment of Fracture by the Gum Bandage. By Ed. J. Franklyn, Esq., 522
XI. Extracts from a Report on Epidemic Cholera in Newcastle, Jamaica. By J. D. M'Ilree, Esq., 572
XII. Instructions to Army Medical Officers, for their Guidance on the Appearance of Spasmodic Cholera in this Country. Results of their Observance at Newcastle, 596
XIII. Case of Aneurism of the Femoral Artery Cured by the Application of a Ligature after Failure by Compression. By John Mitchell, M.D., Surgeon 7th Fusileers, 648
XIV. Remarks on the Quarterly Return of Sick of H.M. Forces serving in the Bombay Presidency from July 1 to September 30, 1853. By John Hall, M.D., 674

Army Medical Service, rules and regulations, 293
Arnott, Neil, M.D., F.R.S., an account of the rupture truss with screw adjustments, 573
Arthur, Dr., death of, 127
Artificial membrana tympani, 336
..... pupil, cases of, 580
Ascites, tapping for, 436
Assault, felonious, charges of, in Dublin, 179
Assaults, alleged felonious, in connexion with a recent epidemic of infantile leucorrhœa, 260, 346, 369, 446
Assistant-surgeons in the navy, 18
Associated Medical Journal, the attack on Mr. Churchill by the, 557
....., the British, 230, 280, 555
....., Provincial Medical and Surgical, 205-221, 276, 643
Assurance, medical examination of lives for, 611
..... offices, 376
..... : Who ought to pay the surgeon's fee? 502
Attwood, Mr., death of, 491
Auckland, New Zealand, influenza in, 495
Aztecs, the, 43
Azygos, review, 560

B

Baly, Dr., 231
Bankier, Dr., death of, 205
Bardsley, Sir James, 229
Barlow, death of Mr., 24
Barwell, R., review, 508
Bate, C. Spence, Esq., on the peridental membrane in its relation to the dental tissues, 419
Bavaria, 491
Beds for urgent cases in the London Hospitals, 227
...., Lifting apparatus for, 651
Belladonna in salivation, 422
Bellingham, O'B., M.D., review, 146
Benefit societies and medical men, 643
Bengal, 24, 178
..... Medical College, 153
Benson, Mr., death of, 591
Bequests, 51, 205, 229, 254, 337, 361, 491
Bettleheim, Dr., on medicine in Lewchew, 136, 164, 188
Bifid uvula, 90
Birmingham Gaol, 278
Births, 78, 102, 127, 154, 179, 206, 231, 256, 281, 314, 337, 361, 387, 413, 439, 466, 491, 531, 568, 591, 669
Blackballing at the Chirurgical Society, 556, 591, 632, 637, 682
Blackton, W. H., Esq., case of intussusception, 190
Bladder, rupture of the, 59
Blake, Mr., death of, 413
Bleeding in cholera, 423
Blood-vessels of the lower extremity, wounds of, 5
Bloomsbury Dispensary, practice of medicine and surgery at, 269
Blount, Mr., 361
Board of Health and the Croydon fever, 93
Bombay, 24, 178
Books received, 26, 52, 78, 128, 180, 232, 256, 338, 388, 440, 492, 544, 592, 644, 670
Botanical Society, 591
Bowe, H., Esq., Case of epileptic convulsions cured by the internal administration of chloroform, 323
Brain, softening of the, 396
Branston, T. F., review, 584
Braun, Charles, review, 147
Bright's disease, 487
Brinton, W., M.D., review, 431
British Association, 230, 280, 555
Brodhurst, B. E., Esq., Contributions to orthopædic surgery, 8, 37, 524
Bromley, Dr., death of, 205
Brompton Hospital, 361
Budd, George, M.D., F.R.S., Lectures on organic diseases and functional disorders of the stomach, 27, 207
Bull, Dr., death of, 517
Bulley, F. A., review, 584
Burial-grounds in the metropolis, closing of the, 644
Burmah, the war in, 254
Burrows, G., M.D., F.R.S., Illustrations of clinical medicine and pathology, 239, 624
Bursa, 243
Byne, death of Mr., 25

C

Caffre doctors, 449
Calculus, biliary, 487
Cambridge, University of, 50, 412, 438, 464, 517, 665
....., rules and regulations, 285
Cameron, Dr., Army medical report by, 365
Cancer, colloid, 46
..... from inoculation, 462
..... in the brain, 487
..... in early life, 61
..... of the omentum, 436
....., medullary, 324, 326
Cancerous growth, 72
Cancroid disease of the hand, 459
Canney, Geo., Esq., case of large polypus of the uterus, complicated with inversion, 498
Canthariden, poisoning with, 20
Carlon, production of, by galvanism, 465
Caries of the orbit, 372
Carotid, case of ligature of the, 100
Cartilaginous tumours, 88
Case of excision of the knee-joint, by G. M. Jones, Esq., 11
..... farcy in the Devon and Exeter Hospital, 539
..... intussusception, 190
..... large polypus of the uterus with inversion, 498
..... laryngeal disease. By Henry Smith, Esq., 34
..... ligature of the carotid at St. Mary's Hospital, 100
..... placental presentation. By F. Danford, Esq., 190
..... rupture of the bladder, 59
Cases of affections of the nervous system, 107, 163
..... amputation at St. George's Hospital, 527
..... chronic disease of the stomach, with sarcinæ in the vomited matters, 496, 522
..... compound fracture at St. George's Hospital, 528
..... exostosis, 38
Cataract, incipient lenticular, 340
Causes of insanity, 591
Central London Ophthalmic Hospital, practice of medicine and surgery at, 218, 423
Certificates for assurance societies, payment of, 122
Ceylon, cholera in, 495
....., small-pox in, 495
Chalk, W. O., Esq., on a case of ulcer of the rectum, 599
Chambers, Dr. J. W., army medical report by, 59
Charing-cross Hospital and Dr. E. Smith, 49, 68, 100, 115, 123, 148, 174, 255
....., practice of medicine and surgery at, 374, 396, 450, 555, 601
....., rules and regulations, 393
Charitable trusts, 254
Charity, medical, 533
Charter of the Royal College of Physicians, 66
Chatham-street School of Medicine, Manchester, 230
.....
..... rules and regulations, 307
Child born without limbs, 604
Children, opium in prolapsus of the rectum of, 509
....., parotid swellings in, 510
....., the Royal Infirmary for, practice of medicine and surgery at, 654
Chirurgical Society, the, 517
....., blackballing at the, 556, 591, 632, 637, 682
Chivalry, a new order of, 643
Chloride of zinc as a deodoriser, 341
Chloroform, 205
..... at St. Bartholomew's, 561
....., case of suspended animation under, 173
..... deaths from, 47, 98, 120, 406, 407, 413, 422, 449, 461, 485, 503
..... in delirium tremens, 148
..... epileptic convulsions, 323
..... puerperal convulsions, 412
Chemistry, Royal College of, 127
....., rules and regulations, 305

Chemistry, organic, lectures on, 30, 103, 184, 363, 441, 519, 671
Chemists and druggists, practising, 255
....., prescribing, 531
Chobham, health of the troops at, 51, 77, 127
Cholera, 113, 153, 162, 179, 195, 205, 226, 230, 255, 281, 326, 328, 329, 336, 344, 354, 375, 424, 450, 486, 489, 514, 549, 562, 563, 566, 575, 577, 586, 596, 610, 612, 627, 682
....., and the Board of Health, 271
..... drainage of London, 455
..... the Epidemiological Society, 504
....., clergy *v.*, 480
....., Dr. Macloughlin on, 506, 534
....., hot-water cushions in, 423
..... the prevention of, 367
....., progress of, 329, 354, 377, 400, 420, 457, 482, 505, 534, 558, 583, 606, 632, 659
....., pure metals, a remedy in, 462
....., Quarterly Report of the Registrar-General on the, 506
....., sulphuric acid in, 460
....., the saline treatment of, 513, 682
Chronic disease of the stomach, with sarcinoe, 496, 522
Churchill, Mr., the attack on, by the Association Medical Journal, 557
Chylous urine, 493
Cirrhosis of the liver, 463
City Dispensary, the, 543
City of London Hospital for Diseases of the Chest, practice of medicine and surgery at, 90, 602
Clark, Sir James, and the statements of the *Zoist*, 423
Clapham abortion case, the, 52, 67
Clelland, Dr., death of, 337, 387
Clenkin, Mr., death of, 387
Clergy *v.* cholera, 480
Clinical instruction at the London Hospitals, 514
..... lecture on wounds of blood-vessels of the lower extremity, 5
..... medicine, 353
..... at the London schools, 455
....., neglect of the study of, 50
Coagulum, Mr. Pretty's case of detained, 21, 48
Cock, J., M.D., Review, 46
..... T. F., M.D., Review, 609
Coffinism, more, 532
Cogswell, Dr., on tests for iodide of potass, 542
Colic, lecture on cases of, 79
College, Bengal Medical, 153
..... examinations, the, 226
....., King's, 25, 439, 668,
....., presentation for degrees and honours at, 23
....., ..., rules and regulations, 295
....., Madras Medical, 609
....., Marischal, Aberdeen, 491
....., Medical Benevolent, 44, 144, 152, 280, 337, 413, 517, 533, 567, 617
....., Queen's, Birmingham, 178
....., Trinity, Dublin, 77
....., University, 617
..... rules and regulations, 296
..... of Chemistry, 127
....., rules and regulations, 305
....., Liverpool, rules and regulations, 309
..... Physicians, the, 24, 178, 386, 413, 684
....., charter of the, 66
....., rules and regulations, 289
..... Surgeons, the, 24, 50, 77, 100, 126, 152, 204, 361, 386, 413, 438, 439, 490, 517, 542, 567, 591, 616, 668, 684
....., examinations at the, 277
....., rules and regulations, 290
....., strange questioning for the diploma of the, 563
Collegiate elections, the, 50, 77
Colloid cancer, 46
Colney Hatch, County Lunatic Asylum, practice of medicine and surgery at, 219
Colour of urine, 378
Comet, a bright, 231
Communications, Original, 7, 8, 11, 32, 34, 37, 59, 84, 86, 87, 105, 106, 107, 133, 134, 136, 161, 163, 164, 187, 188, 190, 211, 213, 215, 216, 237, 239, 241, 258, 260, 262, 264, 319, 321, 323, 341, 344, 346, 365, 367, 369, 371, 391, 392, 417, 419, 444, 446, 470, 473, 495, 496, 498, 522, 524, 526, 547, 548, 549, 572, 573, 575, 596, 598, 599, 623, 624, 627, 648, 649, 651, 674
Compliment to the Medical Profession, 178
Compound fracture, cases of, at St. George's Hospital, 528
Congenital malformation of the heart, 563
Conneau, Dr., 205
Constipation, 435
Contagion among animals, 101
Contractions and anchylosis of the knee and hip-joints, 59, 134
Conveyance of cholera patients, 387
Convulsions, on, 516
Cooper, Mr. Bransby, 229, 491
...., death of, 204, 205
....., post-mortem on, 248
Cooper's, Sir Astley, clinical prize, 101
Coote, H., Esq., examination of a fibrous tumour, presenting some resemblance to a cystic growth, 215
Copland, J., M.D., on certain pathological states of the blood, 539
Corfe, Geo., M.D., observations on emphysema pulmonum, 86
Cork, climate and diseases of, 509
Cormack, Dr., on cholera, 514
Cornea, opacity of the, 469
Correspondence, foreign, 251, 275, 405, 510,
....., general, 21, 48, 73, 99, 122, 148, 173, 199, 227, 252, 277, 335, 360, 379, 406, 433, 459, 483, 512, 538, 561, 586, 610, 637, 664, 682
....., provincial, 120, 225, 276, 334, 406, 512, 537, 561, 637, 662, 682
Correspondents, notices to, 26, 52, 78, 102, 128, 154, 180, 206, 232, 256, 282, 314, 338, 362, 388, 414, 440, 492, 518, 544, 592, 618, 644, 670, 684
County Court, important decision in a, 456
Coup de soleil, 255
Cowan, Mr., death of, 591
Cox, A., review, 71
.. ., W. J., review, 403
Crewkerne and Yeovil District Medical Society, 361
Criminal jurisprudence, 121
Crisp, Dr., on a dog without a spleen, 542
....., on the weight and form of the heart, the diameter of the aorta, and the size of the blood corpuscles in the vertebrata, 542
Croom, Mr., death of, 337
Croonian lectures, the, 569, 593, 619, 645
Croydon fever, the, and the General Board of Health, 93
Curie, Dr., death of, 413
Currie, Mr., death of, 387
Currey, F., review, 608
Cust, Hon. Lady, review, 273
Cyanide of potassium, deaths from inhaling, 639
Cyst, large, in the labium pudendi, 113
....., removal of a, 628
..... under the tongue, 678
Cystic disease of testicle, 227
Cysticercus, 19
Cystorrhœa, 488

D

Dalrymple memorial, 617
Dalziel, J., M.D., review, 19
Danford, F., Esq., case of placental presentation, 190
Dartnell, Dr., army medical report by, 258
Davidson, J., M.D., navy medical report by, 623
Dawson, La Mert *v.*, 153, 169
Deaf and dumb, 361
Deakins, Mr., death of, 77
....., Dr., death of, 152
Deaths, 24, 50, 77, 101, 127, 152, 178, 205, 230, 314, 336, 361, 386, 413, 439, 465, 491, 517, 543, 567, 591, 617, 643, 668, 684
Deaths from chloroform, 47, 98, 120, 406, 407, 413, 422, 449, 461, 485, 503
Deformity, remarkable, 227
Delirium tremens, 167
....., chloroform in, 148
Demoralizing advertisements, 581
Dendy, W. C., review, 249
Dental evolution, phase of, 148
Dentistry in Madrid, 78
Devon and Exeter Hospital, 179, 280
....., case of farcey in the, 539
Diabetes, 123
..... mellitus, 250
Diarrhœa, choleraic, 344
..... sulphuric acid in, 512
Dilatation of blood-vessels, 560
Disease, laryngeal, case of, 34
..... among the Russian troops, 387
..... in vegetables, 78
Diseases and climate of Cork, 509
....., organic, and functional disorders of the stomach, 27, 207
..... of the brain, 124
..... of the ear, 587
..... of the scalp, 181
..... of the troops in Burmah, 161
Dislocations, 422, 435, 487
Disorganisation of the joint of the great toe, 141
Dispensary, Bloomsbury, practice of medicine and surgery at, 269
Draper, Mr., death of, 591
Drugging, domestic, 205
Druggists, practising, 278
Drugs, their impurities and adulterations, 426
Dublin, charges of felonious assault in, 179
..... Hospital Grants, 605
..... Hospitals, 582
Dumb and deaf, the, 361
Duplicate placenta, 409
Dura mater, on malignant disease of the, 129
Dysentery, 162

E

Ear, diseases of the, 587
Earthquake, 255
East India Company's service, the medical appointments in, 94
..... medical service, rules and regulations, 294
East Surrey Cholera Society, 439
Edinburgh, university of, 177, 537

EDITORIAL ARTICLES :—

Our new volume, 14; The naval medical service, 15; The election of surgeon to St. Thomas's Hospital, 17; Assistant-surgeons in the navy, 18; Government neglect of men of science, 41; Faraday on table-turning, 42; The late slander case at Wimbledon, 43; The Aztecs, 43; The Charter of the Royal College of Physicians, 66; The case of criminal abortion, 67; Charing-cross Hospital, 68; The General Board of Health and the Croydon Fever, 93; The medical appointments in the East India Company's Service, 94; Vaccination Extension Bill, 114; The *Edinburgh Review* and the quarantine question, 115; Charing-cross Hospital, 115; Unqualified medical practitioners, 143; The Medical Benevolent College, 144; The Vaccination Extension Bill, 145; Knighthood, 168; The case of Lamert *v.* Dawson, 169; Irish Poor-law: Medical Salaries: Disrespectful advertisements, 170; Cholera progress, 195; The smoke nuisance, 196; The Vaccination Extension Bill, 197; Medical reform 220; The Swansea meeting of the Provincial Medical and Surgical Association, 221; The *Edinburgh Review* on yellow fever, 245. The medical staff of the metropolitan hospitals, 246; *Post-mortem* examination of the body of Mr. Bransby Cooper, 248; Medical education in India, 270; The cholera and the Board of Health, 271; Address to students, 283; Medical reform a public, not a professional question, 327; Cholera, 328; On the admission of cholera patients into public hospitals, 351; The directions and regulations of the Board of Health, 352; Clinical medicine and surgery at the London schools, 353; The treatment of cholera, 375; Assurance offices, 376; Official registration of medical practitioners, 377; The Profession and the Vaccination Act, 397; Mr. Guthrie's introductory lecture, 398; Successful prosecution by the Apothecaries' Company, 399; Medical officers of health, 424; Medical reform a public question, 425; The cholera and the drainage of London, 455; Clinical medicine at the London schools, 455; Important decision in a county court, 456; Clergy *v.* cholera, 480; The staff of the metropolitan hospitals, 481; The Albert-park, Finsbury, 481; Assurance offices: Who ought to pay the surgeon's fee, 502; The recent deaths from chloroform, 503; The Albert-park, Finsbury, 504; Hospital Statistics, 532; More "Coffinism," 532; The Medical Benevolent College, 533; St. Thomas's Hospital, 533; Recent improvements in medical examinations, 555; Blackballing at the Medical and Chirurgical Society, 556; The attack on Mr. Churchill by the *Association Medical Journal*, 557; Naval medical officers, 580; Demoralising advertisements, 581; The Dublin Hospitals: the vacancy in Steevens', 582; Quackery within the ranks, 604; Dublin Hospital grants: Westmoreland Lock Hospital, Dublin, 605; Mr. Simon's report, 606; The New Lunacy Acts, 631; Blackballing at the Medical and Chirurgical Society, 632; Professional independence *v.* hospital committees, 657; Student life in London, 658; Practical Examinations at the University of London, 681.

Edwards, Mr., death of, 337
Elbow, fracture of the, 76
Election of surgeon to St. Thomas's Hospital, 17
Elections, collegiate, 50, 77
Electricity, 172
Elephantiasis Græcorum, 444, 470
Elkington, Mr., death of, 387
Emigrants, Irish, 387
Emphysema pulmonum, on, 86
Entomological Society, 491
England, health of, 203
English university procedure, 25
Enlargement of the middle lobe of the prostate, 280
Epicanthus, 218
Epidemic of remittent fever at Prome, Burmah, 7
Epidemics, 281
Epidemiological Society, 149, 333, 515, 614, 684
..... and the cholera, 504
..... vaccination Bill, 117
Epilepsy with amaurosis, 166
Epileptic convulsions, chloroform in, 323
Erichsen, John, review, 536
Erysipelas, 124
Ethnology, 449
Examinations at Apothecaries' Hall and University of London, relative merits of, 123
....., the College, 226, 253, 277, 335
..... at the College of Surgeons, and Mr. Guthrie, 76, 99

Examinations, medical, 555
....., University, 360
....., practical, at the University of London, 681
Excision of the knee-joint, 11, 213
..... proximal phalanx of the thumb, 603
Exeter Infirmary, practice of medicine and surgery at, 501
Exhausting apparatus of Dr. Junod, 258, 408
Exhibitions, public, in London, 314
Exostosis, cases of, 38
Extramural interment, 51
Extra-uterine fœtation, 325
..... pregnancy, 262
Extraction of loose cartilages, 301

F

Faraday on table-turning, 42
Farcy, case of, in the Devon and Exeter Hospital, 589
Fatty liver, 458
Fecundation, artificial, 618
Fee, surgeons', and assurance offices, 502
Fellowship, the, 356, 413, 438, 490
Female physicians, 25
Fennell v. Adams, 335
Fergusson, A., M.D., Extracts from reports on the cholera and small-pox in Ceylon in 1852, 495
Ferro-manganic preparation, on a new, 598
Fever, 255
..... hospital at Manchester, a new, 71
....., Newcastle-on-Tyne, 71
....., intermittent, 148
..... puerperal, 682
....., remittent, at Prome, 7
....., scarlet, 491, 555, 644
....., ship, 389
....., typhus, 217, 359, 432
....., yellow, 51, 78, 101, 140, 179, 205, 230, 281, 338, 413, 439, 465, 518, 617, 669
Filliter, W., Esq., M.B., two cases of extra-uterine pregnancy, 262
Finlay, Mr., and Mr. Wiblin, 176
Finsbury, the Albert-park, 481, 504, 567
Fisher, Mr., death of, 127
Fistula, 20
..... in perinæo, 380
Flies, a swarm of, 518
Flogging in the Navy, 179
Fookes, Mr., death, 617
Forceps, the lever ring, 587
Foreign Correspondence, 251, 275, 405, 510
..... Journals, selections from, 19, 46, 72, 98, 119, 148, 172, 198, 250, 274, 333, 359, 378, 404, 432, 458, 509, 536, 560, 585, 609, 636, 661
..... Medical Schools, 25
Forrest, Dr., army medical report by, 258
Fracture apparatus, an improved, 98
..... cases of compound, at St. George's Hospital, 528
..... of the elbow, 76
..... ribs, 167
..... thigh, 111
....., treatment of, by the gum bandage, 522
..... 250, 411, 630, 655
Frank, Dr. Philip, on the treatment of contractions and anchylosis of the knee and hip joints by forced rupture, 59, 134
Franklyn, E. J., Esq., army medical report, on the treatment of fracture by the gum bandage, 522
Freezing mixtures, 274
French, J. G., review, 661
Frith, Dr., death of, 567
Fuller, H. W., M.D., on cholera and choleraic diarrhœa, 544
Fund, Medical Benevolent, 50, 152, 280, 387, 517, 643
Fungoid tumours, 464

G.

Galvanic cautery, the, 506
Galvanism in ulcers, 84
....., production of carbon by, 465
Galvano-puncture, 274
Gamgee, J. S., review, 584
Gangrene of the brain, 560
..... spontaneous, 250
Gas, olefiant, 519
GENERAL CORRESPONDENCE :—
21, 45, 73, 99, 122, 148, 173, 199, 227, 252, 277, 335, 360, 379, 406, 433, 459, 483, 512, 538, 561, 586, 610, 637, 664, 682
Germany, medical sketches in, 275, 405, 510
Greenhill, W. T. M., Esq., on the outbreak of cholera in Newcastle, 627
Gay's, Mr., operation for ulcer, 176
Go[illegible] Hospitals, the, 439
Gibb, C. J. Esq., report on cases of cholera at Newcastle upon-Tyne Infirmary, 549, 575
..... description of a new splint, 676
Gilkrest, Dr., review, 403
..... death of, 684
Glands, removal of, 190
Glasgow, health of, 205
..... Medical Society, 517
....., University of, 563
Glucosuria, 250
Goold, Mr., death of, 439
Gordon, Dr., death of, 465
Government neglect of men of science, 41
Gratuitous medical services, 612
Graves, Mr., death of, 25
Griffiths, T., review, 19
Gum bandage, treatment of fracture by the, 522
Gunshot wound, 111
....., case of, 638
Gurlt, Dr. E., review, 224
Guthrie, Mr., and the examinations at the College of Surgeons, 76, 99
Guthrie's, Mr., introductory lecture, 398
Gutta percha, substitute for, 168
Guy's Hospital, opening of the medical session, 381
....., practice of medicine and surgery at, 40, 62, 110, 141, 194, 266, 351, 373, 424, 450, 451, 475, 500, 578, 629, 679
....., rules and regulations, 300

H

Hadwen, S., Esq., M.R.C.S., account of five cases of amputation at the ankle-joint, 649, 675
Hale v. Manckekwell, 248
Hall, A., M.D., review, 71
.. .., J., M.D., army medical report by, 674
Hall, Apothecaries, 24, 50, 77, 100, 127, 152, 178, 204, 229, 280, 336, 361, 386, 517, 542, 567, 616, 684
..... rules and regulations, 291
Hand, cancroid disease of the, 459
Handbill, a, 543
Hartwig, Geo., M.D., review, 432
Harveian Society, 517
Harvey, Mr., death of, 387
Hayes, Dr. Boon, Lectures on histological anatomy and microscopical manipulation, 132
Headland, F. W., B.A., review, 536
Health, General Board of, 231, 329, 352
..... , and the cholera, 271
..... of England, 203
..... the Russian troops, 439
..... Leeds, 413
..... troops in Ceylon, 365
Hearne, E., M.B., review, 458
Heart, diseases of the, 561
Heat, intense, in New York, 387
Heidelburg, 405, 510
Henderson, W., M.D., review, 378
"Henry, Dr.," action against, 205
Hernia, 110
....., cases of strangulated, at St. George's Hospital, 530
....., inguinal, 392
....., scrotal, 40
Hirschfeld, Dr., on the nerves of the uterus, 87
Histological anatomy and microscopical manipulation, lectures on, by Dr. Boon Hayes, 132
Hæmorrhage, 274, 422
Hofmann, Dr. A. W., F.R.S., lectures on organic chemistry, 30, 103, 184, 363, 441, 519, 671
..... Liebig's Hand-book of Organic Analysis, 509
Hogg, Jabez, review, 119, 273
Holland, T. S., M.D., review, 635
Homœopathy, 122, 360, 361
Hooper, Dr., death of, 643
Hospital, a new fever, at Manchester, 71
....., Brompton, 361
....., Central London Ophthalmic, practice of medicine and Surgery at, 218, 423
....., Charing-cross, and Dr. E. Smith, 49, 68, 100, 115, 123, 148, 174, 255
....., practice of medicine and surgery at, 374, 396, 450, 555, 601
....., rules and regulations, 303
....., City of London, for Diseases of the Chest, practice of medicine and surgery at, 90, 602
..... Committees, professional independence *v.*, 657
....., Coventry and Warwickshire, 205
....., Devon and Exeter, 179, 280
....., case of farcy in the, 589
....., Fever, at Newcastle-on-Tyne, 71
..... for Diseases of the Skin, practice of medicine and surgery at, 630
....., Grants, Dublin, 605
....., Guy's, practice of medicine and surgery at, 40, 62, 110, 141, 191, 266, 351, 373, 424, 450, 451, 475, 500, 578, 629, 679
....., rules and regulations, 300
....., King's College, practice of medicine and surgery at, 13, 166, 217, 242, 372, 424, 475
....., rules and regulations, 298
....., Lincoln, practice of medicine and surgery at, 142, 655
....., the London, practice of medicine and surgery at, 65, 89, 141, 167, 422, 475, 477, 630, 680
Hospital, the London, rules and regulations, 301
....., Metropolitan Free, Practice of medicine and surgery at, 326
....., Middlesex, practice of medicine and surgery at, 653
....., rules and regulations, 302
....., Norfolk County, 230
....., Nottingham General, 567
....., practice of medicine and surgery at, 479
....., Royal London Ophthalmic, practice of medicine and surgery at, 91, 423, 580
....., the Royal Orthopædic, 337
..... Free, practice of medicine and surgery at, 112, 394
....., St. Bartholomew's, 423
....., practice of medicine and surgery at, 13, 38, 62, 88, 108, 138, 167, 190, 243, 266, 325, 375, 424, 449, 450, 476, 499, 628
....., rules and regulations, 298
....., St. George's, 92
....., practice of medicine and surgery at, 451, 475, 553
....., rules and regulations, 300
....., St. Luke's, rules and regulations, 305
....., St. Mary's, 337
....., practice of medicine and surgery at, 65, 244, 326, 630
....., rules and regulations, 304
..... statistics, 532
....., Steevens', 582
....., St. Thomas's, 25, 254, 533
....., practice of medicine and surgery at, 64, 111, 167, 268, 350, 424, 477, 579
..... presentation for honours and prizes at, 23
....., rules and regulations, 299
..... therapeutics, 501
....., University College, practice of medicine and surgery at, 12, 324, 422, 499, 600
....., rules and regulations, 298
....., Westminster, 152
....., practice of medicine and surgery at, 475, 479
....., rules and regulations, 300
....., Winchester County, practice of medicine and surgery at, 680

HOSPITAL REPORTS :—

BLOOMSBURY DISPENSARY :—Chronic Abscesses in the thigh, 269.

CENTRAL LONDON OPHTHALMIC HOSPITAL :—Severe double epicanthus cured by operation, 218. Cases of lachrymal calculus, 423.

CHARING-CROSS HOSPITAL :—Injury to the head followed by persistent pain; Death two months afterwards; Autopsy; Abscess in the brain, 374. Softening of the brain attended by epilepsy, and followed by apoplectic effusion into the pons varolii; Death; Autopsy, 396. Cases of epidemic cholera, 450. Case in which it seemed probable that scarlet fever had been inoculated, 555. Cases of paraplegic anæsthesia, 601.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST :—Albuminuria and chronic disease of the heart, with congenital absence of the right kidney; Case of excision of bifid uvula, 90. Expectoration of chalk in phthisis, 602.

GUY'S HOSPITAL :—Scrotal hernia, 40; Cancer in early life, 61. Operation for hernia; Strangulated congenital hernia, 110. Resection of the metatarso-phalangeal joint of the great toe; Recovery, 141. Tumours and operations, 191; Cases in which tracheotomy was performed, 266. Paralysis from chronic softening of the spinal cord, apparently produced by peripheral injury, 351. Large abscess in the brain opening externally through a fissure in the frontal bone; Death; Autopsy, 373. Cases of epidemic cholera, 450. Aneurism of the popliteal artery; Treatment by compression; Cure, 451. Double aneurism of the right femoral artery, 452. Popliteal aneurism; Treatment by compression; Cure, 453; Cases of epidemic cholera, 475, 577. Large popliteal aneurism; Ten week's treatment by compression; Favourable progress, 500. Case of mercurial tremors; Tonic treatment; Recovery, 578. Tubular aneurism of the femoral artery, produced by distal obstruction, 629. Fibro-cellular tumour in the scrotum, 679.

HOSPITAL FOR DISEASES OF THE SKIN :—Pityriasis versicolor a contagious disease, 630.

KING'S COLLEGE HOSPITAL :—Congenital varicose tumour on the leg, 13. Severe epilepsy with amaurosis; Large tumour in the anterior lobe of the right hemisphere of the brain, 166. Abstract of eighteen cases of typhus fever, treated by the free exhibition of brandy, 217. Case of aggravated hysteria occurring in a man; Recovery, 242. Caries of the orbit; Abscess in the brain opening into the arachnoid sac; Acute suppurative arachnitis; Death; Autopsy, 372.

Cases of epidemic cholera, 424, 475. Sebaceous cyst under the tongue, 678.
London Hospital:—Cancer in early life, 61. Large fibro-cellular growth in the antrum, 89. Disorganisation of the joint of the great toe; Treatment by free incisions; Recovery, 141. Delirium tremens produced by abstinence from tobacco, 167. Dislocation of the femur into the thyroid foramen; Spontaneous reduction; Death; Examination of the joint, 422. Cases of epidemic cholera, 475. Popliteal aneurism; Traumatic aneurism, 477. Fracture through the petrous portion of the temporal bone; Protracted discharge of subarachnoid fluid; Recovery, 630. Cut throat, with division of the thyro-hyoid membrane, 680.
Metropolitan Free Hospital: — Medullary cancer of the head of the tibia and surrounding the knee-joint; Amputation; Death; Autopsy, 326.
Middlesex Hospital: — Cases of epidemic cholera, 577. Obstruction of the bowels by a tumour in the pelvis relieved by opening the colon in the left loin, 653.
Royal Free Hospital:—Treatment of ulcers on the leg by incisions and plastic operations, 112. Cases of oto-meningitis and abscess in the brain, 394.
Royal Infirmary for Children:—Treatment of nævus by the injection of perchloride of iron, 654.
Royal London Ophthalmic Hospital:—Cases of mydriasis, 91. Cases of lachrymal calculus, 423. Cases of artificial pupil, etc., 580.
St. Bartholomew's Hospital:—Excision of the head of the femur; Removal of a cancerous gland, 13. Cases of exostosis, 38. Cancer in early life, 61. Cartilaginous tumour within the upper part of the fibula, 88. Lithotomy; Amputation of the leg for obstinate ulceration after compound fracture, 108. Cases of Lithotomy in which the operation was performed by a new method (recto-urethral), 138; Excision of a fibrous tumour of peculiar characters from the periosteum of the tibia, 167. Excision of very large tubercular glands from the axilla, 190. Large bursa containing solid bodies beneath the deltoid muscle; Treatment by free incision; Recovery; Large anastomotic aneurism on the scalp; Treatment by ligature, etc.; Recovery, 243. Cases of laryngitis, in which tracheotomy was performed; 266. Extra-uterine fœtation; Escape of the fœtus into the peritoneal cavity; Death; Autopsy, 325. Cases of epidemic cholera, 375, 424, 450, 577. Death from the administration of chloroform; Autopsy, 449. Popliteal aneurism, 476. Aneurism of both popliteal arteries; Cure of both by compression in periods respectively of four and eight days, 499. Removal of a cyst from the scalp containing a mass of hair; Excision of a congenital tumour composed of cysts, some of which contained blood, 628.
St. George's Hospital:—Large popliteal aneurism cured by compression, 451. Popliteal aneurism cured in ten weeks by interrupted compression, 475. Table of cases of amputation performed in 1852, 527. Table of cases of compound fracture of the thigh, leg, arm, and fore-arm, in 1852, 528. Table of cases of strangulated hernia operated on in 1852; Cases of death from diseases of the stomach, induced by the action of caustic alkali and ammonia, 553
St. Mary's Hospital:—Cancer in early life, 61. Notice of operations; Perineal section; Puncture of bladder, &c., 244. Cases of epidemic cholera, 326, 577. Fatty tumour beneath the eyebrow, and extending into the orbit; Excision; Recovery, 630.
St. Marylebone Infirmary.—Cases of epidemic cholera, 577.
St. Thomas's Hospital.—Cancer in early life, 61. Gun-shot wound of the fore-arm; Compound fracture of the thigh, with laceration of the kidney; operations, 111. Severe fracture of the ribs; Extensive emphysema; Recovery, with permanent depression of the fractured ribs, 167. Chronic laryngitis; Tracheotomy; Recovery, with closure of the wound; Pulsating varix over the bridge of the nose; Operation; Cure, 268. Paraplegia; partial recovery; Relapse; Death; Autopsy; Scrofulous caries of the vertebræ, 350. Cases of epidemic cholera, 424, 577. Popliteal aneurism, 477. Large diffuse aneurism of the carotid; Ligature; Favourable progress; Subsequent inflammation of sac; Hæmorrhage; Death; Autopsy, 579.
University College Hospital.—Employment of the galvanic cautery in cases of vesico-vaginal fistula, prolapsus uteri, and vascular growth in the urethra, 12. Medullary cancer of the humerus in a boy; amputation at the shoulder-joint; Recovery, 324. Death from chloroform during its administration previous to an operation for hernia, 422. Large popliteal aneurism; Treatment by compression; Cure in six weeks, 499. Cases of epidemic cholera, 577. Removal of a large congenital tumour (fibro-plastic?) from the head of an infant; Recovery, 600.
Westminster Hospital: — Cases of epidemic cholera, 475. Aneurism of the right radial artery treated by ligature of the brachial, 479.

County Lunatic Asylum, Colney Hatch.—Case of wound of the neck, implicating the larynx, pharynx, and superior thyroid artery, and puncture of the abdomen, in attempted suicide by a lunatic, 219.
Exeter Infirmary.—Traumatic aneurism of the anterior tibial—treatment by compression—cure in three weeks, 500.
Leeds General Infirmary.—Case of large cyst in the labium pudendi analogous to hydrocele of spermatic cord, 113; Case of fibrous tumour of the womb removed by incision and enucleation, 194; Popliteal aneurism—ligature, 453; Large diffused femoral aneurism — ligature, 454; Chronic ulcer of the leg treated by incisions in the neighbouring parts, 531; Case of excision of the proximal phalanx of the thumb, 603.
Lincoln Hospital.—Case of lithotrity, 142; A case of compound fracture of the left leg, simple fracture of the right thigh, and rupture of the urethra, 655.
Nottingham General Hospital. — Popliteal aneurism cured in sixty hours by compression, 479.
Winchester County Hostital. — Lacerated wound of lung, 680.

Hospitals, clinical instruction at the London, 514
....., the Dublin, 582
..... London, on the necessity of preserving beds for urgent cases in, 227
....., statistical report of the principal operations performed during the month of July, 218; August, 348; September, 420; October, 551; November, 652
..... Metropolitan, the medical staff of the, 246, 481
....., out patients at, 360
....., public, on the admission of cholera patients into, 351, 380
..... *v.* workhouses, 206
Howe, Mr., death of, 413
Hull and East Riding school of medicine and anatomy, rules and regulations, 308
Hunter, Mr., death of, 413
Hydrocephalus, 359
Hydrophobia and quackery, 617
Hydrothorax, 464
Hypertrophy of the mammary gland, 359
..... of the tongue, 227
Hysteria, 242

I

Idiocy, 645
Ileus, 72
Illustrations of clinical medicine and pathology, by Geo. Burrows, M.D., F.R.S., and W. S. Kirkes, M.D., 239, 624
Imperforate anus, 436
Incipient lenticular cataract, 340
Income-tax, 336
India, appointments in, 24
....., medical education in, 270
....., merit, 25
Infantile leucorrhœa, on a recent epidemic of. By W. R. Wilde, F.R.C.S., 260, 346, 369, 446
Infants, milk-scab in, 509
Infirmary for children, practice of medicine and surgery at, 654
....., Exeter, practice of medicine and surgery at, 501
....., the Leeds General, practice of medicine and surgery at, 113, 194, 453, 531, 603
....., Manchester, 254
....., North Devon, 230
Inflammation, 589
Influenza in Auckland, New Zealand, in 1853, 495
Infusoria in woman's milk, 536
Inguinal hernia, 392
Injury to the head, 374
Insanity, causes of, 591
Insolvency, as affecting medical diplomas, 568
Institution, the Royal, 617, 684
Instrument, new, for the removal of polypi from the ear, 526
Inversion, polypus of the uterus complicated with, 498
Intemperance, 161
Intermittent fever, 148
Intussusception, 190
Invalids, the way they are treated, 25
Invention, important scientific, 403
Inventions, new, 264, 526, 651, 676
Irish, 568
..... emigrants, 387
..... Poor-law, 170
Izod, Mr., death of, 127

J

Jamaica, 617
Jarrold, Dr., death of, 50
Jenner, 113
....., monument to, 280
....., W., M.D., F.R.C.P., Clinical Lecture on the Pathology and Treatment of Diseases of the Scalp, popularly known by the name of Ringworm, 181
Johnson, George, M.D., Lectures on the Relation between Therapeutics and Pathology, 1, 53, 155, 233, 315, 389, 415
Jones, G. M., Esq., case of excision of the knee-joint, in which the whole apparatus patellaris was preserved, 11
....., H. Bence, M.D., F.R.S., Clinical Lectures on the Relation of Renal Disorders to Disorders of the Stomach and to other Acute and Chronic Diseases, 257, 467, 493, 545
Journal, the *Monthly*, 538
Junod, Dr., exhausting apparatus of, 258, 408
....., T., M.D., review, 333
Jussieu, M., death of, 205

K

Kahn's, Dr., anatomical museum, 498
Kay, W. T., Esq., navy medical report by, 319
Keith, Dr., death of, 387
Kendrick, Mr., death of, 591
King's College, 25, 439, 642, 668
..... Hospital, opening of the medical session, 385
....., practice of medicine and surgery at, 13, 166, 217, 242, 372, 424, 475
....., presentation for degrees and honours at, 23
....., rules and regulations, 295
..... Hospital, rules and regulations, 298
..... University, Aberdeen, 229
Kirkes, W. S., M.D., Illustrations of clinical medicine and pathology, 239, 624
Kitchen condiments, 491
Knee-joint, excision of the, 11
Knighthood, 168, 178
Kramer, Dr., 611
....., and Mr. Wilde, 434, 483

L

La Mert *v.* Dawson, 153, 169
Labour, 488
Lachrymal calculus, 423
Lambert, Dr., death of, 543
Lancet, the, and Mr. Wilde, 538
Lanyon, Mr., death of, 591
Lardner, D., D.C.L., review, 584
Laryngeal disease, case of, 34
Laryngitis, 265
Lawrence, W., Esq., F.R.S., Clinical lecture on malignant disease of the dura mater, 129
.....
..... wounds of blood-vessels of the lower extremity, 5
Lawson's, Mr., lifting apparatus for beds, 651
Leach, Mr., death of, 101
Lecture, clinical, on cases of colic, by R. B. Todd, M.D., F.R.S., 79
..... the diagnosis of incipient lenticular cataract in elderly persons, by H. Haynes Walton, Esq., F.R.C.S., 340
..... malignant disease of the dura mater, by W. Lawrence, Esq., F.R.S., 129
..... the pathology and treatment of diseases of the scalp, by W. Jenner, M.D., F.R.C.P., 181
..... removal of a particular kind of opacity from the cornea, by H. Haynes Walton, Esq., F.R.C.S., 469

LECTURES, Etc., By—
Adams, John, Esq., F.R.C.S., 106
Arnott, Neil, M.D., F.R.S., 573
Bate, C. Spence, Esq., 419
Bettleheim, Dr., 136, 164, 188
Blackton, W. H., Esq., 190
Bowe, Henry, Esq., 323
Brodhurst, Bernard E., Esq., 8, 87, 321, 524, 548
Budd, George, M.D., F.R.S., 27, 207
Burrows, George, M.D., F.R.S., 239, 624
Cameron, Dr., Surgeon 57th Regiment, 365
Canney, George, Esq., 498
Chalk, W. O., Esq., 599
Chambers, Dr. J. W., Surgeon 35th Regiment, 59
Coote, Holmes, Esq., F.R.C.S., 215
Corfe, G., M.D., 86
Danford, Fred., Esq., 190
Dartnell, Dr., Staff-Surgeon, 258
Davidson, Jas., M.D., Surgeon R.N., 623
Fergusson, Andrew, M.D., 495
Filliter, W., Esq., M.B. Lond., 262
Forrest, Dr., Staff-surgeon, 258
Fowler, R. S., Esq., 651
Frank, Dr. Philip, 59, 134, 473
Franklyn, E. J., Esq., 522
Fuller, W., M.D. Cantab., F.R.C.P., 344
Gibb, Charles John, Esq., 549, 575, 676
Greenhow, T. M., Esq., F.R.C.S., 627
Hadwen, S., Esq., M.R.C.S., 649

Hall, J., M.D., 674
Hayes, Dr. Boon, 132
Hirschfeld, M. le Docteur Ludovic, 87
Hofmann, Dr. A. W., F.R.S., 30, 103, 184, 363, 441, 519, 671
Jenner, W., M.D., F.R.C.P., 181
Johnson, George, M.D. Lond., F.R.C.P., 1, 53, 155, 233, 315, 389, 415
Jones, G. M., Esq., 11
Jones, H. Bence, M.D., F.R.S., 257, 467, 493, 545
Kay, W. T., Esq., Assistant-surgeon R.N., 319
Kirkes, W. Senhouse, M.D., 239, 624
Lawrence, W., F.R.S., 5, 129
Mayo, Thomas, M.D., F.R.S., 569, 593, 619, 645
M'Ilree, J. D., Esq., 572
Maclean, Dr., 258
Marks, A. H., M.D., F.R.C.S., 241
Mitchell, John, M.D., 105, 648
Murphy, M. W., Esq., Assistant-surgeon 80th Regiment, 7
Ogle, Dr. J. W., 107, 163
Paget, James, Esq., F.R.S., 392
Ramsbotham, F. H., M.D., F.R.C.P., 648
Ransom, W. H., M.D. Lond., 496, 522
Richardson, Sir John, Knt., M.D., C.B., 187, 211
Sadler, M. T., M.R.C.S., 371
Scott, Dr., Deputy Inspector-General of Army Hospitals, 258
Skey, Frederick C., Esq., F.R.S., 57, 83, 159, 339
Smart, W. R. E., M.D., R.N., 444, 470
Smith, Henry, Esq., 34, 213
Snow, J., M.D., 367
Speer, S. T., M.D., 598
Steele, Charles Deane, Esq., Surgeon R.N., 391
Stewart, James, Esq., 18th R. I. Regt., 161
Taylor, J. R., Esq., 80th Regt., 161
Thom, Alex., Esq., 417
Thomson, Arthur S., M.D., Surgeon 58th Regiment, 237, 495
Todd, Robert B., M.D., F.R.S., 79
Toynbee, J., Esq., F.R.S., F.R.C.S., 526
Walton, H. Haynes, Esq., F.R.C.S., 340, 469
Wells, T. S., Esq., F.R.C.S., 32, 84, 133, 216, 264, 547
Wilde, W. R., Esq., F.R.C.S., 260, 346, 369, 446

Lectures, clinical, on the relation of renal disorders to disorders of the stomach, and to other acute and chronic diseases, by H. Bence Jones, M.D., F.R.S., 257, 467, 493, 545
..... on medical testimony and evidence in cases of lunacy, by T. Mayo, M.D., F.R.S., 569, 593, 619, 645
..... on organic chemistry, by Dr. A. W. Hofmann, F.R.S., 30, 103, 363, 441, 519, 671
..... on organic disease and functional disorders of the stomach, by George Budd, M.D., F.R.S., 27, 207
..... on the relation between therapeutics and pathology, by Geo. Johnson, M.D., 1, 53, 155, 233, 315, 389, 415
..... on surgery, by Frederick C. Skey, Esq., F.R.S., 57, 83, 159, 339
....., Original, 1, 5, 27, 30, 53, 57, 79, 83, 103, 129, 132, 155, 159, 181, 184, 207, 233, 257, 315, 339, 340, 363, 389, 415, 441, 467, 469, 493, 519, 545, 569, 593, 619, 645, 671
....., the Croonian, 569, 593, 619, 645
Leeds General Infirmary, practice of medicine and surgery at, 113, 194, 453, 531, 603
..... School of Medicine, 178
...., rules and regulations, 308
Leicester, 13
..... Gaol, 280
Leucorrhœa, infantile, a recent epidemic of, 260, 346, 369
Lever ring forceps, 587
Lewchew, medicine in, 136, 164, 188
Libel, 591
Licentiates in midwifery, 50, 439, 616
Liebig, Justus von, review, 509
Life insurance, 121
Lifting apparatus for beds, 651
Lincoln Dispensary, 567
..... Hospital, practice of medicine and surgery at, 142, 655
Lind, Jenny, 145
Linton, Mr., death of, 280
Litholiby, 198
Lithotomy, 47, 108, 138
Lithotrity, 142
Little, W. J., M.D., review, 97
Liver, fatty, 458
Liverpool College of Chemistry, rules and regulations, 309
..... Royal Infirmary, rules and regulations, 308
London Hospital, practice of medicine and surgery at, 65, 89, 141, 167, 422, 475, 477, 630, 680
....., opening of the medical session, 384
....., rules and regulations, 301
....., parks for, 543
LONDON PRACTICE OF MEDICINE AND SURGERY, 12, 13, 38, 40, 61, 88, 89, 90, 91, 108, 110, 111, 112, 138, 141, 166, 167, 190, 191, 217, 218, 219, 242, 243, 244, 266, 268, 269, 324, 325, 326, 348, 350, 351, 372, 373, 374, 375, 394, 396, 420, 422, 423, 424, 449, 450, 475, 476, 477, 479, 499, 501, 527, 551, 553, 555, 577, 578, 579, 580, 600, 601, 602, 628, 629, 630, 652, 653, 654
London, the drainage of, and cholera, 455
....., University of, 125, 176, 202, 253, 567
..... rules and regulations, 287
Lower extremity, on wounds of blood-vessels of the, 5
Loy, Dr., death of, 439
Ludlow, Mr., death of, 465
Lunacy Acts, the new, 631, 635
....., danger incurred by signing certificates of, 226
..... laws, the, 201
....., medical testimony and evidence in cases of, 569, 593, 619, 645
Lunatic Asylum, West Riding, 230
Lutronomic experiments, to illustrate the absorbing power of the skin, 537
Lyel, Mr., death of, 387
Lymph, supply of, 252
Lyons, R.D., M.D., review, 118

M

M'Ilree, J. D., Esq., army medical report by, 572
M'Dougall, Mr., death of, 25
Macwhirter Dr., death of, 668
Macgillivray, Dr., 491
Macguire, Mr. T. H., 51
Macilwain, Geo., review, 483
Maclauglin's, Mr., case of child born without limbs, 604
Maclean, Dr., army medical report by, 258
Macloughlin, Dr., on cholera, 506, 534
Madras, 24, 178
..... Medical College, 609
Malaria, 669
Malformation of the heart, 435
Malformed heart, a, 488
Mancekwell, Hale v., 248
Manchester Infirmary, 254
..... Royal School of Medicine and Surgery, rules and regulations, 307
Mania, intermittent puerperal, 250
....., opium in, 73
Manslaughter by small-pox, 543
....., verdict of, against an unqualified practitioner, 439
Marischal College, Aberdeen, 491
Marks, A. H., M.D., case of scrofulous ovarian abcess, 241
Marsh, Dr., death of, 387
Martin, W., review, 119
Matthew, Mr., death of, 413
Mayne, R G., M.D., review, 536
Mayo, Thos., M.D., F.R.S., Croonian lectures on medical evidence and testimony in cases of lunacy, 569, 593, 619, 645
Measles, 179
Measures and weights, 312
...., sanitary, 538
Medals of the Royal Society, 517
Medical appointments, 24, 77, 101, 127, 152, 178, 204, 229, 254, 336, 361, 386, 439, 491, 543, 567, 668, 684
..... in the East India Company's Service, 94
..... Benevolent College, 44, 144, 152, 280, 337, 413, 517, 533, 567, 617,
..... Fund, 50, 152, 280, 337, 517, 643
..... breakfast, 337
..... charities, 613, 533
..... education in India, 270
..... ethics, 336
..... evidence in criminal cases, 334, 353
..... examinations, recent improvements in, 555
..... men and benefit societies, 643
....., important to, 517
..... NEWS, 24, 50, 77, 100, 152, 178, 204, 229, 254, 280, 314, 336, 361, 386, 412, 438, 464, 490, 517, 542, 567, 591, 616, 643, 668, 684
..... officers of health, 424
..... Union, 25
..... Practitioners, official registration of, 377
..... reform, 220, 253, 327, 425
..... remuneration under the new Lunatic Asylums Bill, 173
..... salaries, 170
..... sketches in Germany, 275, 405, 510
..... Society of Bristol and Bath, 127
..... Glasgow, 517
..... London, 361, 387, 411, 436, 462, 488, 514, 540, 541, 564, 589, 615, 639, 641, 665
..... travel, a, to Burmah, 251
..... witnesses, 408
Medicine and Surgery, the Practice of, 12, 13, 38, 40, 61, 88, 89, 90, 91, 108, 110, 111, 112, 138, 141, 166, 167, 190, 191, 217, 218, 219, 242, 243, 244, 266, 268, 269, 324, 325, 326, 348, 350, 351, 372, 373, 374, 375, 394, 396, 420, 422, 423, 424, 449, 450, 475, 476, 477, 479, 499, 501, 527, 551, 553, 555, 577, 578, 579, 580, 600, 601, 602, 628, 629, 630, 652, 653, 654, 678
....., clinical, 50, 353
..... at the London schools, 455
..... in Lewchew, 136, 164, 188
Medico-Chirurgical Society of Queen's College, Birmingham, 566
Medullary cancer, 324, 326
Memoir of Dr. George Rae, 116
Memorial, the Dalrymple, 517
Mental disorders, 409
Mercurial poisoning by worm lozenges, 669
..... tremors, 578
Meteorology, 26, 78, 128, 179, 206, 231, 281, 314, 337, 362, 387, 413, 439, 466, 518, 531, 568, 591, 669
Metropolitan Free Hospital, practice of medicine and surgery at, 326
..... Hospitals, the medical staff of the, 246, 481
Microscopical manipulation and histological anatomy, 132
Micturition extraordinary, 406
Middlesex Hospital, opening of the medical session, 384
....., practice of medicine and surgery at, 653
....., rules and regulations, 302
Midwifery instruments, 412
....., licentiates in, 50, 439, 616
Military appointments, 24, 50, 77, 101, 127, 152, 178, 205, 280, 314, 386, 413, 439, 465, 491, 517, 567, 591, 617, 643, 668
..... medical statistics, 277, 335
Militia appointments, 24, 77, 127, 205, 229, 254, 280, 314, 336, 361, 517, 591, 668
Milk, infusoria in woman's, 536
....., on the so-called witches', 537
..... scab in infants, 509
Millbank prison, 281
Miller, James, review, 431
..... v. Syme, 664
Milroy, Gavin, M.D., review, 377
Mitchell, J., M.D., army medical report by, 105, 648
....., J. T., review, 458
Moir, Dr., 543, 617
Monthly Journal, the, 538
Morbid poisons, on, 411
Morehead, C., M.D., review, 96, 560
Morphia in puerperal convulsions, 412
Mortality, comparative, in France, England, and Prussia, 280
..... in public institutions, 26, 52, 78, 102, 128, 180, 206, 231, 281, 314, 338, 414, 457, 518, 544
..... the southern states of America, 413
..... notabilia, 26, 52, 78, 102, 127, 154, 179, 205, 231, 255, 281, 314, 337, 361, 387, 413, 439, 466, 491, 518, 531, 568, 591, 618, 644, 669, 684
Moseley, George, review, 431
Murphy, M. W., Esq., report on a recent epidemic of remittent fever at Prome, 7
Murphy, Dr., on convulsions, 516
Museum, Dr Kahn's, 498
Mydriasis, 91
Myrrh, 426

N

Nævus, 219
....., treatment of, by perchloride of iron, 654
Nasal injections, 199
Naval appointments, 24, 50, 77, 101, 127, 152, 204, 254, 280, 361, 386, 413, 439, 465, 491, 517, 567, 591, 616, 643, 668, 684
..... intelligence, 439, 668
..... medical officers, 127, 152, 229, 580, 617
..... service, 15
Navy Medical Department, rules and regulations, 292
....., flogging in the, 179
....., rotten meat for the, 101

NAVY MEDICAL REPORTS :—

I. On an Epidemic of Variola at Corfu, in 1852. By T. S. Wells, Esq., F R C S, 32
II. On the Treatment of Ulcers by Galvanism. By T. S. Wells, Esq., F.R.C.S., 84
III. On the Relative Prevalence of Phthisis at Malta, among Seamen, the Land Forces, and Natives. By T. S. Wells, Esq., F.R.C.S., 133
IV. Extracts from a Report on Scarlatina in H.M.S Agamemnon and Odin in 1853. By Sir John Richardson, Knt., M.D., C.B., 187, 211
V. Extracts from a Report upon the Sanitary Condition of the Parish of Stonehouse, Devon. By W. T. Kay, Assistant-Surgeon R.M., 319
VI. Extracts from Official Reports upon the Effects of Chloride of Zinc in Deodorising Offensive Effluvia from Cesspools, Sewers, etc., and in Decomposing Poisonous Emanations from the Bodies of those Affected by Contagious Diseases, 341
VII. Two Cases of Extraction of Loose Cartilages from the Elbow-joint. By Charles Deane Steele, Esq., Surgeon, 391

VIII. On Elephantiasis Græcorum, or Lepra Tuberculosa, as it is seen in the Island of Crete. By W. R. E. Smart, M.D., R.N., 444, 470
IX Extracts from a Report on the Ventilation of Ships. By T. S. Wells, Esq., F.R.C.S., 547
X Two Cases: one of Epilepsy and another of Apoplexy, resulting from Flogging in one of Her Majesty's Ships. By James Davidson, M.D., Surgeon R.N., 623
Nebulæ, the, 170
Nerves of the uterus, on, 87
Nervous system, affections of the, 107, 163
Neuralgia, 198
Neurological investigations, 334
Newcastle and Gateshead Pathological Society, reports of, 22, 76, 278, 380, 411, 463
Newcastle upon-Tyne College of Medicine and Practical Science, rules and regulations, 306
New instrument for the removal of polypi from the ear, 526
..... inventions, 264, 526, 651, 676
News, medical, 24, 50, 77, 100, 152, 178, 204, 229, 254, 280, 314, 336, 361, 386, 412, 438, 464, 490, 517, 542, 567, 591, 616, 643, 668, 684
Nicholl, Dr, death of, 25
Nickel's elastic plaster, 413
Nicotine injections in paralysis of the bladder, 379
Noble, D., review, 358
Non-restraint system, the, 638
Norfolk County Hospital, 230
North Devon Infirmary, 230
..... London Medical Society, Reports of Meetings, 667
..... Staffordshire Medical Society, 543
Norton, Mr., death of, 280
Nottingham General Hospital, 567
....., practice of medicine and surgery at, 479
Nuisances, 168
Nux vomica, poisoning by, 199

O

Obliteration of the vagina, 20
Obstruction of the bowels, 653
Offices, assurance, 502
Ogle, J. W., M.D., cases of affections of the nervous system, of organic and inorganic origin, 107, 163
Olefiant gas, 519
Opening of the medical session, 381
Operations, 112
....., statistical report of the principal performed during the month of July, 218; August, 348; September, 420; October, 551; November, 652
Ophthalmic Hospital, Central London, practice of medicine and surgery at, 218, 423
....., Royal London, practice of medicine and surgery at, 91, 423, 580
Ophthalmoscope, a new, some account of, by T. S. Wells, Esq., F.R.C.S., 264
....., 379
Opium, consumption of, 101
..... in mania, 73
..... in prolapsus of the rectum, 509
Ordnance appointments, 465
..... medical department, rules and regulations, 294
Organic chemistry, lectures on, 30, 103, 184, 363, 441, 519
..... diseases and functional disorders of the stomach, lectures on, by G. Budd, M.D., F.R.S., 27, 207
ORIGINAL COMMUNICATIONS, 7, 8, 11, 32, 34, 37, 59, 84, 86, 87, 105, 106, 107, 133, 134, 136, 161, 163, 164, 187, 188, 190, 211, 213, 215, 216, 237, 239, 241, 258, 260, 262, 264, 319, 321, 323, 341, 344, 346, 365, 367, 369, 371, 391, 392, 417, 419, 444, 446, 470, 473, 495, 496, 498, 522, 524, 526, 547, 548, 549, 572, 573, 575, 596, 598, 599, 623, 624, 627, 648, 649, 651, 674
ORIGINAL LECTURES, 1, 5, 27, 30, 53, 57, 79, 83, 103, 129, 132, 155, 159, 181, 184, 207, 233, 257, 315, 339, 340, 363, 389, 415, 441, 467, 469, 493, 519, 545, 569, 593, 619, 645, 671
Orr, Dr., death of, 25
Orthopædic Hospital, the, 337
..... Surgery, 8, 37, 524
Oto-meningitis, cases of, 394
Out-patients at hospitals, 360
Outlaw, Mr., death of, 77
Ovarian cyst, 124, 613
..... disease, 412
Oven, B. V., M.D., review, 198
Oxford University, 412, 438, 464, 490, 643
....., rules and regulations, 285
Ozone, 255, 413

P.

Paget, Jas, Esq., F.R.S., two cases of inguinal hernia, in which the sac was pushed back with the intestine, 392
..... review, 248
Paralysis, 351
Paraplegia, 350
Paraplegic anæsthesia, 601
Park, the Albert, Finsbury, 431, 567, 504
Parkin, J., M.D., review, 559
Parks for London, 543
Parliamentary proceedings, 51, 68, 95, 117, 146, 170, 197, 223
Parotid swellings in children, 510
Pathological Society of London, Reports of Meetings, 435, 487, 563, 613
Pathology, lectures on the relation between therapeutics and, 1, 53, 155, 233, 315, 389, 415
Pearce, Mr., review, 19
Peat charcoal, as a disinfectant, 281
Peene, Dr., death of, 25
Peile, Dr., death of, 152
Pension, 280
Perchloride of iron in nævus, 219
Percivall, W., review, 458
Pericarditis, 462
Peridental membrane, on the, 419
Perineal section, 244
Peritonitis, 172
Pharmaceutical Society, 280
....., rules and regulations, 305
Pharmaceutists, unqualified, 617
Pharmacy in Paris, 669
Philp, Mr., death of, 643
Photographic soirée, 25
Phthisis, 133, 602
..... sugar in, 173
Physicians, Royal College of, 24, 178, 336, 413, 684
....., charter of, 66
....., rules and regulations, 289
....., female, 25
Physiological meetings of the Medical Society of London, 411, 541, 641
Pian, 250
Pityriasis versicolor, 630
Placental presentation, case of, 190
Pleuro-pneumonia, 568
Poisons, morbid, 411
Poisoning, 231
..... by aconite, accidental, 543
..... arsenical ointment, 612
..... lobelia, 568
Polypi, new instrument for the removal of, 526
..... of the uterus, 359
Polypus of the uterus, with inversion, 498
..... uteri, 648
Poor-law, Irish, 170
Popham, John, A.B., M.B., review, 509
Portrait gallery, the medical, 127
Portsmouth, storm at, 25
Potato disease, the, 179, 231, 403
Powell, Mr., death of, 387
Practice of medicine and surgery, the London, 12, 13, 38, 40, 61, 88, 89, 90, 91, 108, 110, 111, 112, 138, 141, 166, 167, 190, 191, 217, 218, 219, 242, 243, 244, 266, 268, 269, 324, 325, 326, 348, 350, 351, 372, 373, 374, 375, 394, 396, 420, 422, 423, 424, 449, 450, 475, 476, 477, 479, 499, 501, 527, 551, 553, 555, 577, 578, 579, 580, 600, 601, 602, 628, 629, 630, 652, 653, 654, 678
Practising chemists and druggists, 255, 278
Pravoz, Dr., death of, 205
Pregnancy, extra uterine, 262
Premature delivery, 359
Prescribing chemists, 531
Preston, H. C., M.D., review, 197
Pretty's, Mr., case of detained coagulum, 21, 48
Price, Dr., death of, 336
Prichard, John, review, 609
Prince of Wales, the, 13
Prismatic spectacles, cure of squinting by the use of, 216
Professional independence *v.* hospital committees, 657
Progress of the cholera, 329, 354, 377, 400, 429, 457, 482, 505, 534, 558, 583, 606, 632, 659

PROGRESS OF MEDICAL SCIENCE:—

Cysticercus in the human brain; Poisoning with cantharides; Entrance of air into a vein; Accidental obliteration of the vagina; Upon the treatment of vesico-vaginal fistula; Ætheric solution of balsam of tolu in chronic bronchial catarrh; Prostatic concretions in the female, 19. Upon colloid cancer, with remarks upon non-malignant colloid growths; Report upon a case of death from chloroform; Lithotomy, 46. Stricture of the aorta; Upon apoplexy of the spinal cord; New observations upon the histology and genesis of cancerous growths; Chloroform inhalations and injections of air in ileus; Veratria in acute articular rheumatism; Fatty condition of the grey substance of the brain in a drunkard, 73. Cure of an aneurism of the subclavian artery by means of the external application of chloride of zinc; Report on cases of death by chloroform, 98. Upon the entire resection of both superior maxillary bones; Report on cases of death from chloroform; Anæsthetic action of the lycoperdon proteus, 120. Resection of both superior maxillary bones; Phase of dental evolution; Chloroform in delirium tremens; On the employment of inhalation of ether impregnated with quinine in intermittent fever, 148. Electricity as an agent of surgical therapeutics; Peritonitis as a complication in certain acute diseases; Sugar in phthisis; On a new source of indications for the trepan in cases of syphilitic osteitis of the cranium, 172. Litholiby; External application of atropin in neuralgia; Aneurism of the gluteal artery; Ligature of the common iliac; Nasal injections considered as a means of nourishing new-born infants; Note upon the good effects of milk in cases of poisoning by nux vomica; Upon a peculiar form of ulceration of the gums, 198. Upon the pian, or yaws, a disease of tropical climates; Spontaneous gangrene in glucosuria; On the pathology and treatment of diabetes mellitus; On the diagnosis of fractures; Intermittent puerperal mania; Thyroiditis in a patient whose larynx was hypertrophied, 250. Writers' cramp; Galvano-puncture in varicosities and aneurisms; Freezing mixtures applied to the skin to produce insensibility to pain in operations; Aneurism by anastomosis cured by galvano-puncture; On fluids which stop hæmorrhage, 274. On the difference of temperature between venous and arterial blood; Neurological investigations, 333. On a new method of inducing premature delivery; On polypi of the uterus; Chronic hydrocephalus during pregnancy; On typhus fever in children; On hypertrophy of the mammary gland, 359. On the colour of the urine; Nicotin injections in paralysis of the bladder; Acute disease of the articulations: suppuration: with lesion of the cartilages of the right tibio-femoral articulation; On the evolution of the teeth in infants, 379. Contributions to the examination of the urine; Survey of the practice of M. Roux during the first semestre of 1853; Bichromate of potass in the treatment of syphilis, 405. Treatment of typhus; Belladonna in salivation; Thlaspi bursa pastoris in hæmorrhage, 432. On fatty liver; On cancroid disease of the dorsal surface of the hand, 458. Opium in prolapsus of the rectum in children; On the signification of the milk-scab in infants; On parotid swellings in children, 509. Infusoria in woman's milk; On so-called witches' milk; Lutronomic experiments to illustrate the absorbing power of the skin, 536. On partial aneurism of the heart; The microscopical dilatation of the blood-vessels in inflammations of the brain and diseases of the mind; Gangrene of the brain after decubital mortification; On the seat and usual causes of disease of the heart, 560. On syphilitic contagion by cigar-smoking; Treatment of inflammations by impermeable coverings; Cure of toothache by emetics; On redness of the face in typhus; Existence of syphilis in France in the first century of the Christian era; On the chemical composition of sweat, 585. Essay upon injections of the perchloride of iron, as applied to the treatment of aneurisms, 609, 636. Practical considerations upon rachitis and its treatment; Medical congresses, Arras; Tubingen; Sideration; Complete obliteration of the canal of the urethra; New form of perineal urethrotomy: cure, 661.
Prolapsus of the rectum, opium in, 509
Prosecution, successful, by the Apothecaries Company, 399
Prostate, enlargement of the middle lobe of the, 280
Prostatic concretions, 20
Provincial correspondence, 120, 225, 276, 334, 406, 512, 537, 561, 637, 662, 682
..... Medical and Surgical Association, 205, 221, 276, 643
Prussians, physical deterioration of the, 255
Psychological medicine and general pathology, journal of, review, 509
Public Institutions, mortality in, 26, 52, 78, 102, 128, 180, 206, 231, 281, 314, 338, 414, 457, 518, 544
Puerperal convulsions, morphia and chloroform in, 412
..... fever, 682
Pulte, J. H., review, 333
Puncture of bladder, 244

Q

Quackery, 153, 170, 568, 617, 663
..... within the ranks, 604
Quarantine, 230
..... question, the *Edinburgh Review* and the, 115
Queen of Portugal, death of, 567
....'s College, Birmingham, 178
....., opening of the medical session, 386
..... University, Ireland, 101
Quekett, Mr., lectures of, 684

Questions of the Epidemiological Society regarding cholera, 504
Quinine in cholera, 407

R

Rae, Dr. Geo., memoir of, 116
Ramsbotham, F. H., M.D., F.R.C.P., case of natural cure of polypus uteri by sloughing, 648
Ransom, W. H., M.D., cases of chronic disease of the stomach, with sarcinæ in the vomited matters, 496, 522
Ranelagh sewer, the, 591
Rachitis, 661
Rawes, Dr., death of, 668
Rectum, diseases of the, 682
Reform, medical, 220, 253, 327, 425
Registrar-General, Dr. Macloughlin to the, on cholera, 506
....., Quarterly Return of the, 516
....., Report of, on cholera, 506
Registration, official, of medical practitioners, 377
Reid, Seaton, M.D., review, 609
Relation between therapeutics and pathology lectures on, 1, 53, 155, 233, 315, 389, 415
Remittent fever, epidemic of, at Prome, 7
Remuneration of medical men under the Vaccination Extension Bill, 199
Renal disease, 239
..... disorders, on, 257, 467, 493, 545
Renwick, Mr., death of, 491

REPORTS OF SOCIETIES:—

Epidemiological Society:—Yellow fever in Antigua, 149. Opening meeting, 515. Indian plague and the black death, 614
King's College Medical Society:—Conservative surgery 642.
Medical Society of London:—Duplicate placenta; Mental disorders, 409. Tapping for ascites; Imperforate anus; Suppuration of joints, 436. Pure metals a remedy in cholera; Cancer; Pericarditis, 462. Cystorrhœa; Labour, 488. Cholera, 514. Cerebral diseases, 540. Arrest of development; Resection of knee-joint; Fibrinous constituent of the blood in relation to disease, 564. Metritis, 589. Exostosis; Swelled testicle, 615. Fibrinous concretions from hanging; New forceps; Cancer, 639. Gunshot wound; Source of hæmorrhage in partial separation of the placenta, 665.
Medical Society of London:—*Physiological Meetings.*—Morbid poisons, 411. Source of motion of fluid in ureter and thoracic duct; Tests for iodide of potass; Muscular fibre attached to an adventitious growth; Dog without a spleen; Weight and form of the heart; Diameter of the aorta, and size of blood-corpuscles in the vertebrata, 541. Colour of the bile in various animals; Protoxide of copper a test for sugar; Narcotico-irritants, 641.
Medico-Chirurgical Society of Queen's College, Birmingham:—Cholera, 566.
Newcastle and Gateshead Pathological Society:—Restoration of the nose; Excision of os calcis, 22. Tracheotomy for the extraction of a piece of glass; Compound fracture of the elbow; Uterine tumour, 76. Scirrhus of the breast; Wound in the head; Tumour of the brain; Aneurism; Enlargement of the prostate, 278. Fistula in perinæo, 380. Compound fracture of the skull; Midwifery instruments; Monstrosity; Morphia and chloroform in puerperal convulsions; Ovarian disease, 411. Rupture and cirrhosis; Encysted tumours; Stone in bladder; Fungoid tumour; Hydrothorax, 463
North London Medical Society:—Hip-joint disease, 667
Pathological Society of London:—Constipation; Dislocated wrist after concussion of the brain; Malformation of the heart; Scirrhous kidney from a capibara; Heart of a peregrin falcon, containing filariæ; Diseased stomach; Diseased aortic valves; Cancer of the omentum; Suppurative inflammation, 435. Dislocation of the hip-joint; Rupture of the uterus; Amputation; Biliary calculus; Cancer in the brain; Bright's disease; Malformed heart, 487. Aneurism: Ulcer of the ileum; Malformation of heart, Strongyli in the artery of an ass; Jaundice; Hypertrophy of bladder; Disease of ovary; Elongation of cervix uteri; Diseased kidney; Ulceration, 563. Ovarian cyst; Cholera; Rupture of the bowel; Diseased bowel; Aneurism; Tumour from the brain; A malignant growth; Congested lungs, 613.
Royal Medical and Chirurgical Society:—On intermitting diabetes, and on the diabetes of old age; An ovarian cyst which contained brain; Erysipelas; Aneurism; Galvanism; Diseases of the brain, 123. Cystic disease of the testicle; Deformity of the lower limbs; Hypertrophy of the tongue; Small-pox and vaccination, 227. Opening meeting, 514. The blood, 539. Diseases of the ear; on inflammation, 587. Seventeen cases of parturition, in which chloroform was inhaled with pernicious effect, 664.
Western Medical and Surgical Society of London:—Cholera; Thoracic aneurism, 489. Convulsions, 516. Poisoning by sulphuric acid; Galvanic cautery in uterine disease, 566. Scrofulous inflammation of the eye, 616.

Resection of bones, 119, 141, 148
Return, quarterly, of the Registrar-General, 516

REVIEWS:—

On the Healing Process after Resection and Extirpation of Bones. By Dr. A. Wagner, 18; Chemistry of the Four Seasons. By T. Griffiths, 19; Remarks on Hysteria in Connexion with Hydrophobia and other Convulsive Affections. By J. Dalziel, M.D., 19; Plain Advice on the Management and Diet of Infants. By W. Pearce, M.R.C.S., 19; On the Use of an Artificial Membrana Tympani in Cases of Deafness, Dependent upon Perforation or Destruction of the Natural Organ. By Joseph Toynbee, F.R.S., 45; The Progress of Improvement in the Treatment of Consumption and other Pulmonary and Laryngeal Diseases, and on some New Remedial Means. By James Turnbull, M.D., 46; The Sea-weed Collector's Guide. By J. Cock, M.D., 46; On the Pathology and Treatment of Acute Rheumatism. By James Alderson, M.D., F.R.S., 69; Report of Dublin University Commission, with Evidences and Suggestions, etc., 79; Plates of the Brain; or, Explanations of the Physical Faculties of the Nervous System. By Joseph Swan, 71; An Apology for British and Colonial Medical Degrees. By A. Hall, M.D. Edin., 71; The Landlord's and Tenant's Guide. By A. Cox, 71; Notes on Pericarditis, Endocarditis, and Organic Diseases of the Heart and Aorta By C. Morehead, M.D., etc., 96; On the Nature and Treatment of the Deformities of the Human Frame. By W. J. Little, M.D., etc., 97; The Sophistry of Empiricism, 97; Researches on the Primary Stages of Histogenesis and Histolysis. By Dr. R. D. Lyons, 118; Remarks on the Operation of Bronchotomy. By W. Martin, Esq., 119; Elements of Experimental and Natural Philosophy. By Jabez Hogg, Surgeon, 119; Table-Turning and Table-Talking, 119; Confessions of an English Opium-Eater, 119; A Treatise on Diseases of the Heart. By O'B. Bellingham, M.D., F.R.C.S.I., 146; Records of Maculated Typhus, or Ship Fever, with Suggestions of Treatment. By J. B. Upham, M.D., 147; Monographie des Eaux Minérales de Wiesbaden. Par M. Charles Braun, Dr. en Médecine et en Chirurgie, 147; Observations on the Nature and Treatment of the Asiatic Cholera. By William Stevens, M.D., etc., 170; Report on the Cholera in Jamaica, and on the General Sanitary Condition and Wants of the Island, 170; A Treatise on General Pathology. By Dr. J. Henle, Professor of Anatomy and Physiology in Heidelberg. Translated from the German by H. C. Preston, A.M., M.D., 197; The Decline of Life in Health and Disease. By Barnard Van Oven, M.D., 198; Beitrage zur Vergleichenden Pathologischen Anatomie der Gelenkkrankheiten. Von Dr. E. Gurlt, 224; Twenty-third Annual Report of the Belfast District Hospital for the Insane, 225; Cretins and Idiots. A Short Account of the Institutions for their Relief and Cure, 225; Report from Bethlem Hospital, 225; Lectures on Surgical Pathology. Delivered at the Royal College of Surgeons of England. By Jas. Paget, F.R.S., 248; Ψυχή, a Discourse on the Birth and Pilgrimage of Thought. By Walter Cooper Dendy, 249; A Medical and Topographical Sketch of the Thermal Springs of Teplitz. By T. L. Richter, M.D., 249; A Manual of Materia Medica and Therapeutics; including the Preparations of the Pharmacopœias of London, Edinburgh, and Dublin, with many New Medicines. By J. Forbes Royle, M.D., F.R.S., 273; The Invalid's Own Book; a Collection of Recipes from Various Books and Various Countries. By the Hon. Lady Cust, 273; Habit, Physiologically Considered. A Lecture Delivered at the Bristol Literary and Philosophical Institution. By John Addington Symonds, M.D., 273; The Domestic Medical and Surgical Guide for the Nursery, the Cottage, and the Bush. By Jabez Hogg, M.R.C.S., 273; On the Development of Military Offences in Camp and Quarters. By F. Roberts, Staff-Surgeon, 273; Second Annual Report of the Wilts County Asylum, Devizes, 273; Woman's Medical Guide. By J. H. Pulte, M.D., 333; An Introduction to the Use of the Blowpipe for Chemists, Mineralogists, Metallurgists, and Workers in Metals. By Dr. Theodore Scheerer, 333; De l'Emploi de la Méthode Hémospasique dans le Traitement du Choléra Epidémique. Par T. Junod, M.D., 333; Elements of Psychological Medicine. By Daniel Noble, F.R.C.S., 358; Sketch of the Operation and of Some of the most Striking Results of Quarantine in British Ports, since the Beginning of the Present Century. By Gavin Milroy, M.D., 377; Homœopathy Fairly Represented; in Reply to Dr. Simpson's "Homœopathy Misrepresented." By William Henderson, M.D., 378; Practical Observations on Aural Surgery, and the Nature and Treatment of Diseases of the Ear. With Illustrations. By W. R. Wilde, 402; Notes Worth Noticing relative to the Cholera. By Dr. Gillkrest, 403; Homœopathy; its Globules (Bubbles) Analysed. By W. J. Cox, M.R.C.S., M.B., etc., 403; The Principles of Surgery. By James Miller, F.R.S.E., etc., 431; Valentin's Text book of Physiology. Translated by W. Brinton, M.D. Part II., 431; Sandgate as a Residence for Invalids. By George Moseley, 431; A Practical Treatise on Sea-Bathing and Sea-Air. By George Hartwig, M.D., 432; Cholera; its Nature, Treatment, and Sanitary Requirements. By S. Scott Alison, M.D.—Cholera; its Physical Phenomena, Causes, and Treatment, together with the Sanitary Arrangements and Appliances for Preserving Health, Necessary to be Adopted at the Time of the Epidemic. By Joseph Thomas Mitche'l, F.R.C.S.—Thoughts on Cholera. By Edwd. Hearne, M.B., London, 458; The Diseases of the Chest and Air-Passages of the Horse. By W. Percivall, M.R.C.S., 458; Memoirs of John Abernethy, F.R.S. By George Macilwain, F.R.C.S., 483; Asiatic Cholera: its Symptoms, Pathology, and Treatment. By Richard Barwell, F.R.C.S.E., 508; The Journal of Psychological Medicine and Mental Pathology. Edited by Forbes Winslow, M.D., D.C.L., etc., 509; Hand-book of Organic Analysis. By Justus Liebig, 509; Notes on the Climate and Diseases of the City of Cork. By John Popham, A.B., M.B., 509; The Science and Art of Surgery. By John Erichsen, 536; An Expository Lexicon of the Terms, Ancient and Modern, in Medical and General Science. By R. G. Mayne, M.D., 536; On the Prevalent Treatment of Disease. By F. C. Skey, F.R.S., 536; Thirty-third Annual Report of the Directors of the Dundee Royal Asylum for Lunatics, 536; Introductory Lecture to the Medical Session at the Charing-cross Hospital, London, Oct. 7, 1853. By F. W. Headland, B.A., etc., 536; On the Remote Cause of Epidemic Diseases. By John Parkin.—The Remote Cause of Epidemic Diseases. Part II. By John Parkin, M.D.—The Cause of Blight and Pestilence in the Vegetable Creation. By John Parkin, M.D.—The Prevention and Treatment of Disease in the Potato and other Crops. By John Parkin, M.D., 559; Medical Reform; being the Sketch of a Plan for a National Institute of Medicine. By Azygos, 560; An Introductory Lecture delivered in the Grant Medical College at Bombay, at the Opening of the Session 1853-54. By C. Morehead, M.D., 560; Practical Pharmaceutical Chemistry. By Dr. G. C. Wittstein. Translated and Edited by Stephen Darby, 584; On the Advantages of the Starched Apparatus in the Treatment of Fractures and Diseases of the Joints. By J. S. Gamgee, 584; An Account of some Cases of the Epidemic Cholera, Successfully Treated by Hot-water Applications. By Francis Arthur Bulley, F.R.C.S., 584; The Druggist's Hand-book of Practical Receipts. By T. F. Branston, 584; Hand-book of Natural Philosophy and Astronomy. By D. Lardner, D.C.L., 584; The Microscope, in its Special Application to Vegetable Anatomy and Physiology. By Dr. Hermann Schacht. Translated by Frederick Currey, Esq., M.A., 608; Etudes Critiques sur la Surdi-Mutité. Par M. E. Hubert-Valleroux, 608; The Human Hair, Popularly and Physiologically Considered, etc. By Alexander Rowland, 609; A Few Sober Words of Table-Talk about Table Spirits and the Rev. N. S. Godfrey's Incantations. By John Prichard, F.R.C.S., 609; A Manual of Domestic Medicine. By a Doctor's Daughter, 609; Manual of Obstetrics. By Thomas F. Cock, M.D., 609; Annual Statistical Report of the Belfast Union Hospital for the Treatment of Contagious Diseases. By Seaton Reid, M.D., 609; The Irish School of Medicine as it is, and as it ought to be. By Thomas S. Holland, M.D., 635; Statistical Reports of the Sickness, Mortality, and Invaliding among the Troops in the United Kingdom, the Mediterranean, and British America, 659; The Nature of Cholera Investigated. By John G. French-F.R.C.S., 661; On Diseases of the Rectum. By James Syme, F.R.S.E., 682; Physicians', Surgeons', and General Practitioners' Visiting List, etc., 682; The Laws of Cholera, 682.

Richardson, Mr., on the source of motion of fluid in ureter and thoracic duct, 541
....., Sir John, Kt., M.D., C.B., navy medical report by, 187, 211
Richter, T. L., M.D., review, 249
Ricord, M., 254
Ringworm, 181

Roberts, F., review, 273
Rotherham Dispensary, 229
....., the medical practitioners of, and the sewerage of the town, 179
Roux, M., 404
Rowland, Alex., review, 609
Royal Academy, the, 543
..... Free Hospital, practice of medicine and surgery at, 112, 394
....., opening of the medical session, 385
..... Institution, 617, 684
..... Medical and Chirurgical Society, reports of meetings, 123, 227, 514, 539, 587, 664
..... Society, the, 567, 582
..... medals, 517
Royle, Forbes, M.D., review, 273

RULES AND REGULATIONS OF EXAMINING MEDICAL BODIES IN LONDON AND THE PROVINCES, SESSION 1853-54 :—
England :—
University of Oxford, 285
..... Cambridge, 285
..... London, 287
Royal College of Physicians of England, 289
..... Surgeons of England, 290
Apothecaries' Hall, 291
Navy Medical Department, 292
Army Medical Service, 293
Ordnance Medical Department, 294
East India Company's Medical Service, 294
King's College, 295
University College, London, 296
Hospitals and Medical Schools :—
St. Bartholomew's Hospital and Medical College, 298
St. Thomas's Hospital Medical and Surgical School, 299
Guy's Hospital, 300
Westminster Hospital School of Medicine, 300
St. George's Hospital Medical School, 300
London Hospital Medical and Surgical School, 310
Middlesex Hospital School o Medicine, 302
King's College Hospital, 298
University College Hospital, 298
Charing-cross Hospital Medical School, 303
St. Mary's Hospital, 304
Theatre of Anatomy and Medicine, 304
Royal College of Chemistry, 305
Pharmaceutical Society of Great Britain, 305
St. Luke's Hospital for Lunatics, 305
Chatham-street School of Medicine, Manchester, 307
Newcastle-upon-Tyne College of Medicineand
Sheffield Medical Institution, 308
Leeds School of Medicine, 308
Sydenham College, Birmingham, 305
Manchester Royal School of Medicine and Surgery, 307
York School of Medicine, 307
Hull and East Riding School of Medicine and Anatomy, 308
Liverpool Royal Infirmary, 308
College of Chemistry, Duke-street, Liverpool, 309
Table of General Hospital Statistics, 310
..... Hospital Practice Fees, 310
..... Fees to the Lecture, 310
..... Classes and Lectures at the London and Provincial Medical Schools, 311
..... Weights and Measures, 312
..... Scientific Societies in London, with the place, days, and hours of meeting, 313
List of Hospitals and Schools of Surgery and Medicine from which Certificates are received by the College of Surgeons, 313
..... Institutions from which the London University receives Certificates for Degrees in Medicine, 313
..... Public Exhibitions in London, 314

Rupture, 463
..... of the uterus, 586
..... truss, with screw adjustments, 573

S

Sadler, M. T., Esq., on the spread of cholera in Barnsley, 671
Salt, 25
Saline injections in cholera, 586, 610, 612
..... treatment of cholera, 513, 682
Salivation produced by sesquichloride of iron, 201
Sanitary appointment, 684
..... condition of Stonehouse, Devon, 319
..... measures, 538
Sarcina ventriculi, 76
Sarcinæ in the vomited matters, in chronic disease of the stomach, 496, 522
Scarlatina, 187, 211, 281, 639
Scarlet fever, 491, 555, 644
Scheerer, Dr. T., review, 333
School of anatomy and medicine, opening of the medical session, 385
..... Heidelberg, the, 510
Science, Government neglect of men of, 41
Scientific societies, 617
Scirrhous kidney, 435
Scirrhus, 278
Scott, Dr., army medical report by, 258
Scottish Universities, 127
Scrotal hernia, 40
Selections from foreign journals, 19, 46, 72, 98, 119, 148, 172, 198, 250, 274, 333, 359, 378, 404, 432, 458, 509, 536, 560, 585, 609, 636, 661
Semple, Dr., on the pathology and diagnosis of cerebral diseases, 540
Session, opening of the Medical, 381
Sewers, Court of, 353
....., ventilation of, 544
Shanks, Dr., death of, 668
Sheffield Medical Institution, rules and regulations, 308
Ship fever, 380
Ships at sea, cholera in, 508
....., ventilation of, 547
Sick, return of, in Bombay army, 674
Sideration, 662
Simon's, Mr., sanitary report, 606
Singleton, Mr., death of, 567
Skey, F. C., Esq., F.R.S., lectures on surgery, 57, 83, 159, 339
..... review, 536
Skin, Hospital for Diseases of the, practice of medicine and surgery at, 630
....., lutronomic experiments to illustrate the absorbing power of the, 537
Slander case at Wimbledon, the, 43
Small-pox, 227, 387, 475, 644
..... in Ceylon, 495
....., manslaughter by, 543
....., suicide by, 543
Smart, W. R. E., M.D., R.N., navy medical report by, 444, 470
Smith, Dr. E., and Charing-cross Hospital, 49, 68, 100, 115, 123, 148, 174, 255
....., on a case of voluntary muscular fibre attached to an adventitious growth, 542
....., Henry, Esq., case of laryngeal disease, 34
....., on excision of the knee-joint, 213
Smoke nuisance, the, 196
Snow, J., M.D., on the prevention of cholera, 367
Society, the Botanical, 591
..... Chirurgical, 123, 227, 514, 517, 539, 587, 664
....., black-balling at, 556, 591, 632, 637, 682
....., Crewkerne and Yeovil District Medical, 361
....., East Surrey Cholera, 439
....., Entomological, 491
....., the Epidemiological, 149, 333, 515, 614, 684
....., and the cholera, 504
..... vaccination Bill, 117
..... Harveian, 517
....., King's College Medical, Reports of Meetings, 642
....., Medical, of Bristol and Bath, 127
..... London, 361, 387, 411, 436, 462, 488, 514, 540, 541, 564, 589, 615, 639, 641, 665
..... Glasgow, 517
....., Medico-Chirurgical, of Queen's College, Birmingham, 566
....., Newcastle and Gateshead Pathological, reports of, 22, 76, 278, 380, 411, 463
....., North London Medical, Reports of Meetings, 667
....., the North Staffordshire Medical, 543
..... Pathological, of London, Reports of Meetings, 435, 487, 563, 613
..... Pharmaceutical, 280
....., rules and regulations, 305
..... Royal, 567, 582
....., medals of, 517
....., Western Medical and Surgical, of London, Reports of Meetings, 489, 566, 616
Societies, Reports of, 22, 76, 123, 149, 227, 278, 380, 409, 435, 461, 487, 514, 539, 563, 587, 613, 639, 664
....., scientific, 617
Softening of the brain, 396
Soldiers, on the weight of, 237
Speer, S., Esq., on the therapeutic uses of a new ferro-manganic preparation, 598
Spinal cord, on apoplexy of the, 72
Splint, a new, 676
Squinting, cure of, by the use of prismatic spectacles, by T. S. Wells, Esq., F.R.C.S., 216
St. Andrew's, University of, 490
St. Bartholomew's Hospital, 423
....., and its servants, 486
....., chloroform at, 561
....., opening of the Medical Session, 381
....., practice of medicine and surgery at, 13, 38, 62, 88, 108, 138, 167, 190, 243, 266, 325, 375, 424, 449, 450, 476, 499, 628
...., rules and regulations, 298
St. George's Hospital, 92
....., opening of the medica session, 383
....., practice of medicine and surgery at, 451, 475, 553
....., rules and regulations, 300
St. Luke's Hospital, rules and regulations, 305
St. Mary's Hospital, 337
....., case of ligature of the carotid at, 100
....., opening of the medical session, 385
....., practice of medicine and surgery at, 65, 244, 326, 630
....., rules and regulations, 304
St. Thomas's Hospital, 25, 254, 533
....., election of surgeon to, 17
....., opening of the medical session, 381
....., practice of medicine and surgery at, 64, 111, 167, 268, 350, 424, 477, 579
....., presentation for honours and prizes at, 23
....., rules and regulations, 299
Stallard, Mr., death of, 314
Statistical report of the principal operations performed during the month of July, 218; August, 348; September, 420; October, 551; November, 652
Statistics, hospital, 532
....., medical, of Belgium, 274
....., military medical, 277, 335
Steel, Dr., death of, 152
Steele, C. D., Esq., navy medical report by, 391
Steevens' Hospital, 582
Stevens, W., M.D., review, 170
Stewart, J., Esq., army medical report by, 161
Stomach, chronic disease of the, with sarcinæ, 496, 522
....., disorders of the, 257, 435, 467, 493, 545, 553
..... organic diseases and functional disorders of the, 27, 207
Stone in bladder, 464
Storm at Portsmouth, 25
Strangulated hernia, cases of, at St. George's Hospital, 530
Structure of the aorta, 72
Student life in London, 658
Styptic, a new, 78
Sugar in phthisis, 173
Suicide by a lunatic, 219
..... by small-pox, 543
..... defeated, 491
Sulphuric acid in cholera, 460
..... diarrhœa, 512
Suppuration of joints, 4, 6
Suppurative inflammation, 436
Surgeon-dentists, "cheap," 568
Surgeons' Fees, Assurance Office, 502
Surgeons, Royal College of, 24, 50, 77, 100, 126, 152, 204, 361, 386, 413, 438, 439, 490, 517, 542, 567, 591, 616, 668
....., College of, rules and regulations, 290
Surgery, lectures on, 57, 83, 159, 339
....., orthopædic, 8, 37, 524
Swann, Joseph, review, 71
Swane, Dr., death of, 387
Swansea meeting of the Provincial Association, 221
Swarm of flies, 518
Sydenham College, Birmingham, opening of the medical session, 386
....., rules and regulations, 305
Syme, Miller v., 664
....., Mr., and the Provincial Association,
..... , Review, 682
Symonds, Dr., 127
Symonds, J. A., M.D., Review, 273
Syphilis, 405
Syphilitic osteitis, 173

Table of practitioners of medicine, according to the Census of 1841, compared with the number of qualified practitioners in the Medical Directories in 1851, 151
Table-turning, 42, 121
Tait, Dr., death of, 152
Talipes, 524
Tate v. Webb, 51
Taylor, J. R., Esq., army medical report by, 161
Teeth, the, in infants, 379
Temperature of venous and arterial blood, 333
Testimonials, 77, 617
Theatre of Anatomy and Medicine, rules and regulations, 304
Therapeutics and Pathology, lectures on the relation between, 1, 53, 155, 233, 315, 389, 415
....., hospital, short notices of, 501
Thom, A., Esq., army medical report by, 417
Thompson, Sir Jas., death of, 439
....., Dr., death of, 387
Thomson, A. S., M.D., army medical report by, 237
..... St. Andrews, 490

Thomson, A. S., M.D., History of an epidemic influenza at Auckland, New Zealand, in Jan. and Feb., 1853, 495
....., Dr., 408
Thumb, excision of the proximal phalanx of the, 603
Thyroiditis, 251
Tinsley, Dr., 231
Todd, R. B., M.D., F.R.S., lecture on cases of colic, 79
Toms, Mr., death of, 387
Toynbee, J., F.R.S., on a new instrument for the removal of polypi from the ear, 526
....., review, 45
Tracheotomy, 76, 265, 539
Trant, Mr., death of, 668
Treatment of cholera, 375, 543
....., the saline, 513
..... contractions and anchylosis of the knee and hip-joints, by forced rupture, by Dr. Philip Frank, 59, 134
..... fracture by the gum bandage, 522
Trepanning, 173
Trinity College, Dublin, 77
Tumour, a fatty, 630
Tumours, 76, 88, 167, 191, 215, 279, 463, 640, 679
Turnbull, Dr., review, 46
Turner, Mr., death of, 77
Typhus fever, 217, 359, 432
Ulcer of the rectum, 599
Ulceration of the gums, 199
Ulcers, 176, 563
....., galvanism in, 84
....., treatment of, 112
Union medical officers, 25
University College, 617
....., opening of the medical session, 385
....., rules and regulations, 296
..... Hospital, practice of medicine and surgery at, 12, 324, 422, 499, 600
....., rules and regulations, 298
..... examinations, 360
....., King's College, Aberdeen, 229
..... of Cambridge, 50, 412, 438, 464, 517, 668
....., rules and regulations of, 285
.... Cracow, 280
..... Edinburgh, 177, 537
..... Glasgow, 563
..... London, 125, 176, 202, 253, 567, 681
....., rules and regulations, 287
..... Oxford, 412, 438, 464, 490
....., rules and regulations, 285
University, Queen's, Ireland, 101
Universities, Scottish, 127

U

Unqualified medical practitioners, 143, 151
..... pharmaceutists, 617
..... practice, 78
..... practitioner, verdict of manslaughter against an, 439
..... practitioners, caution to, 491
Upham, J. B., M.D., review, 147
Urine, chylous, 493
....., examination of the, 404
....., on the colour of the, 378
Uterus, nerves of the, 87
....., polypus of the, 359, 498, 648
....., rupture of the, 487, 586

V

Vaccination, 200, 227, 252, 336
..... Act, the, 337, 360, 397, 459, 669
....., compulsory, 222
..... Extension Bill, the, 114, 117, 145, 197
....., remuneration of medical men under the, 199
..... in Egypt, 281
Vagina, obliteration of the, 20
Valleroux, E. H., review, 608
Variola, 32
Varix, pulsating, 268
Vegetables, disease in, 78
Venous and arterial blood, 333
Ventilation of sewers, 544
..... ships, 547
Veratrin, 72

W

Wagner, Dr., 51
..... A., review, 18
Wainhouse, Mr., death of, 77
Walton, H. Haynes, Esq., F.R.C.S., clinical lecture on the diagnosis of incipient lenticular cataract in elderly persons, 340
.....
..... removal of a particular kind of opacity from the cornea, 469
Wallace, Mr., death of, 314
War in Burmah, 254
Water supply, cholera and the, 535
Watkins, Mr., death of, 617
Weatherhead, Dr. death of, 25
Webb, Tate *v.*, 51
Webb, Sir J., 248
Weight of soldiers, on, 237
Weights and measures, 312
Wells, T. S., Esq., F.R.C.S., on the cure of squinting by the use of prismatic spectacles, 216
....., on a new ophthalmoscope, 264
..... navy medical reports, by, 32, 84, 133, 547
West Indies, 491
West Riding Lunatic Asylum, 230
Western Medical and Surgical Society of London, Reports of Meetings, 489, 566, 616
Westminster Hospital, 152
....., opening of the medical session, 381
....., practice of medicine and surgery at, 475, 479
....., rules and regulations, 300
Westmoreland Lock Hospital, Dublin, 605
Whittle, Mr., death of, 413
Wiblin, Mr., and Mr. Finlay, 176
Wilde, Mr., and Dr. Kramer, 434, 483
..... the *Lancet*, 538
..... W. R., Esq., History of the recent epidemic of infantile leucorrhœa, with an account of five cases of alleged felonious assaults, 260, 346, 369, 446
....., review, 402
Wimbledon, the slander case at, 43
Winchester County Hospital, practice of medicine and surgery at, 680
Winslow, Forbes, M.D., review, 509
Witch's milk, on the so-called, 537
Wittstein, Dr. G. C., review, 584
Wray, Mr., death of, 152
Wright's, Dr., library, 491
Wrightson, Mr., death of, 77
Writers' cramp, 274
Woman's milk, infusoria in, 536
Woodward, Mr., death of, 543
Workhouses, Hospitals *v.*, 206
Wound in the head, 279
Wounds of blood-vessels of the lower extremity, by W. Lawrence, F.R.S., 5

Y

Yaws, 250
Yellow fever, 51, 78, 101, 149, 179, 205, 230, 281, 353, 413, 439, 465, 518, 617, 669
..... the *Edinburgh Review* on, 245
York School of Medicine, 413
....., rules and regulations, 307

LIST OF ENGRAVINGS.

Illustrating Mr. Brodhurst's contributions to orthopædic surgery, 10
..... Dr. Corfe's observations on emphysema pulmonum, 86
..... a case of excision of bifid uvula, 90
..... an improved fracture apparatus, 99
..... a many-sided calculus, 109
..... a plastic operation in ulcer of the leg, 113
..... a case of large cyst in the labium pudendi, 113
..... Dr. Boon Hayes's lectures on histology, 133
..... a new speculum ani, 139
..... a calculus, 140
..... the resection of the metatarso phalangeal joint of the great toe, 141
..... Dr. Hofmann's lectures on organic chemistry, 184, 441, 442, 443, 519, 520, 671
..... a non-malignant tumour, 193
..... a fibrous tumour of the womb, 195
..... Dr. Junod's exhausting apparatus, 259
Illustrating a new ophthalmoscope, 264
..... Dr. Frank's treatment of contractions and anchylosis of the knee and hip-joints by forced rupture, 474
..... a case of chronic disease of the stomach, with sarcinæ in the vomited matters, 524
..... Mr. Toynbee's new instrument for the removal of polypi from the ear, 526
..... the treatment of chronic ulcer of the leg by incisions in the neighbouring parts, 531.
..... Dr. Neil Arnott's rupture truss with screw adjustments, 574
..... Mr. Maclauglin's case of a child born without limbs, 604
..... a lifting apparatus for beds, 651
..... an instrument for injecting perchloride of iron in nævus, 655
..... Mr. Gibb's new splint, 677, 678
..... a fibro-cellular tumour in the scrotum, 679

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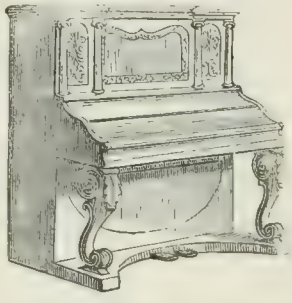

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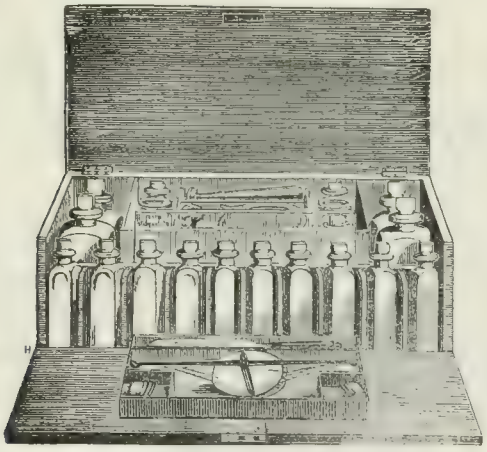

Medicine Chests.—To the Medical

PROFESSION.—JOHN HARVEY (late A. Springweiler), No. 2, DUKE-STREET, SMITHFIELD, LONDON.—John Harvey, nephew, and, of late years, having managed the business of the late A. Springweiler, and left by his will successor and executor to the estate, begs to thank the Medical Public for their support since the death of his uncle; and having always a large stock of Medicine Chests, etc., made by workmen who have been in the Manufactory in Duke-street a number of years, and still in J. H.'s employ, feels confident no house can equal his productions in materials and workmanship.

Medicine Chests, in various patterns, from 5s. to £10. Emigrant Chests for all climates. Ship Medicine Chests according to Act of Parliament.

Notice.—An Advertisement having appeared, from which it may be inferred, that the business has been removed from Duke-street, J. Harvey begs to say, that such is not the fact, it being still carried on at the old premises, No. 2, Duke-street, Smithfield, London.

Established 50 years.

Asthma, Chest, and Throat Affec-

TIONS.—Immediate Relief and effectual Cure by Markwick's Patent 2s. 6d. Respirator, Chest Protector, etc.

GOUT, RHEUMATISM, and LUMBAGO.—For a speedy Cure, use Markwick's Patent Piline Gout Socks and Gloves, Knee and Shoulder Caps, Lumbago Bands, etc.

SHOE SOCKS of Markwick's Patent Piline, surpass every other for comfort; being waterproof; you are also protected against damp.

MARKWICK'S PATENT SPONGIO PILINE POULTICE or FOMENTATION is invaluable for its extraordinary efficacy, easy application, cleanliness, and durability.

G. Trimbey, sole Manufacturer, Queen-street, Cheapside, London. Sold retail by all respectable Chemists and Druggists.

Nickels's Patent Elastic Plasters.—

The superiority of these Plasters over those in general use consists in the easy method of their application, and the increased ease and comfort they afford the patient.

The PATENT ELASTIC PLASTER can be easily moulded to the shape and form of the surface to which it is applied, and from the open nature of the fabric allows that necessary amount of evaporation to take place which effectually prevents the heated condition of a wound bound up with the ordinary strapping. These Plasters are made NON-ELASTIC ONE WAY, which has been found of great advantage, especially when used as bandages for Sprains, Varicose Veins, Weakness of the Limbs, Rheumatism, and other chronic affections, where equal and constant support is required; and when additional warmth or support is necessary, extra thicknesses may be applied. The bandages can be had any length or width. The Patentee has much pleasure in submitting for perusal the accompanying medical reports of his Elastic Plasters, which have already received the patronage and approbation of some of the most eminent of the Faculty:—

"This is an improvement on the old adhesive plasters. The adhesive material being spread on an elastic fabric, possesses a great amount of elasticity, and allows a free expansion and contraction of the muscles, while the circulation is unimpeded."—Vide the Lancet, page 418, Oct. 29, 1853.

"We have made some trials of this Plaster, and find it particularly applicable to wounds on the face or hands, as it may be moulded to, or laid on, any prominence or depression."—Vide Medical Times and Gazette, page 413, Oct. 15, 1853.

"The novelty of these Plasters consists in the extensibility of the material on which they are spread, so that they are more capable of being accurately fitted to the parts on which they are applied than those in general use. We consider Mr. Nickels's plaster as a useful addition to our surgical armamentarium."—Vide Association Medical Journal, page 884, Oct. 11, 1853.

"Specimens of a new sort of Plaster were brought under the notice of the meeting by Mr. Benjamin Nickels. Mr. A. Ure said he was glad to find that Mr. Nickels had directed his attention to the subject of plasters. He liked the appearance of that before the meeting, and would be happy to give it a fair trial at St. Mary's Hospital."—Vide Pharmaceutical Journal, Vol. XIII., page 213, Nov. 1st, 1853

BENJAMIN NICKELS, Sole Patentee, 9, CAMBERWELL-GREEN.

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An elegant preparation, vesicating in much less time than the Emp. Lyttæ P.L., easily applied and removed, and will not produce strangury or troublesome after-sores. It has received the sanction and commendation of many of the most eminent Practitioners in the Kingdom.—In Tin Cases, containing twelve feet, 6s. 6d.; and small Cases of six square feet, 3s. 6d. each.

BROWN'S TISSUE DRESSING.

An elegant, economical, and cleanly substitute for all ointments as a dressing for Blisters, and may be called a companion to the above.—In Tin Cases, containing twelve square feet, 1s. 6d. each.

Extracts and Editorial Note from the New York Journal of Medicine.
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"BROWN'S CANTHARIDINE TISSUE.—It presents peculiar claims to our notice in the inflammatory diseases of females and children, in whom the unpleasant consequences which so often follow the application of the Emp. Cantharides are most apt to occur. We have found it a reliable and peculiarly safe vesicant, and from the many trials we have given it, we are satisfied that it deserves the attention of the Medical Profession.

"Accompanying this article is a very simple and neat dressing."

From the Medical Examiner and Record of Medical Science for May, 1850, Published in Philadelphia.

"We have received from Mr. Geo. D. Phelps, of New York, specimens of BROWN'S CANTHARIDINE BLISTERING PLASTER and DRESSING, with which our readers are doubtless familiar as a new and exceedingly neat preparation, easy of application and certain in their effects. We have given them a fair trial, and find they fully answer our expectations."

" Army Medical Department, January 16, 1847.

"The Principal Medical Officer of the General Hospital, Fort Pitt, Chatham, reports that Mr. BROWN'S BLISTERING TISSUE has been used extensively in the Military Hospital, has been found effective as a vesicatory, when carefully applied, and has not been productive of any degree of strangury.

" ANDREW SMITH, M.D.,
" Deputy Inspector-General of Hospitals.

"Mr. T. B. Brown, Druggist, Handsworth, Birmingham."

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